

*Transforming education
with a smile*



A Tribute to Professor S. C. Sahasrabudhe

5th July 1942 - 28th December 2019



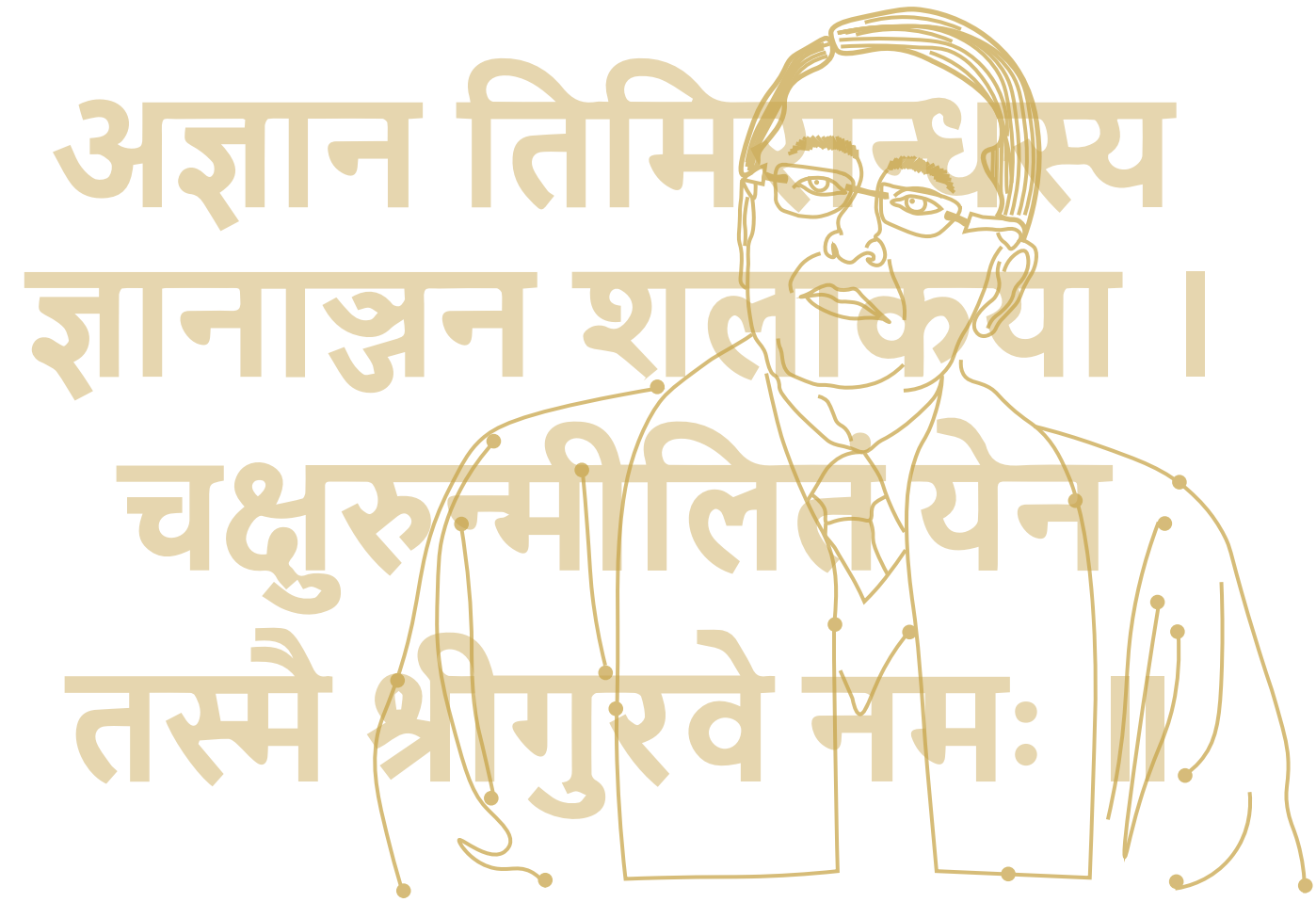
*We shall build monuments not
of stone, but of the spirit.*

*We shall build temples of learning
where education is worshipped.*

*We shall be inspired to carry the
flame of knowledge far and wide.*

*A tribute to an extraordinary
teacher, friend and mentor
– Professor Sahasrabudhe.*





Ajnana Timirandhasya Jnanaanjana Shalaakaaya

Chakshurunmilitam Yena Tasmai Sri Guruve Namaha

Meaning:

(Salutations to the Guru) who removes the darkness of ignorance from our blind (inner) eyes by applying the collyrium of the light of knowledge.

By whom our (inner) eyes are opened; salutations to that Guru.

The above verse from Guru Stotram is perfectly applicable to Prof. S. C. Sahasrabudhe who was our teacher and Guru in the field of education. He passed away suddenly in Pune on 28th December, 2019 when he had come to conduct a workshop.

A teacher to the core, Prof. Sahasrabudhe had kept strides with the changing times and performed various roles. He was instrumental in spreading telematics in India. As an administrator, he was a Deputy Director, officiating Director at IIT Bombay and Director at Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar, Gujarat. He was also the Chief Technology Officer (CTO) at Global Tele-systems Ltd. (GTL), Mumbai. His contribution to the field of education was incredible. Through active participation in National Assessment and Accreditation Council (NAAC) and National Board of Accreditation (NBA) programmes, he helped in improving the national and international ranking of educational institutes across the nation. He played a key role in getting Washington Accord - an international agreement to accept engineering accreditation by participating countries to India. Prof. Sahasrabudhe mentored several colleges and universities in India in his capacity as a governing body member. Organisations like ISRO and DRDO immensely

benefitted from his deep technical expertise. His abilities to sight talent and take other members along, saw him on many expert selection committees. He travelled extensively in India and abroad for these activities. Despite shouldering so many responsibilities, Prof. Sahasrabudhe was truly a people-friendly person. His domain knowledge and teaching skills were extraordinary. Prof. Sahasrabudhe earned a very large friend circle across geographical boundaries, age and different sectors. No wonder, he found a special place in the heart of everyone who came in touch with him.

He was a recipient of many awards. He was a fellow of IEEE and IETE, and received a life-time achievement award from the hands of his holiness Shri. Dalai Lama in 2015. Having received many rewards, usually any normal person would easily get tempted to come and stay in the limelight. Prof. Sahasrabudhe turned his back towards unwarranted publicity and kept his feet firmly on the ground. All this and numerous qualities have inspired us to bring out a memoir which we believe would work as a guiding light and become a source of inspiration for students and teachers. With this view in mind, we have restricted the scope of the memoir to Prof. Sahasrabudhe's professional life only. We know that this is a herculean task and it is not practically possible to gather everything within such a short time. Nevertheless, this memoir is a humble and honest attempt to capture this vast ocean of experience into our small hands. We are sure, readers would understand and appreciate it. We reached out to alumni, his colleagues, friends, students and associates at IIT, GTL, DA-IICT and various professional bodies. Despite our best efforts, it is possible that we have missed some due to our limited knowledge and reach. We sincerely apologize to all those who have been missed out. The recent pandemic has made our job a little difficult as physical meetings with these people were not possible. However, thanks to technology, we could record the memories of most of them over the phone. A few people chose to e-pen their experiences. It took us almost a year to complete this exercise. We followed the process of sending the transcripts and the edited messages to the respective contributors for getting them vetted. The received corrected versions of these documents were taken up for the memoir. The ordering of the contributions have been kept as per

the chronological sequence of Prof. Sahasrabudhe's life to the extent known to us. In the end, the final version of the book was again shared with the contributors for validation. Hence, every step was taken to ensure that the memoir is error-free. Still, if there are any errors left, kindly inform us at scstribute@gmail.com

This memoir wouldn't have been possible without the consent of Prof. Sahasrabudhe's family. We would like to sincerely thank all the authors for their contributions. Their immense help in terms of sharing memories, correcting transcripts and guiding us in this endeavour is really appreciated. We would like to place on record the special efforts by DA-IICT Director Dr. K. S. Dasgupta for acceding to our request and sending the faculty contributions with the help of Prof. Jaydeep Mulherkar. We are thankful to IIT Bombay for instituting the Lifetime Achievement Award in the name of Prof. S. C. Sahasrabudhe. Special mention must be made of IITB Director Prof. Subhasis Chaudhuri whose encouragement and backing helped not only in establishing the award, but also in realizing this memoir. Our thanks are due to Dean R&D Prof. Suhas Joshi, his office staff, IITB Alumni Association and IITB Heritage Foundation for their whole-hearted support at various stages during this project. We appreciate the support from IITB Pro, Mrs. Falguni Banerjee Naha for considering to host this memoir on IITB website. Finally, Lakshmi Narayanan and Shruti More have done a fabulous job editing and designing the memoir. Many people and institutes have shared quality photographs and hence, they deserve a separate mention. IIT Bombay, DA-IICT, Vishwakarma Institute of Information Technology (VIIT) Pune, National Board of Accreditation (NBA), IIT Bombay, Dhole Patil College of Engineering Pune, Symbiosis Centre for Distance Learning, Dr. Anil Nassa, Dr. Shekhar Gadgil, Dr. Rajeev Agrawal and the Sahasrabudhe family. We sincerely hope that readers will get inspired to carry forward Prof. Sahasrabudhe's legacy through future generations. This will be a true tribute to him.

*Avinash Joshi,
Poorvi Vora,
Apoo Koticha*

Having earned a doctorate from Leningrad University, USSR, Prof. Sahasrabudhe made rich contributions in technology research and education in India. He also served at IIT Bombay from 1971 to 2003 in various capacities such as Head of Electrical Department, officiating Director and Deputy Director. He was the Chief Technology Officer at Global Telesystems Limited from December, 2000 till February, 2005. He was the recipient of several awards such as SK Mitra Memorial Award from IETE, fourth IETE Prof. SVC Aiya Memorial Award for outstanding contributions in motivating research work in Electronics and Telecommunication Engineering, Best Teacher Award and Lifetime Achievement Award from IIT Bombay. He was elected Fellow of IEEE “for academic leadership in creating and managing an electrical engineering education system”. He was elected Fellow of IETE and received other IETE honors. He contributed significantly in the areas of Communications, Signal & Image Processing and Microprocessor Applications. He joined DA-IICT as the Director in March 2005 and retired from there in January, 2015. Under his leadership, DA-IICT grew as one of the top technology institutes in the country. For colleagues and students, he was a teacher, mentor and friend. He immensely contributed to the Indian education system through active leadership roles in National Board of Accreditation (NBA) and National Assessment and Accreditation Council (NAAC). His guidance, support, and advice have certainly helped many of his colleagues and students to grow as good teachers and professionals. He will always be remembered in our hearts.

उद्यमेन हि सिध्यन्ति कार्याणि न मनोरथैः।

*Any task can be accomplished only through proactive enthusiasm
and hard work, never by merely dreaming about it.*

MEGHANA SAHASRABUDHE

Family

My earliest memories of my dad working are when I was still in elementary school and I would find him on the balcony of our house, furiously working away on a microprocessor unit. He would spend hours there, alternating between working on the board and reading a book he had on the topic, and I would see him erupt in childlike joy every time something worked! That is how he approached his work, and also his life; always ready to take on any problem, look at all the possible solutions, and when that problem was solved, to tackle the next one with the same enthusiasm. As I got into high school, and started to study late into the night, I noticed that dad would be awake too, preparing for the lecture he had the next morning. I knew he had been teaching these courses for years now, and had mastery over the topics, and yet, he always had this drive to bring out something novel each time he taught a new class of students.

When I was in college, and my coursework started to become challenging, I began needing his help with my studies. I still remember him trying to juggle between work and home responsibilities, and rushing around so he was able to do justice to both! He would ask me to join him on his nightly walks to the Communication Systems lab, often because he had forgotten a book there that he needed to read at night, or papers that he needed to grade. But going there, also gave me a view into how he worked with his students, and how dedicated his graduate and doctoral students were to their work. Soon after, I moved to the US, and while I didn't live with my parents anymore, I always spent the

weekends talking to them. While my conversations with mom would be about if I was eating and doing well, conversations with dad were always about my studies and career. Dad retired from IIT, and so began the second innings of his work life, first as the CTO of GTL, and then as the Director of DA-IICT. Even after DA-IICT, and after moving to Nagpur to start his "retirement", he got busier than ever. His travelling schedule went up the scale and he got involved in more consulting activities. While we all made several attempts to get him to start a proper retired life, he was not having any of it! He told me that the day he stopped working, is the day he would fall sick, and so I stopped pleading with him to quit.

As I made strides in my own professional life, I always sought his advice on every move I made. And he was always careful not to make the decisions for me, but to give me all the pros and cons that led me to the right decision. The one person whose achievements always made him beam with pride, was my daughter, and his granddaughter, Sanika. He could see himself in her, and the energy with which she approached everything she set her heart on. He always instilled in all of us the importance of hard work and perseverance, even in the face of difficulties, even when we didn't see the results right away. He wanted all of us to stay curious, and derive pleasure from our work, as he always did. I saw that my dad was truly the happiest when he was working, that is what kept the spring in his step and the smile on his face, until the last day. And that is how I will forever remember him.



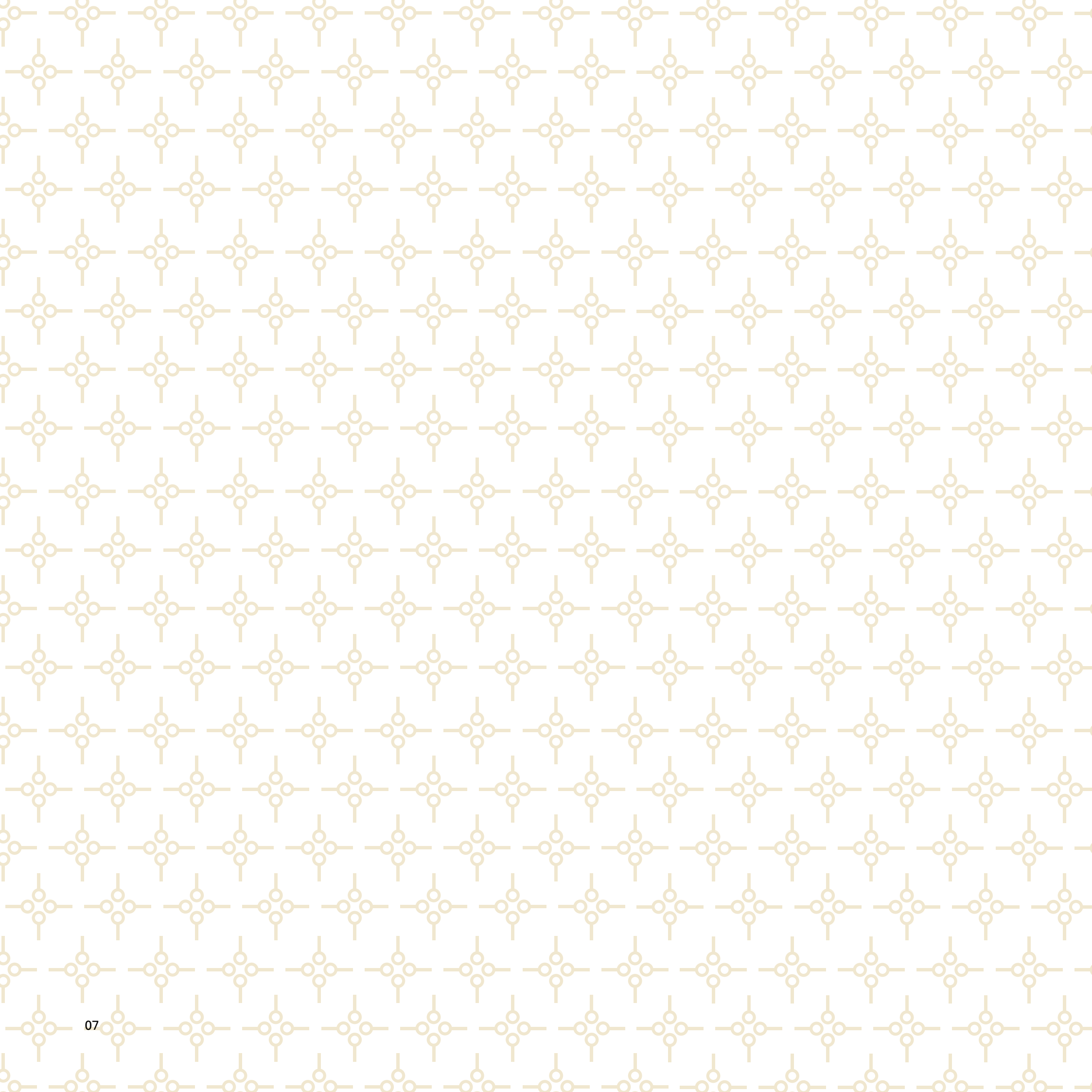
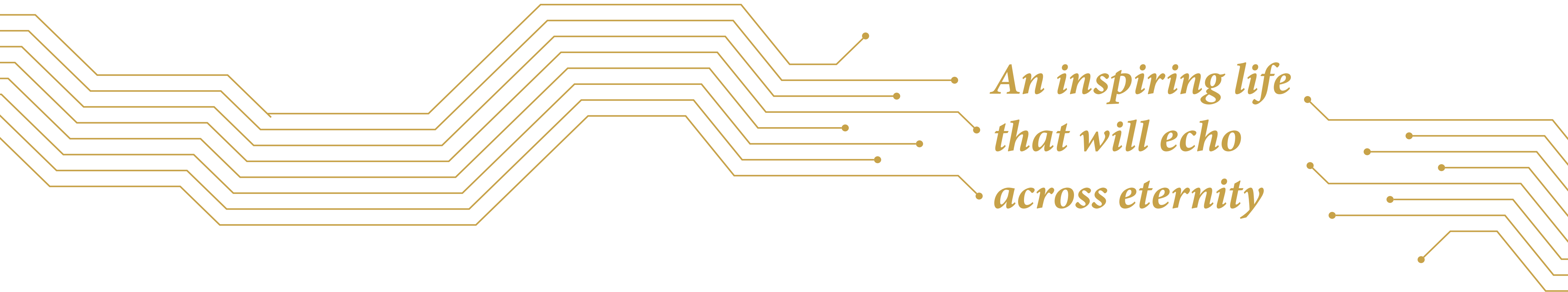


Table of Contents



Chapter I: IIT Bombay	11
<i>A life dedicated to education and excellence</i>	
a. Life at IIT	13
b. Telematics Group	65
c. Projects	83
d. IEEE	89
Chapter II: GTL	95
<i>A leader with passion and purpose</i>	
Chapter III: DA-IICT	105
<i>An architect of modern education</i>	
Chapter IV: Board Memberships	121
<i>A lighthouse for educators</i>	
a. AICTE	123
b. NBA	127
c. Other Associations	131
Chapter V: Awards & Accolades	151



*An inspiring life
that will echo
across eternity*



*A life dedicated to
education and excellence.*

Chapter I: IIT Bombay



Sudhakar Sahasrabudhe – Some Memories

PROF. S. P. SUKHATME

*Professor Emeritus, IIT Bombay,
Director, IIT Bombay, 1995-2000,
Chairman, Atomic Energy Regulatory
Board, 2000-2005*



It is with great sorrow that I write this article in memory of my close friend and colleague - Professor Sudhakar Sahasrabudhe who passed away in December, 2019. I was in Bengaluru then and I could hardly believe the news when I received it.

As many of you might know, Professor Sahasrabudhe joined IIT Bombay as a postgraduate student in the Electrical Engineering Department in 1964 and completed his MTech with specialization in Electronics in 1966. If my memory serves me right, he was selected as a faculty member in IIT Bombay and immediately deputed to the USSR to work for his doctoral degree. He went to the Leningrad University, one of the best in the USSR, and obtained his PhD over a period of about four years. He then returned to re-join IITB. His area of research was Communication / Signal Processing, an area with which I am not familiar. Through his long career, he guided many MTech and PhD students, and of course, taught UG and PG courses in his area of specialization.

I joined IITB in 1965; so our interactions began after he joined the institute as a faculty member in 1971. If I remember correctly, the first time I met Prof. Sahasrabudhe was during a meeting in the conference room of the main building which had been called by the then Director – Professor Kelkar. I really cannot recall what the meeting was about, but it was on some topic that concerned many departments. What I do remember is that after the meeting, a mutual friend of ours introduced me to Sudhakar. For me, first impressions of a person are always important. A few things that immediately struck me about him were his youthful attitude, the friendly look on his face, his pleasant personality and his clear diction. He was quite articulate whether he spoke in Marathi, English or Hindi and you could follow him easily. Those impressions remained with me over the years.

Thirty years together in an institute is a long period and looking back, one would think that we would have interacted in many ways and on many occasions with each other. But that was not the case. He was in Electrical Engineering and I was in Mechanical Engineering – two separate buildings. So, from 1971 till almost 1990, our friendship was casual. Professionally, we had nothing much to do with each other, excepting that we were together on some institute committees. Of course, we were both staying on the campus and came to know each other on that account. My wife and I would occasionally meet him, Madhuri and their children in the evening; just a casual exchange of greetings every now and then as with so many other friends we had on the campus. His children and mine were almost the same age and in fact, his daughter and my younger son were in the same class in the Kendriya Vidyalaya.

Somewhere during 1993 or 1994, Professor Sahasrabudhe took over as the Deputy Director of the institute when Professor Nag was the Director. It was during that period that I met Professor Sahasrabudhe a few times, sometimes alone and sometimes when Professor Nag had called both of us together to discuss some particular issues. Professor Nag's term ended in September 1994 and my appointment letter as Director came in December 1994. In this interim period, it was

generally expected that I would probably take over. Thus, there was a period of three or four months, when Professor Sahasrabudhe was the Acting Director of the institute and then I took over from him formally in the first week of January 1995. By September or October end, I started meeting him more often to start getting some briefings. I remember meeting him before an upcoming Board meeting. He wanted to inform me about the agenda of that meeting. As I mentioned, our interactions earlier were characterized by openness and friendliness. Now even though there were more important items for discussion, our interactions continued in that same friendly tone. He had a light-hearted way of treating the most serious things. We had two or three fairly long meetings with hardly anyone else present, just to exchange ideas and for me to take notes for what needed to be done on certain pending issues, which I would have to handle and also the plans for the future. In one of those meetings, he said, “When you take over as the Director, I don't necessarily have to continue as the Deputy Director if you want somebody else to take over”. And I said, “Don't even talk about such a situation. I certainly want you to continue with me. Of course, we have to be together”. There was no more discussion on that matter.

“Our interactions earlier were characterized by openness and friendliness. Now even though there were more important items for discussion, our interactions continued in that same friendly tone. He had a light-hearted way of treating the most serious things.”

Our interactions began in a big way when I took over as the Director. Generally, there is a fair amount of routine paperwork which comes to the Director via the Deputy Director. I would question why these papers had to go first to the Deputy Director, then to the Director. They came all the way up through the necessary channels and I didn't have anything significant to contribute. I recall once sitting down with Sudhakar and saying, “This is a waste of time. All this

routine paperwork goes through the same cycle. Just because these routine procedures are being followed for years and years, doesn't mean we have to keep on doing the same thing. I'll simply go to the Board and request it to approve that certain papers would be dealt with by the Deputy Director and do not have to be seen by the Director”. So we did that. If you can't hand over certain powers to the Deputy Director and Deans, you are wasting everyone's time. Long-drawn out paperwork and processes having too many levels, and hardly any delegation of powers are some of the major weaknesses of the Indian administrative system. Together, we made a sincere effort to simplify things a little.

Many sensitive issues are discussed with the Deputy Director - for instance, the appointment of Heads of Departments when the existing one's term ends. For this, the Deputy Director usually visits the concerned department and tries to get the views of the faculty. In many cases, it is unanimous. The departments are very clear about who they want. If either of us had no real objection, it was not a problem. But very often, we found ourselves with two faculty members being suggested, both equally popular and proficient. Appointing one might hurt the feelings of the other and we wouldn't want that to happen. These were situations which Sudhakar handled with a lot of diplomacy. Every time this happened, he would convey our decision to both the candidates one by one, and then I issued the formal order. He was very good at explaining to the concerned persons how important they were even though somebody else was going to get appointed. If you have someone like Sudhakar, it really helps smoothen the process. Similarly, there are many committees we have to appoint in the institute for various purposes. Picking the right people for such committees is always very important. If you don't do it with care, you may end up with a situation where the chairman is dominating. Then the committee does not function effectively and the institute's work suffers. Again, these were situations in which Sudhakar excelled. He would invariably come up with names of good people for the committee under consideration and was also extremely good at persuading these people to take up the job. Such people are always in

demand, but he would always manage to convince them. There are many specific events that come to my mind, but there's one more general issue that we both focused on a lot and that was – strengthening our ties with alumni. It began in Professor Nag's time, and together, we gave a big boost to this initiative. Many of our alumni were in the USA. Some of them had passed 30 years ago and were in their fifties. They had done well for themselves and were keen to help the institute. However, if you don't reach out, nothing will happen. That was something for which we both worked and managed to get things going. Again, it's not something that ended with our tenures. Succeeding directors have continued with this initiative over the years. It is one of our big assets when compared to other IITs and universities in India which don't get much support from their alumni, and don't go out of their way to seek that kind of support either.

Let me now share with you a situation which arose where Sudhakar went out of his way to help me. It was the summer of 1997 and I was on a four week visit to the United States. The purpose was to meet with our alumni across the country – Boston, Chicago, Seattle, the Bay area, Los Angeles and Pasadena – and tell them about some of the new things happening in IIT Bombay. Overall, the visit was a success. Now, as most people are aware, our Joint Entrance Examination (JEE) is conducted in May and unfortunately, in 1997, the JEE Math question paper leaked. It came to our attention that the question paper was available at one or two centres in the morning just prior to the examination. IIT takes pride in organising JEE and that year we were the organising institute. A chairman is specially appointed for the job and he is given all the powers necessary for maintaining secrecy. In fact, the IIT directors themselves do not know who the paper setters are, when the papers are set, where they are printed. All those things are kept a secret. I was in Berkeley that morning. The JEE Chairman immediately called to inform me about the incident and said, "I bear the responsibility and can resign immediately if you want me to". I had appointed the Chairman. My first job was to put my trust in him. I asked him, "Have you done anything wrong"? "No, I have done nothing wrong. I have no idea how this has happened, but it

has" he said. I reassured him, "In that case, there is no case for resigning. So just forget that. I am telling you from here that I have full faith in you and you are not resigning". After that, I connected with Professor Sahasrabudhe and we had a long talk. He said "We have to act quickly and decisively. Tomorrow there is a meeting with the HRD Minister in Delhi. All the IIT Directors have been asked to attend and I am going on your behalf. We have to take some decision and I am going to go along with the view that we will hold the whole exam again even though we have no evidence that the other papers have leaked. Even the leak of the Maths paper does not appear to be widespread". "That is not the point" I said. "If it has leaked even at one place, it is bad enough. IIT's reputation is at stake and you have to say that we will conduct the exam all over again. Period". He said "Yes. I am with you. I am going to say that tomorrow. I am also going to say that we'll hold the exam within six weeks so that nothing gets delayed". So that exam was cancelled and a fresh exam was held. Few can imagine the herculean efforts put in by the Chairman and his colleagues in order to make this happen. For the first year students, the semester started about a month late. They were not given a vacation in December that year and they caught up with the other students at the beginning of the second semester. The important thing to note here is that Professor Sahasrabudhe was the Deputy Director and he could have easily suggested that it would be better if I came back to India immediately. Instead, it took only one long-distance telephone call between us to decide on a course of action. That was it! This is the kind of support and cooperation one needs from one's colleagues.

I also remember the time when my father passed away suddenly in Pune in January 1997. I received the news at 9.30 in the morning and had to immediately leave for Pune. I called up Professor Sahasrabudhe to inform him. He said, "Don't worry about what's happening here in your absence. Everything will be taken care of." It matters a lot when someone says that because I knew that I might have had to stay for 5 or 6 days in Pune. The next day, something important was going to happen which concerned some disciplinary action. My presence in the institute was important. Professor

Sahasrabudhe could have taken my place, but he had to be briefed on the subject. It was a little confidential. I told him that I had to issue an order on the next day, and that the Dean of Planning would tell him all the details. Everything had been kept ready, but he would have to act in my place the next day. I didn't want to delay the matter due to my personal problem which had arisen suddenly. Professor Sahasrabudhe could have refused to take this additional responsibility. However, he said "No problem. You were going to do something. Now tomorrow, I will be there in your place. I will take the necessary action." Nobody even knows we had had this conversation. It was an important action as it had certain consequences to it; he acted on it the next day as had been planned and everything proceeded smoothly thereafter.

But our interactions also had a lighter side. This happened quite often. I recall an occasion associated with the 1998 or 1999 convocation. The Chief Guest for the function was coming from Delhi by the last flight on the previous evening. As per protocol, Professor Sahasrabudhe went to the airport to receive him and then escorted him to the place where he was going to stay. By the time Sudhakar was returning home, it was 11.30 in the night. It was the rainy season and the campus was quite dark. Now, leopards are sometimes spotted on the campus and apparently a leopard jumped across his car while he was returning. Next morning, Professor Sahasrabudhe came to my home while passing by. Our conversation went something like this:

Sudhakar: You know, I had a meeting with a leopard last night.

Self: Leopard? What was it doing here?

Sudhakar (with a serious look): I guess it has come to the campus to receive its degree from you today.

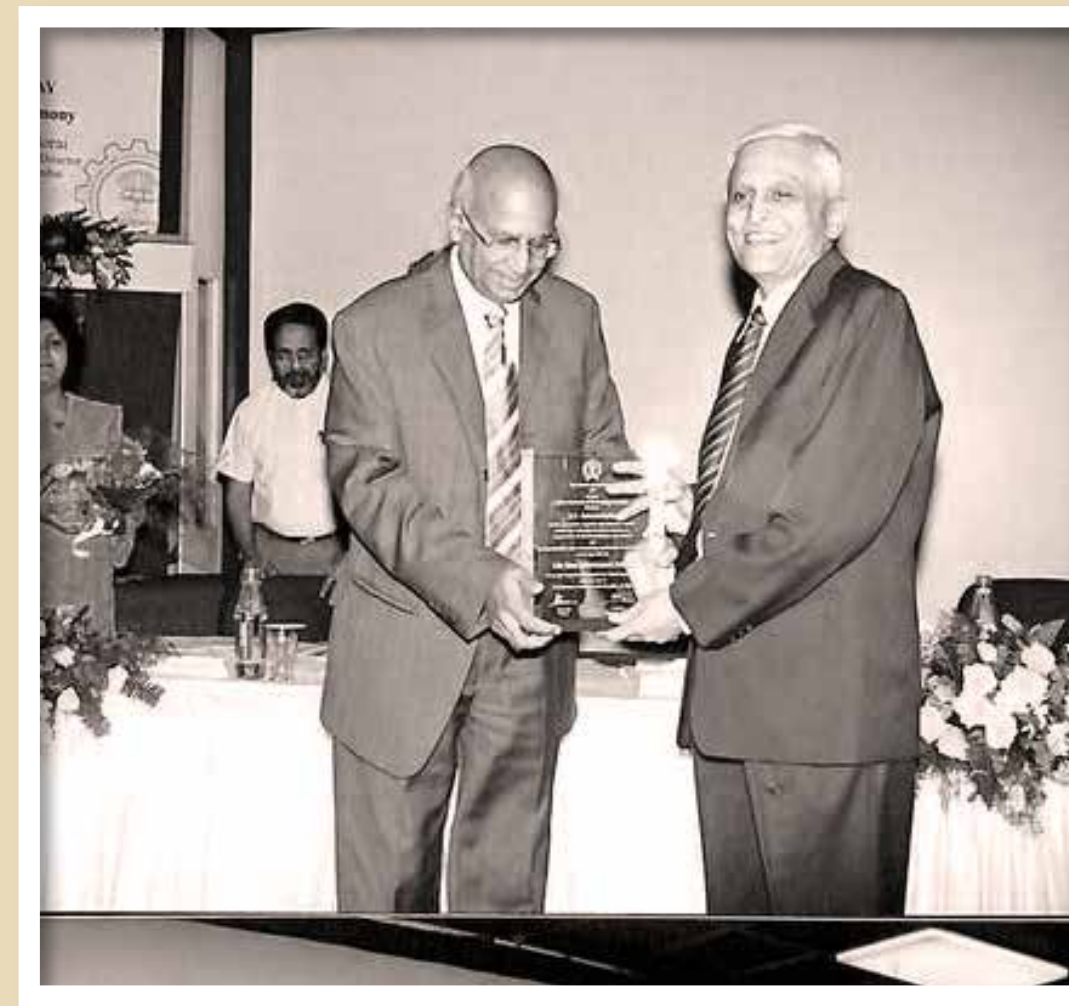
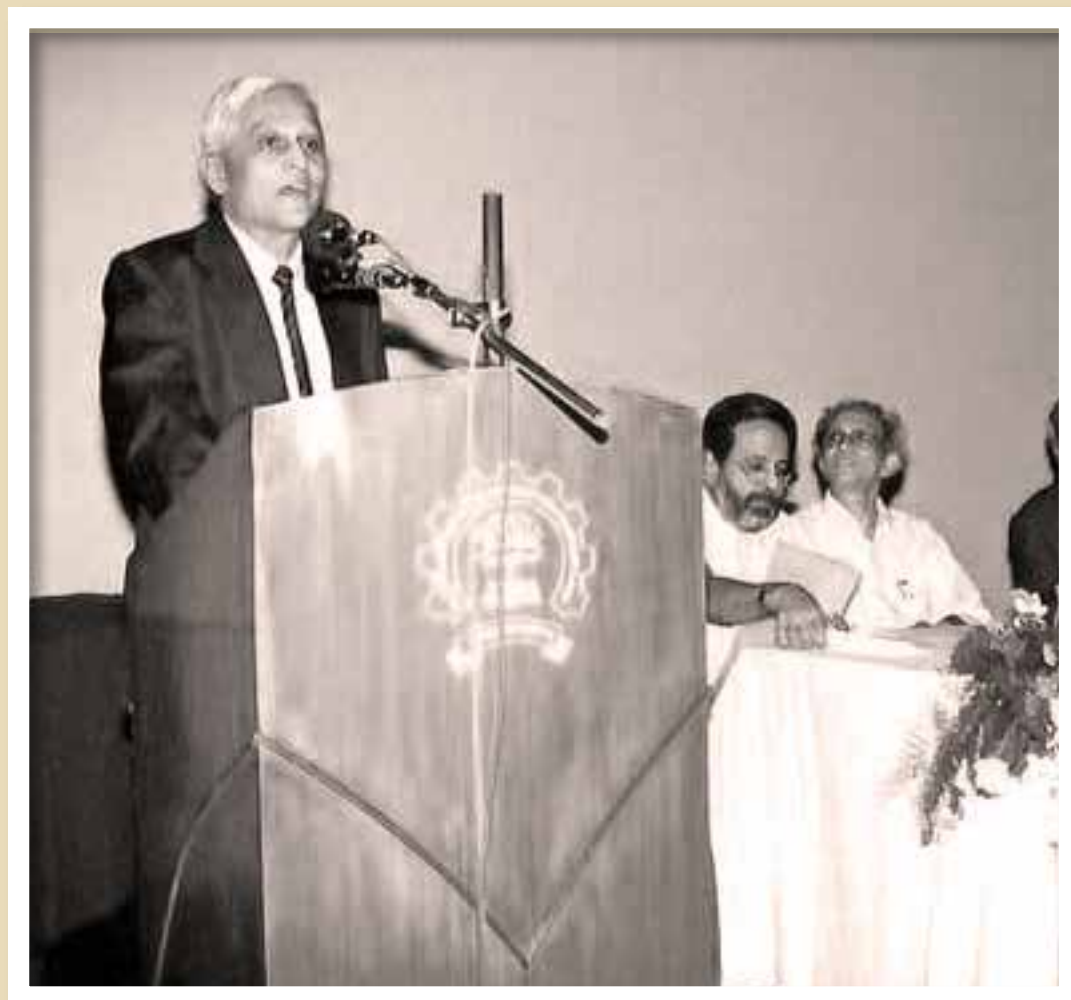
He started to laugh and I joined spontaneously.

Looking back, I must say that we had a very pleasant and fruitful five-year partnership before I retired in 2000. Soon after that, he joined a private company in Mumbai as the Chief Technology Officer and worked

there for 3 or 4 years. I was also in Mumbai working as the Chairman of the Atomic Energy Regulatory Board (AERB), so we used to meet, off and on. After that, Sudhakar moved to Gandhinagar to join the Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT) as the Director, and I retired after finishing my 5-year term at AERB. He was in DA-IICT for about ten years. I used to visit IIT Gandhinagar quite frequently for meetings and lectures there, and his visits to Mumbai were frequent too. In Mumbai, we had flats in the same society, close to the IIT campus. So, we used to frequently meet Madhuri and Sudhakar. Invariably, we would go out for dinner and spend some time together. Even after leaving DA-IICT, Sudhakar was still occupied with his work on the National Accreditation Programme. Visiting institutes or colleges that needed accreditation to see whether they had the requisite facilities and what grade to give them, it was something dear to his heart. He regularly spoke about the accreditation process at various conferences and workshops in order that people should know what it's all about. If any college or institute invited him for such an event, he would always accept. He used to say that it's important to keep on improving the quality, particularly of the colleges which don't know what's required of them. Hopefully we would then have better curricula and better ways in which students get educated. This was something he kept on doing right to the end. In fact, he was in Pune for this very purpose when he passed away in December.

The last time we met was in November, 2019. Both Madhuri and he were in Mumbai. We hadn't gone out to eat during that visit because he was a little occupied and so was I. But we did meet after his long meeting. They dropped in at our flat after dinner and we discussed a whole range of topics for an hour. I said to him that although he had a nice house in Nagpur, Mumbai had the advantage of being in the centre of things and suggested that he should plan to stay more in Mumbai. To this he said that he had grown up in and around Nagpur and liked staying there. We promised that the next time they came, all of us would definitely go out for dinner. His departure brought an end to a friendship, a friendship that I cherished. It was a shock for us. May his soul rest in peace!

IIT Bombay Lifetime Achievement Award, 46th Foundation Day Celebration, 2005



Receiving lifetime achievement from TCS Vice Chairman, S. Ramadorai



Brilliant researcher, great leader and a compassionate person with an ever present smile!

PROF. DEEPAK B. PHATAK

Professor Emeritus, IIT Bombay



Let me begin by saying that there aren't enough adjectives for me to adequately describe Prof. Sahasrabudhe. Knowing him for close to five decades and being counted among his friends is truly a great privilege which I will always cherish.

I first met him when I shifted to the campus in 1973-74. Several faculty colleagues had gone to Russia to work on their PhDs. It was a common practice in those days as our institute was supported by the then USSR. In the staff hostel where we lived for the first couple of years, I got to know many of them. Most used to flaunt their prowess in Chess, and their fluency in Russian, which they could speak with ease. Prof. Sudhakar Sahasrabudhe was the only one who talked about his research. A small thing, but it spoke volumes about his priorities in life. He went on to excel in his chosen field of communication technologies. Later, I had an occasion to work more closely with him and with my guru Prof. Kekre, when I undertook the task of developing a course on digital signal and image processing. Every discussion with Prof. Sahasrabudhe used to be a treat in logical reasoning and displayed his immense depth of study. He was mindful of how students thought and learnt, and always came up with the right set of examples with increasing level of complexity; being sure to add some challenging problems at the end of a topic. It was during those years that I witnessed an incident which reflected his

high standard of academic ethics. The occasion was a conference on digital signal processing held at the Space Application Centre (SAC) in Ahmedabad. Prof. Kekre, Prof. Sahasrabudhe, and I participated in that conference. While we were in the overnight train to Ahmedabad, my curiosity was piqued at seeing Prof. Sahasrabudhe carrying a packed tiffin. Later, Prof. Kekre told me that Prof. Sahasrabudhe could not stand any spicy food, as Ahmedabad was known for its 'chatpata' food liberally spiced with chillies. But I digress. After reaching SAC, I read the conference brochure, containing the schedule with a list of all the papers, to decide which of the parallel sessions to attend. I was intrigued to find that three papers, in rather distinct areas, all had the same first author. To my mind, this author must definitely be a master, though I had never heard of him. I pointed this out to Prof. Sahasrabudhe who confirmed that he did know this 'Mr. X' but did not consider the person to be a great researcher. He did know a couple of other authors and recommended them as being really good. However, he too was curious to discover how 'Mr. X' was the first author in each of the three papers. While chatting with a few participants and couple of authors, I discovered that the said 'Mr. X' was the director of the lab where most of the other authors worked and the lab's 'clearance' was required for papers to be sent for publication. Researchers at this particular lab had quickly discovered that if 'Mr. X' was not one of

the authors, clearances got inordinately delayed. If 'Mr. X' was only included as an additional author, the clearance came through after a short delay. However, if 'Mr. X' was the first author, the clearance came through almost immediately. I felt quite appalled on discovering this. When I mentioned this state of affairs to Prof. Sahasrabudhe, I could see the contempt he felt, lit across his face. 'People in positions of higher authority', he said, 'have to be far more careful about academic ethics, and must NOT let their names be associated with any work in which they have not actively participated'. He vowed that he would not let this matter lie and would definitely take it up by speaking or writing to someone. I do not know precisely what he did, but 'Mr. X' suddenly stopped appearing on papers, at least as the first author! Prof. Sahasrabudhe assiduously held himself to highest standards of academic ethics.

Although I was a few years his junior, some of his contemporaries like Prof. M. P. (Nana) Dixit, and Prof. Guruji had become my close friends, and this helped in further developing our friendship too. Since we lived on the campus, our children grew up as friends. Whenever he spent time with family and friends, his great human character used to be so visible – jovial, friendly, and caring. The teacher and administrator in him would disappear on such occasions. When it came to discharging his responsibilities as administrator, he never let his friendships come in the way. I recall an incident when he was the deputy director, which amply illustrates his style of functioning in official matters. The CSE department was headed by my colleague Prof. S. S. P. Rao. I was in charge of the software lab of the department and Prof. Rao would often consult me on several technical and administrative issues. We had a very talented engineer who was in-charge of maintenance of the PC infrastructure for the entire institute. He was a very competent person and ensured that every request for support was expeditiously handled by him and his team. Having served for a few years, he was expecting a promotion. This aspiration was fully endorsed by Prof. Rao, except for the fact that no higher position existed in that cadre at that time. Prof. Rao wrote to the director, and the process of creation of a suitable position was under consideration.

However, the engineer got impatient and told Prof. Rao that if nothing happened soon then he would resign from IIT and join some industry. We knew that he was in demand. Prof. Rao had met Prof. Sahasrabudhe a couple of times urging him to act expeditiously on the pending proposal. This was taking time as the process of approvals needed was complex, and needed the concurrence of the Board for positions at that level. The engineer had started exploring possibilities for an industry position. Being very talented, he had some preliminary job discussions, although he really liked his position at the institute. Finally, the engineer got impatient with the delay and handed in his resignation letter to Prof. Rao. Now, Prof. Rao had thought that the possibility of the institute services being disrupted might encourage Prof. Sahasrabudhe to consider some immediate measures, even if these were of a temporary nature. So, he once again set up a meeting with Prof. Sahasrabudhe and took me along to support the anticipated arguments. On entering Prof. Sahasrabudhe's office along with the engineer, Prof. Rao handed over the resignation letter and explained his concern about the health of the institute PC-LAN infrastructure. Prof. Sahasrabudhe frowned after looking at the letter. He did not initiate any discussion but simply looked up at the engineer and asked him when he would like to be relieved. "Tomorrow itself", was the haughty reply he received. "I see", Prof. Sahasrabudhe said, and scribbled a note on the resignation letter, and gave it back to Prof. Rao. All of us were surprised to read what he had written. 'May be relieved today evening itself, if the officer so wishes', his order stated. The engineer was simply stunned as he was not prepared for such a sharp and quick decision.

Prof. Rao tried a last ditch attempt to convince Prof. Sahasrabudhe on retaining the engineer. Prof. Sahasrabudhe cut him short saying, "No one can hold a gun to the director of an institute, and expect a favourable consideration". He further added that the institute was functioning well when none of us were working here, and will continue to function well even after all of us stopped working here. If there is a problem for some time, we will figure out a way to solve it. But since this gentleman is in a hurry, let him

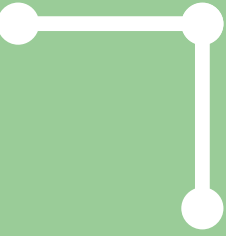
go immediately so that the institute does not come in the way of his personal progress. The ‘gentleman’ was thoroughly disheartened. He confessed later that he still did not have any confirmed appointment, and that if he was relieved now, he would have to vacate his hostel accommodation immediately. The next day Prof. Rao pleaded on his behalf with Prof. Sahasrabudhe asking for some time. Prof. Sahasrabudhe smiled and asked him to read his order again, which had said, ‘if the officer so wishes’. He further told Prof. Rao that the letter of resignation could be treated as an official one-month notice, and that the engineer may leave thereafter. Incidentally, the officer did stay for a month and has subsequently earned a good reputation in the industry. I might add that Prof. Rao too had no trouble in making alternate arrangements within the month. In the end, absolutely nothing disturbed the well-being of our PC-LAN infrastructure.

In the year 2000, when Prof. Sahasrabudhe was the acting director of the institute, he issued the letter appointing me to the Subrao M. Nilekani Chair in School of IT. The appointment was approved by the Board sometime earlier, but Prof. Sukhatme, the then director, had finished his term. It was thus my privilege to receive this letter signed by Prof. Sahasrabudhe. I still recall his profound advice when I met him and told him that I have grown with the CSE department all my professional life, and the thought of leaving it is very painful. He said, “Come on, we will all have to leave even this world itself one day”. When I looked up to him in some shock, he smiled and added saying, “Deepak, we all have to leave some things and move on. While one should keep and cherish old memories, one cannot keep such old hangovers in mind as these would become impediments in doing your new job, in a new environment, with full commitment and dedication”. This was advice which proved very valuable in my later years. He himself always walked the talk. After he left IIT Bombay, he first excelled in taking a company to greater heights as its Chief Technology Officer. He then became the director of Dhirubhai Ambani Institute in Gandhinagar, and led that institute to a much higher recognition in the Indian academic landscape. I visited this institute on several occasions during that period, and have witnessed first-hand the respect and love he

commanded among the students and faculty.

A few years back, my wife Pratibha and I had an occasion to be in Nagpur. We took that opportunity to visit Prof. Sahasrabudhe and his wife Madhuri, at their ancestral home. What a pleasure it was to meet them and see their grand old house. We felt it was like a small palace. We wondered why they still maintained the flat in our society in Mumbai, which actually is tiny in comparison to their abode in Nagpur. But then, I realised that his activities would often bring him to Mumbai. I can say that we have greatly enjoyed their company at our Anjaneya CHS in Powai, on the occasions when he and his family visited us.

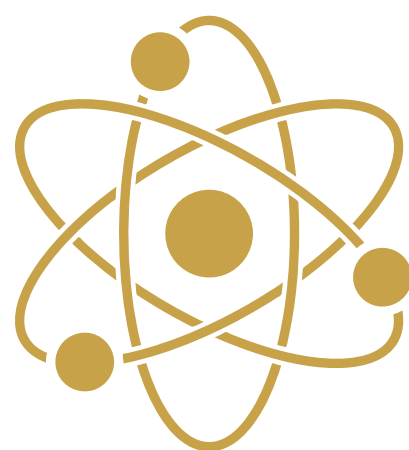
After Prof. Sahasrabudhe retired, he continued to contribute to the work of Indian academic organisations. He was called upon to join many important committees in India. His work was most notable for the National Bureau of Accreditation. He greatly helped in meticulously defining various accreditation processes. I have witnessed his passionate commitment to education and the endless number of journeys he took to visit a large number of institutions. When he interacted with an institution, in his role of the chairman of that committee, he would critically examine all aspects and would arrive at a verdict which was just and fair, whether it was positive or not for the concerned institute. Yet, he always added his own ‘touch’ to the proceedings. He would spend time in advising the faculty and administration on how to do things differently so that any lacunae discovered could be properly addressed. I know many faculty members in these institutions. Several of them have confirmed that a committee visit with him in the chair was always a great learning experience, irrespective of the outcome of the recommendation. Alas, it was during one such visit to Pune that we lost him. I had met him in our society just the day before he went to Pune. I had returned from Delhi and he had come from Nagpur, when we met near the lift of our building. Energetic as usual, even in that late hour of the day, he talked passionately on what he proposed to do in Pune. We chatted briefly and went our way. The disastrous news came just two days later. I will miss him till the end of my life. God bless his soul.



Every discussion with Prof. Sahasrabudhe used to be a treat in logical reasoning and displayed his immense depth of study. He was mindful of how students thought and learnt, and always came up with the right set of examples with increasing level of complexity; being sure to add some challenging problems at the end of a topic.

- PROF. DEEPAK B. PHATAK





The common love for Physics built a strong bond.

PROF. DIPAN GHOSH

Professor Emeritus, IIT Bombay



I joined the institute sometime around August 1974, so I cannot remember when I first met Professor Sahasrabudhe. It must have been in the late '70s, after he got back from Leningrad, Russia. However, I can tell you what brought us together.

Being in Physics, initially I did not have any direct interaction with the professor. At that time, there was a small social circle with Professor Bedford and Professor Shankar from Electrical Engineering and Professor J. S. Murthy from the Physics department. They were very close friends. I knew Professor J. S. Murthy very well and Professor Patni, who later became the Dean of Student Affairs, IIT Bombay. Professor Bedford and Professor Shankar also happened to know Professor Sahasrabudhe, though he may have not been part of their social group. It is through this informal contact that I first got to meet Professor Sahasrabudhe. I liked him from the start because from day one, he had a warm smile for me, and he began pulling my leg within two minutes through our interaction. On our first meeting, Professor Sahasrabudhe in a 'sotto voce' told me, "Look, these people don't agree but I am basically a Physics man". He then launched into an impassioned speech about his love for Physics. After this interesting start, though I cannot put a date to it, we became friends and I worked with him in various capacities.

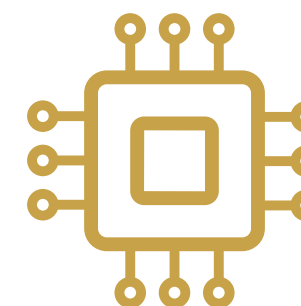
Somewhere in the early 80's, the Department Of Physics started what is known as Engineering Physics Programme, which piggy-backed on the Electric Engineering Department. This happened when the Government of India changed its 5-year B.Tech programme into a 4-year programme. However, they did not change the duration of 5-year M.Sc programme, which was the only IIT Bombay programmes in Physics, Chemistry and Mathematics. The Physics people thought that the societal value of an M.Sc programme was less than that of the B.Tech programme, and if the B.Tech degree was just 4 years while it took 1 extra year for an M.Sc degree, there would be a lack of interest in the sciences. IIT Bombay was the pioneer here, and most other IITs followed suit, though I think IIT Kanpur still holds out. So we changed over to this thing called 'Engineering Physics'. The idea was to create a breed of people who could

have the option of becoming either an engineer or a physicist. The training would be good in physics but they would also know a bit of engineering. Though we termed it as engineering, the idea was that it could be Material Science or it could be Electrical Engineering. However, our emphasis was on Electrical Engineering, primarily because we got a lot of support from the Electrical Engineering Department – especially from Professor Bedford and Professor K. C. Mukherjee. This went to the IIT Bombay Senate in 1983. I was an assistant professor and Professor A. K. Dey was the director then, and so our department managed to get the Engineering Physics programme through.

Our greatest support came from the Electrical Engineering Department because many of our students used to take courses in Electrical Engineering and Physics. In that context, Professor Sahasrabudhe and I used to have a lot of discussion. I must also tell you that our familiarity was such that when he spoke to me in Hindi, he would often switch to 'Tu'. Now, this comes very naturally in Marathi but it is not so easy in Bengali. We do not use 'Tu' in colloquial conversations, unless you are a very close friend or your parents are talking to you. So, he said, "Arey Dipan, tu yeh kya kar raha hain...Khali tum log help loge Electronic Engineering department se and you will not help back". A bit taken aback, I asked him, "Tell me in what way do you want my help?" He said, "Listen... I want two things... Professor Mukherjee is taking time off from teaching so I want you to teach the Electromagnetic Fields course in his absence...."

For a better understanding, Electric Engineering had two courses - Electromagnetic Fields and Electromagnetic Fields 2, which basically involved radiation and antenna - the lectures were from pure Electrical Engineering oriented books like Jordan and Balmain. The Physics part of it which was electro-magnetic fields, was essentially from the Physics books. I could be wrong, but the second course was usually taken by Professor Subbharao. Eventually, I ended up taking both the courses for the Electrical Engineering Department on the prodding of Professor Sahasrabudhe. This was my first academic interaction with him.

Then there was another time, we were discussing the way the Physics programme stood. He told me, "One thing I want to tell you for future generations, particularly if your people are going to learn Electrical Engineering, knowing about micro-controllers is going to be very useful. I suggest that you people start a programme on microprocessors." I had absolutely no idea what he was talking about because I am a theoretical person and I had little to do with the field he was in. So, I asked him to explain. To my enquiry he said, "What kind of a physicist are you who does not know microprocessors?" He further said that there was only one way to learn more, by attending Professor Revenkar's course. Now I was a faculty and they could not just take me as a student, but Professor Sahasrabudhe just brushed these doubts aside and told me that I would be given an honorary title as 'TA' to Professor Revenkar and I was going to be his student. So off I went to Professor Revenkar and he in turn introduced me to Mr. Tandon. That's where I began to learn about micro-processors. The next step was persuading experienced people in my own department to help set up a microprocessor lab, after teaching them what I had learnt from Professor Revenkar. Being a physicist, I was good in programming. However, as the microprocessor programme was more of a software course than a hardware one, this became yet another reason for me to keep interacting with Professor Sahasrabudhe.



This interaction brought me into common cause with the Electrical Engineering Department through 80s and 90s. Later on, when they had a problem in teaching the Numerical Methods course, it was easy for me to step up and help as they were having difficulty in finding

a teacher. It is interesting to note that later, Professor Sahasrabudhe himself took the course and I also attended as a tutor; as by then I had qualified myself.

My interactions with him increased after I became the Dean of Student Affairs, especially when we had mess workers' strikes, which would often happen close to the examination period. A great aspect about him as an administrator is that he never got angry and he would calmly try to solve the problem. Like for the mess strike, he thought that if it goes out of control, we could simply bring 'ghar ka khana' for the students. This kind of attitude could win over anybody, and I found that he treated everyone as equals no matter what their stature in life.

As he was the administrator, I would often approach him on many issues. My Bengali blood used to boil at small irritations - despite me living in Maharashtra all my life. So if I would go to him irritated, he would say, "Thanda ho ja, chai pee le, phir baat karte hai..." or he would call his PA and say, "Ghosh babu ke liye koi ek rasgulla nahi la sakte..?" Always extremely amiable, nothing perturbed him and I don't think anyone remembers Professor Sahasrabudhe without his trademark smile.

After he left the institute and became the CTA of GTL, he called me up one day and said, "What are you doing in the institute? I don't see you doing anything useful, why don't you do some social service?" He explained to me that the MIDC had started a new institute called

the Institute of Software Engineering in Mahape and they were looking for a director. Basically, he wanted me to apply there. At first, I thought he wanted me to join as a professor to teach Software Engineering despite me being a physicist, but he explained that the institute was looking for an administrator - somebody who could make things happen. I took the plunge and joined for a year but unfortunately the institute closed down due to funding issues, and I decided to return. As you can see, I just could not say no to Professor Sahasrabudhe. You will rarely find a person like him; always available for advice, always smiling, with compassionate attitude towards people and penchant for jokes.

After my retirement, I settled in Anjaneya Housing Society in Hiranandani, which is home to a large number of retired IIT people. As luck would have it, Professor Sahasrabudhe had a flat on the same floor but he rarely stayed there as he was always travelling for numerous meetings. He would suddenly appear some nights and stop by for brief personal time with his family, and be travelling again the next night.

In that time, he became a good family friend, especially of my younger daughter who, in typical Bengali fashion, we had nicknamed 'Bacchu'. This was a favourite source of merriment for Professor Sahasrabudhe as he would tease her claiming that I loved her elder sister more. My 'Bacchu' was a grown up girl and knew that he was actually pulling my leg and so she would play along. She would say, "Yes Uncle, I have been telling him that he likes Didi more

than me." Subsequently, my younger daughter went abroad but whenever Professor Sahasrabudhe would meet me, he would joke and say, "I miss Bacchu too much...when she is there, the two of us can gang up on you".

Even after he retired, Prof. Sahasrabudhe continued to have a deep bond with IIT. He had many friends, especially Professor Subhasis. I recall that soon after Professor Subhasis had become the director, he fell very ill with food poisoning and had to be hospitalised. Professor Sahasrabudhe came over and asked me to accompany him in paying a visit to Professor Subhasis, who by then was recovering back home. If anybody was in distress, Professor Sahasrabudhe would always be there.

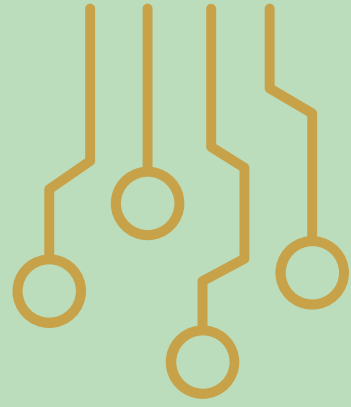
He was very open-hearted. I once received an SMS from him on 13th December, 2019 saying, "Dipan, today is International Tea Day, have you had your cuppa so far? If not, drop by our place and we will have tea together". So, of course, I went over to his place and we had tea together as he joked. Another tea incident springs to my mind, which will stay with me for a very long time. He had possibly just come back from Dharamshala, a place he frequently visited. He brought out a tin of Himalayan tea and, claiming that the day was International Tea Day, he had to do justice to his tea-loving friend with this gift. So, he gifted me the tin of tea. In a couple of days, I had to visit my hometown in Odisha, so I took along this tea. Everybody back home, including my 93-year old mother, loved it. I immediately called Professor Sahasrabudhe and told him, "Remember your gift of Himalayan tea? My mother loved it so much that I have given it to her". He replied, "Look there could be no greater joy to me than that and the next time I go to the Himalayas I will get you another tin". Unfortunately, that was never to be and it remained my last and fondest memory of him.

Professor Sahasrabudhe was much loved as a teacher by his students and being loved as a teacher required a few things, one of them was that he was very well read. Though he was an electrical engineer, he never forgot his physics base and we would often discuss subjects connected to it.

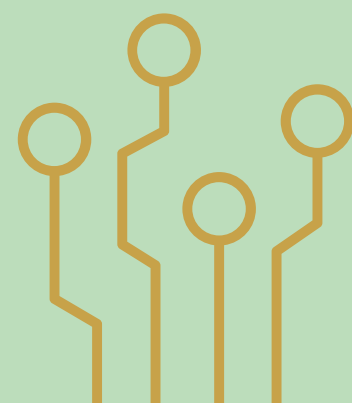
If there is one thing that young aspiring educators can learn from his life is that teachers should not give up on the mission of remaining lifelong students because that was the only way to remain a good teacher - by continuing to learn. These days, everyone knows this truth but I think that it was a philosophy he actually lived. When I say continue to learn, I don't mean master your subject only. Knowledge has no boundaries; one should learn all the things that interest them. What I have learnt as a teacher, and what I think is true of many teachers, is that when you are answering students in class, if you can relate not only technically to the subject matter at hand, but also to other areas, with similes and metaphors, it helps and interests students.

Another incident I remember about Professor Sahasrabudhe is when he was GTL Head and thereafter the Director of Dhirubhai Ambani Institute, Ahmedabad. Though I had retired in 2010, I continued on extension till 2015. Somewhere in 2011, he called and asked me, "Arrey kya kar raha hai? What is the point in continuing to be in the same place after having retired formally?" He said, "Kuch dusaron ke liye karo..." So I asked, "Bolo kya karna hain?". It seems there was a private university in Baroda that was looking for a Vice Chancellor. Now, I was not comfortable moving out of Mumbai, but he convinced me to try it and explore the life beyond IIT. So I went to Baroda, and discovered, in retrospect, that he had already made up his mind as he was the chairman of the selection committee. His personality was such that they gave him the liberty of hiring whoever he felt was most deserving of the Vice Chancellor position. So, I was hired with the committee giving me an offer I could not refuse. I joined the Navrachana University in Baroda on a 3-year contract but left it in a year because we could not adjust to the local culture after living in a cosmopolitan city like Mumbai. Although I was reluctant to leave, my family's welfare came first. Just as I mentioned earlier, Professor Sahasrabudhe was blessed with such an influential personality that I could just never say 'no' to him.

If there is one thing that young aspiring educators can learn from his life is that teachers should not give up on the mission of remaining lifelong students because that was the only way to remain a good teacher - by continuing to learn.



Convocation ceremony, 1996



Prof. Sahasrabudhe during a lab visit in 1993



Wherever there was an opportunity for excellence in education and technology, he was always ready to be a part of it.

PROF. R. K. SHEVGAONKAR

Professor Emeritus, IIT Bombay

Vice Chancellor, Benett University, 2018-2021

Director, IIT Delhi, 2011 - 2015



When I look back, I distinctly recall my first meeting with Prof. Sahasrabudhe, in 1981. At that time, I used to work in Raman Research Institute, Bangalore, and wanted to register in IIT Bombay for my Ph.D. as an external candidate. Prof. Sahasrabudhe was the head of the department, and happened to be in the committee that was interviewing Ph.D. candidates. I felt so exuberant after the interview that when other students and friends asked me how it went, I simply said that it did not matter whether I got selected or not but the interview was very enjoyable. I was far more carried away by the kind of questions I faced and the amazing discussion we had during the interview. SCS kept on asking me questions on antennas and related subjects, which were not really from his area of expertise. Throughout the interview, I was wondering about who this person was! You know, he has this unique ability of framing questions in such an intriguing manner that you didn't really feel bad for not knowing the answers. This initial meeting is forever etched in my memory because it was quite stimulating for me as a Ph.D. aspirant to IIT Bombay.

This was my first impression of SCS. It was only later that I got to know that he was the head of the department and worked in the area of communication. However, there was not much interaction with him as I was doing my Ph.D. with Prof. S. Mahapatra as my guide and Prof. B.V. Rao as my examiner. During this time, I was repeatedly asked why I had not considered Prof. Sahasrabudhe as my guide as I was working on image processing! The reality is that my focus was on radio astronomy, which involved antenna arrays, and so I used to interact with Prof. Mahapatra and Prof. Rao who were the key people in that field. I guess, this kept me from interacting with Prof. Sahasrabudhe initially. After I joined IIT Bombay, I could meet him and worked with him more closely. However, for the first couple of years, I did not have any direct interaction with him because though he was in the field of communications, he used to work more in microprocessors, running the programme with Prof. Revenkar. I can say that I heard more about him from colleagues and students who used to give glowing reviews of his teaching methodology and stimulating exchanges. I can

therefore say that before I even had the opportunity to interact with him, I had already formed an image of him as a much loved and respected professor whose classes were exciting.

My first direct interaction with him started as a co-supervisor for some of the students. One of these was Rajeev Agrawal - a B.Tech. from IIT Bombay, who had taken direct admission for Ph.D., and was working on a topic related to digitization of images. By then, Prof. Sahasrabudhe had moved to a demanding position of Deputy Director and had very little available time. Once in a while, we would all meet and exchange ideas. This is how our academic relationship began that deepened over time. Much of the discussions we had, were related to the Telematics project where SCS was the coordinator. There were periodic meetings in different IITs, as it was a national project.

When I joined IIT Bombay as a faculty, Prof. Sahasrabudhe became my senior colleague in the department, but the student-teacher relation from my PhD days always stayed in the background. Usually, the interactions with colleagues are casual and the conversations with them are informal. But with SCS, I could never bring myself to address him casually. I always considered him as my teacher and spoke to him deferentially. SCS was known for his humour and he could come up with a quip at the drop of a hat. I always enjoyed his hilarious wit but could never bring myself to initiate jokes with him. One thing I remember about SCS is that he used his quick wit to sow confusion among people in vivas or presentations and test them. So, if a student made a particular statement with confidence, SCS would make a diametrically opposing statement and challenge the student to repudiate it. His statement would be invariably invalid but he would logically convince the student that he was right. When the student is almost convinced, SCS would once again switch back and claim that the student's initial hypothesis was correct. This funny academic cat and mouse game really amused us at such serious times. His ability to make a logical and convincing counter argument to what was proposed, was actually a well-designed ploy to test the solidity of a student's thinking. His objective was to check if a person's thinking could

be influenced and deflected from what was right. As you can imagine, this was quite useful during vivas, interviews and faculty selections. SCS had a remarkable quality of being able to guide and correct someone without offending the person.

One thing everyone should learn from SCS is that even if you are under stress, you should not let stress affect your behaviour. No matter how much stressed he was, you could never guess it from his gesture, tone or manner. As the Head of the Department and Deputy Director, I am sure there may have been serious situations which were not to his liking but if you spoke to him, he would always have a smile on his face. I think, keeping your head cool and not expressing your mind every time, is a great art not everyone can develop. I remember, I was a little disconcerted at some point of time, and wanted to step down from the Deputy Director's position. SCS called me and asked me why I was taking that drastic step. I said, I wanted to send a message. His response was very succinct; he asked me to think of where exactly I wanted to send a message, and if there was anybody on the other side to receive my message! He advised me then, 'as you rise higher, learn to remain calm and avoid impulsive decisions'. It was a great advice that helped me in my later life when I became Vice Chancellor and Director of IIT.

SCS was an extremely able administrator, He was Deputy Director of IIT Bombay, Director of DA-IICT as well as CTO of GTL. As an administrator, he used to take the responsibility of his chair very seriously. Often he would take tough decisions and once he decided to execute those, he would steadfastly see that they were followed to their conclusion. He came down ruthlessly on unethical behaviour and would ask for on-the-spot resignation or termination. His smile was deceptive to those who thought that he would not take tough decisions! Another good trait he had as a leader was that he never micro-managed. He would discuss an idea with you and after that it is your responsibility to go ahead and do it. If you did not require his advice, he would not even check back and simply forget it.

There is no doubt that SCS was an excellent human being.

Whenever he met people, he would always inquire about them and their family's wellbeing. Where others might generally ask casual questions and be happy with standard answers, he would be warmly involved on a more personal level. He would ask about whereabouts, school, progress, careers and the like. He truly cared about people. For him, friendship was black and white; if he liked a person, he truly liked him, but if he did not like a person, he would keep his counsel or withdraw. When he liked someone, he would be a friend irrespective of his/her status. He really did not bother about social mores, and would accept the persons as they were. Invariably, when people rise in their career, they dilute contact with those below their level. However, this was not the case with SCS.

I did not attend any of his classes, but I did attend his seminars either for Telecom or Telematics project. I noticed that his presentations would be balanced – partly humour and partly serious thinking material. So, if you happened to have attended his seminars, you would notice that thought provoking concepts, ideas and conversations were the order of the day. Of course, his humour and wit would always be to the fore. I have never seen a presentation of his which was completely serious - like a pure technical presentation. He would take an anecdote from somewhere, put a humorous spin on it and make it a part of his presentation. It is no wonder that he was regarded as a great teacher! In fact, my wife happened to attend one of his courses and she really admired his style of teaching. He would mostly not have a prepared lecture format, especially if it was a topic that he had taught a couple of times before. I have never noticed him making preparatory notes or even carrying a report with him for student vivas. However, I am sure he must have read the report before starting because his questions were always focused. Even if he had not read up on a topic, he had an uncanny ability to pick a critical line of thought or question, during a presentation, and probe a person in depth.

He was a very controlled and balanced person. He would never pass a loose comment or talk about anybody in a bad light. If he was indulging in a bit of light-hearted banter, it would be inclusive of the person

he was teasing. He was always cool and even if he ever became upset, I have never heard him use offensive language in my 30 years of knowing him.

He used to pull my leg regarding my subject, electromagnetics, that was farthest from his liking of stochastic process. But it was always a light-hearted and healthy kind of humour. Though he would joke on my love for electromagnetics, he used to seriously insist that I write a simple, jargon-free 100-page book on Maxwell's equations in a way everyone could understand. I did write a textbook on electromagnetic waves, but not the kind he wanted. I had told him that I would write his kind of book, but now I guess it is a bit too late in the day.

One thing I learnt from him was never to compromise on quality and to always smile and speak the truth. Though he encouraged research, he respected good teaching more. In fact, teaching was an integral part of his character; you could not imagine SCS without teaching. It is what he enjoyed and loved the most. Even when he was in an administrative position, he never took time off from teaching. Deputy Director or Head of Department, no matter which position he held, he would make time for at least one course. One thing young people should learn from him is that if you are from an educational department of IIT or its equivalent, your teaching and research time should complement each other.

Another important aspect; he never thought of competing with younger people. Many a times, ostensibly great people, seem to feel threatened by talented young people. He never had that problem. He was always self-assured of his position in life. He believed that one could mentor young people only when there was no competitive insecurity.

SCS loved travelling. Going to different places, talking to people, experiencing life in different places was something he really loved. Almost twice a week, he would be travelling somewhere. He would always graciously accept invitations even from the remotest colleges or universities. I feel this taxed his stamina and ultimately his health. Many times I told him to

slow down with age but he would just smile! I met him a month before he passed away. We happened to be at a seminar on Teaching Electromagnetism, organised by SSN College of Engineering at Chennai. As was typical of his stature, he was the keynote speaker and gave a speech that was as humorous as it was illuminating. As I mentioned, SCS used to read about other technologies and research material, so his talk on electromagnetism came from a different perspective. In that same session, I was the next speaker followed by a talk on electromagnetism by an ex-student of mine, Uday Khankhoje, who is now a faculty member at IIT Madras. SCS was quite impressed with Uday's concepts and speech, and asked me about his background. Though he had a flight to catch later that evening, SCS wanted

to meet Uday for a short discussion. So, somehow he squeezed in a meeting by taking Uday along in the car up to the airport. Wherever there was excellence, SCS would want to engage with it.

After his talk was over, I told him jokingly that I had finally succeeded in dragging him to my field of electromagnetism! In the same conversation, I complained to him for not recording his course lectures on probability theory and communication theory under the NPTEL project. He immediately responded that he would take my complaint seriously and would record the course when he got back to Mumbai. Unfortunately, this did not happen as he passed away, and this remained our last conversation.

One thing I learnt from him was never to compromise on quality and to always smile and speak the truth. Though he encouraged research, he respected good teaching more.

In fact, teaching was an integral part of his character; you could not imagine SCS without teaching.

- PROF. R. K. SHEVGAONKAR



He was a physicist, teacher, academic diplomat and engineer, effortlessly handling all his roles with a steely resolve and an ever-smiling face.

PROF. SUBHASIS CHAUDHURI

Director, IIT Bombay



People can meet in a twist of fate and then be connected by a cord for life. It was just such a fortuitous meeting that marked the beginning of my personal history with Professor Sahasrabudhe. It would be interesting to note that my narrative begins long before my association with IIT Bombay and far from the shores of India. As I recall, Professor Sahasrabudhe was visiting San Diego, California, for a conference around late 1989 or early 1990. It was a fateful chance that I was staying in the vicinity when he made a flying visit to catch up with my friend Tarun Soni – an IIT Bombay alumnus. Tarun knew that I had set my sights on joining IIT Bombay, so tout suite he called me over to meet Professor Sahasrabudhe. I can tell you, without any embellishment, that I was thoroughly impressed at first sight. I believe the expression in Sanskrit or Hindi of ‘soumya darshan’ person or ‘Kaantimaya’ would be apt to describe the very gentle looking and smiling demeanour of Professor Sahasrabudhe. I still remember the keen interest he showed in what I was working on and my future course of action. After I explained that my forte was in the area of Image Processing and Computer Vision, he quickly observed that we had overlapping interests as he was exploring the field of Image Processing too, in India. With this common thread of interest connecting us, our conversation smoothly carried on into a dinner together

on that particular evening, and became the foundation of a long friendship when I did eventually join IIT Bombay.

From what I remember of those early years, Professor Sahasrabudhe was in charge of the Communications Lab, which I took over on his retirement. It has since evolved into the Vision and Image Processing Lab. Our connection remained intact and he continued to come around to the lab later in life, even after retirement, when he was a consultant with certain companies and academic bodies. He was concentrating on two different aspects of research - one was his pet field of Communication Engineering and Microprocessors, the other was Image Processing. In those days, my field was more to do with 3D Computer Vision – though I also did work in 2D Image Processing.

If I remember correctly, when I joined, there was either Dr. Krishna Prasad or Sengupta who was working in the lab. These were the PhD students which we did not have too many back in 1990. Professor Sahasrabudhe used to invite me to join in many of the discussions, which was always an educative experience because he had mastery over such a wide repertoire of topics from communication, microprocessors to image processing. On the other hand, I was still quite a young faculty member and naturally this was all

rather a new experience for me. In fact, I recall the time when Professor Sahasrabudhe and I co-mentored a PhD student named Asim Banerjee. Now, I hadn’t actually mentored a PhD student before, whereas Professor Sahasrabudhe had a wealth of experience in how you spoke with, encouraged and mentored PhD students. He would gently tell me to try this or do that and it worked. So, you could say that I was in the unique position of being both a mentor and a student as I learnt this art from the professor. My learning experience continued when I had the opportunity to work with Professor Sahasrabudhe, when he was heading a project called SCAN - Scene Correlation Area Navigation, as part of a Defence Department project. It was basically a guidance system for re-entry vehicles that identified the location of re-entry vehicles on the terrain by capturing the side looking images from the vehicle. Although navigation assistance has become commonplace these days, for us, this project came well before the advent of GPS systems. While we continued the discussions during project meetings, I learned how to execute a complex project of this magnitude.

In those days, Professor Sahasrabudhe played a seminal role in the academic scenario, particularly in Western India. When I had joined IIT it was just the nascent beginnings of Communications Technology, which was yet to become the widely popular field it is today. There were no ubiquitous mobile phones, digitally driven devices or networks before these watershed years. It was around this time that Professor Sahasrabudhe and a few other senior colleagues from IIT Kharagpur, Kanpur and other IITs, realised the critical need for research and training in telecom related projects in India.

I believe from 1986 onward, with the go-ahead from the Government, they began the groundbreaking Joint Telematics Group (JTG) that initially involved the existing IITs, and later on IISC, into the process. The thrust of this project was to harness the talent within the IIT academic environment to train college teachers in communication technology related courses, so that engineering colleges across Maharashtra, Madhya Pradesh, Gujarat, Rajasthan and South India would benefit. Some colleges, especially in the interiors,

weren’t keen on Communication Technology as a subject because they felt it involved mathematics. However, Professor Sahasrabudhe convinced them of the importance of having Communications as an important subject for the future.

Somewhere around 1992 and 1993, there was a realisation that the Joint Telematics Project needs to be popularized even more and a regular conference on Communication Systems was required. This became the National Communication Conference (NCC). It is still a matter of great pride to see the bugle call of Professor Sahasrabudhe, which I had the privilege to be a part of, continue to echo down the years. Professor Sahasrabudhe deserves a great deal of credit in building the foundation of Communication Technology in academia in India. He was the captain and helmsman of this great enterprise until he took a sabbatical from IIT in 1998 or a little later. Before he stepped away, he requested me to take on the responsibility of the Principal Investigator (PI), which I hope I held true to his vision. I believe that the JTG project remains one of the longest running training projects in India – operational for almost 15 years.

Another one of his achievements was the integration of students from the erstwhile VSNL enterprise, which was handling overseas communication technology and had its main training institute at Dighi in Pune. Based on a presentation by Professor Sahasrabudhe, they agreed to induct their fresh recruits with our intensive 3-week training programme on signal processing, echo cancellation, DSL and other aspects; which was later trimmed down to 2 weeks. Each year, there were around 3-4 course batches and an exam was held at the end of the course. Initially, VSNL did not see the value in holding these exams. However, Professor Sahasrabudhe convinced them that these fresh college recruits needed this knowledge and VSNL listened to him. He brilliantly suggested using the exam as a means of performance-evaluation tied into the all India cadre posting based on rank. With this incentive, everyone was on board and the students were phenomenally attentive and competitive over the 5-6 years that this programme ran. For him educating students came before one’s own personal comfort.

Each one of us took turns travelling to Pune, to teach single handedly over a two-day period. Often that meant reaching early in the morning or the previous evening and speaking for 12 hours at a stretch on the first day and till 5.30 p.m. on the next; then taking the 6.20 p.m. Indrayani Express back. Some of us felt this regimen to be tough and brought it up with him. He quietly responded, “There is a student waiting for you, who cannot do anything without you being there. Look, I am twice your age and I do it. You younger people should have more energy”. In truth, he really drove himself for his students. Sometimes he would be so exhausted on the train ride back from Pune, that if any fellow passenger tried to pick up a conversation with him, he would drily say, “Sorry, I really can’t talk because I have stopped liking the sound of my own voice”.

He was easily one of the best and most loved teachers we had in the department, especially in the mathematical course. In those times, it used to be called ‘Communication System Theory’ and would probably be more like ‘Probability and Random Processes’ today. It was quite an intense course having applications in communications, noise analysis and other related fields. He was so good at this that when he once took a sabbatical, we were in a quandary as to who would teach this course. The mantle fell on me. I can tell you it was quite a challenge to fill his boots and I had to really work hard to emulate his high standards. I was really thankful for his help during the transition

phase in setting up course agenda and pointers on how to structure my teaching.

Professor Sahasrabudhe had a hunger for knowledge and new ways of learning things. Essentially a physicist, he grew up with the eyes of an engineer. His theoretically honed mind was constantly in action. Any time Professor Sahasrabudhe saw something new in any thesis, he would try and research the subject from the ground up, to the extent he would read the books on the subject before giving his analysis and position.

On the personal front, Professor Sahasrabudhe was certainly one of the most wonderful human beings I have had the good fortune of meeting. He exhibited a calm and smiling demeanour and I cannot recall him ever displaying any overt signs of worry or anxiety. Always respectful and polite, his eyes still hid a hint of mischief that those who were close to him saw in his good humour, light banter and laughter. Initially, as juniors, we were at a loss how to respond to his good-natured ribbing and jokes till we realised that this was just his way of putting us at ease.

I remember just a year ago that he called me and asked, “Subhasis, do you know where I am and what I am doing?” Knowing him, I instantly guessed that he was in Kolkata eating a rosquilla or something. He laughed and replied, “Yes, I am in Kolkata having Naram Pak Sondesh and I wanted you to feel that you are missing out!” He knew how much I loved Bengali

Professor Sahasrabudhe had a hunger for knowledge and new ways of learning things. Essentially a physicist, he grew up with the eyes of an engineer. His theoretically honed mind was constantly in action.

Any time Professor Sahasrabudhe saw something new in any thesis, he would try and research the subject from the ground up, to the extent he would read the books on the subject before giving his analysis and position.

sweets and this was his way of teasing me. Even as recently as in May 2019, I had been quite ill and in hospital. Professor Sahasrabudhe, concerned about my health, visited me with his wife and Professor Dipan Ghosh, where he immediately alleviated my mood by slipping into his typical light banter and teasing. An incident just six months before he expired. There are many other instances of his caring side. He knew that my daughter was nicknamed ‘Kulkuli’. Wherever he was, he would always ask, “What is Kulkuli doing?” Sometimes when he came back from an international trip, he would have a pack of chocolates for her and he would warn me saying, “Look don’t touch the chocolates, these are for Kulkuli and you are not supposed to take a single one”. I would reply, “Because you are telling me this, I am saying that unless the father eats one, the daughter doesn’t get any. So I am taking one right in front of you”. I remember another instance when I visited him in Gandhinagar and my daughter was maybe 6 or 7 years old; she drew a figure and insisted that I give it to him. Two years later when we had a dinner at his place in Gandhinagar, he called me inside and pointed to Kulkuli’s drawing still hanging carefully on the back of his door. Years later when he was in Kharagpur, at the same time that my daughter was doing her masters, I got a call from him saying, “Subhasis, I know Kulkuli is studying somewhere in Kharagpur, give me her number I want to call her”. It was a very sweet and touching gesture from him and my daughter appreciated meeting him.

His empathy and ability to put us juniors at ease endeared him. More so because he genuinely cared for us and was happy when we succeeded. I remember when my first monograph came out through Springer in 1998 or 1999, I took a copy to his lab. He looked at it and said this is superb; he was extremely happy for my achievement. He always inquired about our plans, strategies and whether we needed help with any problem. Vaguely in my mind, I used to amusingly equate him with a kind of benevolent James Bond who had a mission that was only on a ‘need to know’ basis.

How true this was I found out somewhere around 1992 when he asked me to travel to Hyderabad and teach Mathematical Morphology for two days. I wasn’t very

good on morphology but I quickly picked it up. He said, “Here is your travel ticket and somebody from ‘ADRIN’ will meet you at the airport. Not being familiar with it, I asked him, “Okay... so, where is this place?” In James Bond style he said, “You don’t need to worry about details... there will be a car at Hyderabad Airport. They will pick you up and drop you back.” So, mission accepted, I reached the airport and presented my ticket when, to my utter shock, they informed me that I had missed my flight! However, my ticket was showing I was well in time for my flight. The airline representatives tracked down the ‘foul play’ to my travel agent who had noted down an incorrect time on my ticket. Back then, the airline people were very helpful and noting my urgency they called up the travel agent, who squeezed me onto another flight that was departing later that day. So with a four-hour delay, I landed in Hyderabad Airport and obviously could not find anybody there holding a welcome placard with my name on it. I took a turn around the parking lot and still did not see any welcoming face. Now it was 10 p.m. in Hyderabad and I hadn’t had a clue what to do. In the meanwhile, around 50 local autowallas circled me like vultures on a helpless ‘bakra’ from whom they could squeeze a lot more money. They started asking me where I wanted to be dropped. Vaguely, I recalled the name ‘ADRIN’ in my conversation with the professor, but nobody seemed to have heard of it and I was readily agreeing to all sorts of location suggestions of it being in Secunderabad, Hyderabad and the like just to get going. Finally, they got tired of this unfruitful game and left me to my own fate. I think it may have been the first time in India that a ‘bakra’ couldn’t be taken for a ride as no one knew where I was to be dumped! This mission was fast looking like a washout, so I called the IIT number to connect to Professor Sahasrabudhe at his residence. I informed him of the situation and asked what I was to do as it was 10:30 p.m. and the place was absolutely deserted. Professor with his usual cool attitude calmed me down saying, “Subhasis, don’t worry... somebody will come”. Wondering whether he had heard my situation correctly, I once again informed him that perhaps the person had come earlier and was not aware that I had boarded a flight 4 hours later. Professor Sahasrabudhe told me not to worry

and then he hung up. Remember in those times, we did not have mobile phones and I started getting rather anxious. Pacing around, I suddenly spotted a lone white Ambassador car in the far corner of the parking lot. Taking a chance and this being the only car visible, I stood beside it for 10-15 minutes till a person came up to me and asked, “Sir, kya aap ka naam Chaudhuri hai?” Almost like a stranded person rescued from a deserted island, I said, “Haan! Haan!”. The person who I now took to be my driver said, “Baith baith ke main thak gaya toh abhi main ghar return hone wala tha...” So that tells you how bindass a character Professor Sahasrabudhe was. He was totally unperturbed that I was stuck in the middle of nowhere with no idea where to go, whom to meet and not even a credit card in my wallet. You can imagine the scenario that played out when I got back. But again Professor Sahasrabudhe in his unruffled style said “Subhasis, it was my responsibility that you go and come back properly. You have returned safe so now my responsibility is done”. As to the mystery of the place called ‘ADRIN’, well it was none other than the Advanced Data Processing Research Institute (ADRIN), Hyderabad.

I have rarely, if ever, seen him shaken or stirred. He had a core of steel even though he wore his smile like a velvet glove. I discovered this once when I found him a little disturbed but still quite composed. I asked him what had happened. At first he would not reveal anything. Later that afternoon he suddenly said, “Subhasis, I had to kick somebody out of IIT”. Surprised, I asked him what he meant as I had heard nothing of this. Basically, without revealing any details, he told me that there was a gender-related incident with serious repercussions and as the Deputy Director, he took a stern decision to ask the offending party to leave. Even if he seemed soft and always smiling, there was a toughness that he reserved for occasions that deserved it. I look back on those moments with him fondly and even to the last time I met him, when I had snatched myself back from a serious illness and he was there to playfully wish me a speedy recovery. Little did I know then that the friend who came to put me back on my feet would soon find his eternal rest. He was my friend and I will miss his geniality and joy.

*Professor
Sahasrabudhe
deserves a great
deal of credit
in building the
foundation of
Communication
Technology in
academia in
India. He was
the captain and
helmsman of this
great enterprise.*

- PROF. SUBHASHIS CHAUDHURI



*A friend
who was
approachable,
articulate,
compassionate
and had a
brilliant sense
of insight.*

PROF. ABHAY KARANDIKAR
Director, IIT Kanpur



I have fond memories of Professor Sahasrabudhe that go back to our first meeting at the National Conference of Communication (NCC) held in 1996, when I had just finished my PhD from IIT Kanpur and had come to IIT Bombay. Professor Sahasrabudhe was instrumental in hiring me at a time when the IIT Bombay Electrical Engineering Department did not have any faculty in Communications Networking. From the moment I joined, he took me into his fold. We built a strong personal and professional bond, that I often felt like I had known him for a very long time.

One of the most personal memories I have of Professor Sahasrabudhe is that whenever we spoke, whether it was over the phone, down the corridors or when we crossed paths during his walks around the campus, he had a very unique way of greeting me. “Karandi!” Some mornings he would call out to me and say “Karandi, arrey...kuch kaam kiya ki nahi?”

From the moment I joined in 1997, I began working closely with him on a number of projects. He involved me in every one of his projects, whether it was sponsored or Consultancy Projects, guiding students or being an examiner of his students. Professor Sahasrabudhe along with Professor Faruqui, Professor Ashok Jhunjhunwala, Professor Anurag Kumar (IISc) and Professor V. Sinha, were instrumental in setting up the Telematics Group for the advancement of telecommunications in India. This group went on to set up the Annual National Conference on Communication. Another project that I clearly remember when I first joined was a training programme for VSNL engineers in Pune. This used to be a 3-week programme and Professor Sahasrabudhe, a few other professors and I, used to travel to Pune to teach. I attended many of his lectures, the remarkable way in which he could articulate and communicate left a deep impression on me. He had a very compassionate side. Whether it was in the class, question-answers or in the defence, students may have felt that he was tough on them, but I can tell you that was not the case. He would expect his students to do a good job but when it came to grading, he was not harsh. I recall that after a particular MTech defence, when the subject of grading arose, I asked him “Sir,

what about the grades?” He answered, “I have done my job of asking the questions, now you decide on the grading. I have no problem with whatever grade you give”. In fact, if I had to say something about his personality, I always found him to be on the cheerful side - cracking jokes at every opportunity. I never saw him getting angry, shouting at people or getting depressed or anything like that. Since all the other professors were very senior, and I was the youngest in the communications group in 1997, he would pull my leg a lot.

As an academically-inclined person, his mind was always preoccupied with hunches or whatever entered his mind. To my neatly ordered view of the world as an administrator, I felt that this random approach was not very systematic or organised and things could get delayed. This happened with me a couple of times and when I reminded him, he would smilingly say, “Arey haan karta hu, karta hu, karta hu....!!!” Then he would immediately continue, “Accha maine kiya nahi kya? Arey tumhe mujhe remind karna tha...!”

Another thing I remember about him was his sharp insights. He had a way of bringing up significant points that made us all wonder why we did not think of these things earlier. While working on a project for TCS networking, F. C. Kohli had requested a meeting in Bombay House and so, Professor Sahasrabudhe took me along. I experienced firsthand view of the remarkable insights he could bring to the discussion. This view of mine was reinforced when I was involved with him on the Telematics project and the organisation of the National Conference of Communications event. Clearly, it was an eye-opening and wonderful experience working with him.

After I became the Director of IIT Kanpur, I could not meet him for two years but I had spoken to him over the phone, and of course he, in his inimitable way, would say, “Haan Karandi, arrey aas paas koi hain to nahin?” Quizzically, I would answer, “Nahi.” In answer, he would say, “Arrey, now you are a director and I called you Karandi”. That is how jovial and friendly a person he was.

Getting back to the last time I met him sometime last year, I had gone to IIT Delhi as the Director of IIT Kanpur and had checked in at the guest house when I saw Professor Sahasrabudhe’s name directly above mine in the guest house register. At this, I instantly asked the guest house manager if Professor Sahasrabudhe was in his room, and to my great delight, the reply was ‘Yes’. So I spontaneously took the opportunity to knock on his door. I found out that he had come for a National Accreditation Board (NAB) meeting. We chatted for more than an hour. I was not to know that this random meeting of chance would be the last time I would see him in person.

After I had shifted to IIT Kanpur and he shifted to Nagpur, we never got to meet as frequently, so even today I catch myself thinking that I only have to travel to Mumbai to meet him. It is still difficult to believe that this is one journey that can no longer be fulfilled.

I miss him. I still hear his voice reverberate in my ears, “Karandi!”

*I attended many of his
lectures, the remarkable way
in which he could articulate
and communicate left a deep
impression on me. He had a very
compassionate side. Whether it
was in the class, question-answers
or in the defence, students may
have felt that he was tough on
them, but I can tell you that was
not the case. He would expect
his students to do a good job but
when it came to grading, he was
not harsh.*



*When you needed help,
he was the one person
you could always
depend on.*

V. K.TANDON
IIT Bombay



World renowned, energetic, jovial, ever helpful and down-to-earth, Prof. S. C. Sahasrabudhe has been known to me since even before I started working under him in 1993, at his Communication Laboratory, in IIT Bombay. He never treated his subordinates any less than his elite group of friends. Working with him was an honour and pleasure. I noticed how he used to be involved in several activities of the institute simultaneously. We often wondered how he was able to handle it all so efficiently. We learnt many things from him. In spite of being so busy, he would always find time for us when we needed his assistance. He literally proved, that 'a busy man can always find time'.

I vividly recall an incident, during stock verification of the laboratory, when I couldn't find an expensive component, despite searching for it a number of times in the lab. I was quite upset as I was responsible for the laboratory material. Commiserating with my situation, Prof. Sahasrabudhe took a couple of hours out from his busy schedule to actually help me find the missing

component. His assistance proved to be such a huge relief and support to me.

Together, we would often run a course for officers of the Indian Railways at their IRIEEN (Indian Railway Institute for Electrical Engineering) facility in Nashik. This used to be such a wonderful experience every time. Work became so stress-free when Prof. S C Sahasrabudhe was around.

I remember that he was quite fond of playing pranks on his friends. Once, he called me in the evening for some urgent conference work. As decided, I reached the department and got busy with the work. After about an hour he called my home and told my wife that he wants to talk to me. She told him that I had gone to the department a long while back, to work with him only. He said that I was not with him and he had never called me. He told her to give me the message that he wanted to talk to me urgently and hung up. When I came home my wife asked me with an expressionless face, "Where did you go?" I innocently said "Arrey, I told you I was going to the lab to be with Prof. Sahasrabudhe". She very coolly replied, "He called up some time back and you were not with him. Where did you go?" I immediately realised what he was up to, so I called him back and begged him to tell my wife the truth. He laughingly confessed to his prank and only then did I get my dinner.

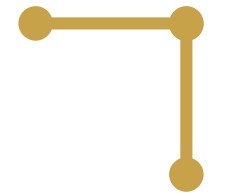
On a personal level, he was instrumental in convincing me to visit UK with my wife, on the invitation of my daughter who was working there. I was quite reluctant to go due to the high cost of the trip. I still remember his words "Tandon, if you don't go now, you can never go. This is a once-in-a-life-time opportunity, since your daughter is already there." So, we visited the UK and a couple of other European countries. He was so right, that was our first and last visit abroad. I am so thankful to him for his insistence.

Prof. Sahasrabudhe's academic excellence is well known. He used to teach multiple courses in any semester. It was definitely a sight to watch him teach. The students were very fond of him and his class always used to have full attendance. I, too, attended

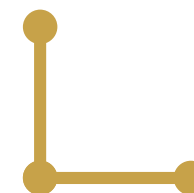
many of his lectures to learn new subjects. He also took on many industrial projects, including MHRD projects. As a by-product, many landmark publications were produced by him. He was an asset to the Institute.

The untimely demise of Prof. S. C. Sahasrabudhe was a great shock to everyone who knew him. I didn't quite believe the news till it was confirmed by a very

close common friend. Needless to say, I will miss his presence immensely. Though he was younger to me, I always took him to be like my elder brother. His advice always used to be of great help. When in trouble, he was the first person who came to my mind, whose assistance I could seek. He was 'gem' of a person. I pray that the 'Almighty' grant eternal peace to his soul and courage to his bereaved family. May his soul show us the right path always.



Prof. Sahasrabudhe's academic excellence is well known. He used to teach multiple courses in any semester. It was definitely a sight to watch him teach. The students were very fond of him and his class always used to have full attendance. I, too, attended many of his lectures to learn new subjects. He also took on many industrial projects, including MHRD projects. As a by-product, many landmark publications were produced by him. He was an asset to the Institute.





It always stands out that he never needed reference notes to deliver a great lecture.

PROF. SUBRAMANIAN IYER
*Distinguished Professor,
University of California Los Angeles, USA*



I vividly recall the Communication System Theory classes that I took with Prof. Sahasrabudhe in 1977. The man would walk the corridors in Hilbert Space - so comfortable was he with the various mathematical transforms - that even today I remain amazed.

He devoted one of his classes to loudspeakers and microphones - and solved the eigen functions of a vibrating membrane on the board - without notes! In fact, I don't remember him ever using notes. Bessel functions of various orders just rolled off his tongue - nodes, antinodes, etc. He digressed into tablas and drums. Every lecture of his was a treat.

Recently, I have started a second career in teaching and I continue to be inspired by Prof. Sahasrabudhe. May he continue to inspire all of us - even in absentia. We have been fortunate to have been taught by this great teacher and पण्डित:



Sometimes a train journey becomes more than a ride.

SUDARSHAN BALA CADAMBI
*GM Memory and IO Technologies,
Intel Corporation (1983-2017)*



My thoughts go back to around 1976 when a few of us petitioned for and organised a train bogie tour to Bangalore - and a bit beyond to Ooty - to further our 'theoretical' education. As you can imagine, those three weeks were engaging and impressionable in very many ways. We had three faculty chaperones, and Professor Sahasrabudhe was definitely one of the most light-hearted and inspirational mentors you could have along on a field trip. I am certain that all of us would agree that having SCS with us made that time truly memorable. Today, I look back on the decades of dedication and achievement as well as the impact that Professor Sahasrabudhe had on so many lives – it is truly humbling for me to have been a small part of his life's journey.



*He inspired me to be
the best teacher I could be.*

PROF. VENUGOPAL VEERAVALLI

*Henry Magnuski Professor,
University of Illinois at Urbana-Champaign, USA*



At the beginning of my fifth year at IIT Bombay, I knew I wanted to apply to graduate schools in the US, but was uncertain about my area of research. I happened to take SCS's Communication Systems class that semester, and I was very impressed with his teaching. He would come to class with just a piece of chalk (no notes) and deliver such amazing lectures; each one like a part of a fascinating novel, delivered one chapter at a time. I would always eagerly await the next lecture. His enthusiasm for communication theory was so contagious that after a few weeks of his course I decided that I wanted to pursue graduate studies in communication theory.

To this day, he serves as a role model for me, and I constantly aspire to be as good a teacher as he was.



*Students loved his courses.
He loved to captivate and inspire them.*

PROF. B. KRISHNA MOHAN

IIT Bombay



I first got to know Prof. S. C. Sahasrabudhe in January 1982, when I started attending the Advanced Digital Signal Processing - a spring semester M.Tech. course. The way he introduced the subject and how he mesmerised the students in the classroom so he got their complete attention was simply amazing. Later, I got to know of his Communication System Theory course that became incredibly famous because he taught it. These are just two examples of the courses taught by Prof. Sahasrabudhe that students just loved to attend.

I was fortunate that he accepted me to do my M.Tech. thesis and later my PhD under his supervision. The many years I spent in this research phase under the mentorship of Prof. Sahasrabudhe, and the discussions on problems in Image Analysis, over casual chats and hundreds of cups of tea at our favourite Cafe haunt, stay with me forever. Prof. Sahasrabudhe had groomed many students who became professors, scientists, and industry professionals spread across the world. It is without a doubt that everyone would recall their association with a tinge of nostalgia.

He was a friend, guide and philosopher to me and to all students who were fortunate to come in contact with him.





*A man of
great conviction
who had the
skill to handle
sensitive situations
with adroitness.*

DR. K. S. DASGUPTA

Director, DA-IICT,

Director IIST Thiruvananthapuram, 2010-2015



Prof. S.C. Sahasrabudhe was popularly known as Prof. SCS among students and in professional circles. I will say that I am fortunate to have completed my PhD at IIT, Bombay under the supervision of Prof. SCS. He has always been reputed for his excellent teaching methodologies and cutting-edge research. However, what stood above it all was the fact that he was a fabulous human being and an extremely good mentor. I have never seen him getting aggravated to the point he would lose his naturally cool temperament. I would say he was always very considerate towards his students.

Let me narrate an incident which touched me the most. Prof. SCS was HoD of EE, IIT, Bombay during the period I was doing my research. I was an external candidate from SAC, ISRO, Ahmedabad and I used to often meet him on campus for discussions. Once, he called me to the campus from Ahmedabad to discuss some research challenges. The moment I entered his office, he smiled and said, “Let us have lunch together at my home”. Later, he told me that he had some urgent work so we need to postpone our research discussions. The manner in which he put across this situation, I did not feel bad though I had travelled all the way from Ahmedabad. This was his great skill in handling delicate issues.

He was often consulted by SAC, Ahmedabad or ISRO, Bangalore, either as an expert to review ongoing projects, or as a member of the Selection Committee to evaluate the performance of Engineers/Scientists for promotions to higher grades. As I was also a part of these proceedings, I could observe the astute manner in which he questioned participants. I can tell you that it needed a significant depth of knowledge and understanding of the subjects to answer his incisive questions.

His passing has created a void and I will miss him throughout my life. I still remember his affection, ever-smiling visage and keen sense of wit and humour with which he used to regale us.



*Quantum mechanics
is cooler than
Shannon Sampling!*

DR. POORVI VORA

B.Tech (EE), IIT Bombay, 1986



Professor Sahasrabudhe had a great class on Shannon’s Sampling Theorem that just blew our minds. You have a continuous function that can be represented by countable values? What?!! So Bikash Sabata, a classmate of mine, and I went to Prof. Sahasrabudhe’s office to tell him how we really enjoyed the class. In classic SCS style, he told us: “We offered the Engineering Physics program the first time to your batch. You could have taken Physics, yet you (silly us, he meant!) students took Electrical Engineering. Quantum Mechanics is much cooler”. And so we were dismissed!

The sampling theorem is associated with Shannon and Nyquist in the West, though we can see from Wikipedia that the Russian Kotel’nikov came up with it earlier. SCS attributed it to Shannon and Kotel’nikov when he taught it; notice the apostrophe, which is not generally used by Western academia but is common among Russian citations. This was him being exacting in what he expected of himself, and us. That apostrophe just stuck in my mind.

I kept my notes from this class for a very long time and might still have them; I likely took the class in the 1984 Monsoon semester. I also recall clearly the lecture

on quantization and the beautiful one on frequency modulation. He also taught part of a class on number-theoretic signal processing, which combines all my favourite topics. He had a gift when it came to lecturing. He knew the material and seemed to love it. It all came to life. Many of us chose to study or work in communication theory because of his one course in the area, required for the B. Tech degree at that time. I used to find it hard to be in class before noon, yet I made it to each of his 8:30 am classes.

SCS always treated us women as equal to the men in the class. There have been other faculty members, both in the US and at IIT, who explicitly brought up my potential role as a mother while discussing career options. But I can’t even imagine him bringing this up. In fact, when we were discussing academic careers, he asked me to think about whether it would matter if my classmates were earning more than I was. He was treating me as having the same financial ambition as any male student in the class. He would also tell us women off if we did not live up to expectations, and would push us to excel. For example, when I was planning to go to the US to study, he started quizzing me on whether I was doing everything that was necessary, and got really annoyed to find out that I had not yet learned to drive: “You are a modern woman and you don’t know how to drive? How will you be independent?” He would have known that would get my goat!

After I left IIT, I stayed in touch with SCS as I know a number of students did. He was Deputy Director for the year I spent as an Assistant Professor at IIT-Bombay right after my PhD. My husband and I went as experts for faculty interviews at DA-IICT while he was Director there. I would talk to him on the phone often when I visited India, and we met a few times too, when he would be in Bombay. Mrs. Sahasrabudhe was exceptionally warm to all of the students, and I was touched by their warmth towards my husband when they met him. Both of them have the gifts of intelligence, grace and warmth, and they are so generous with them. What a large family they have built together over the decades!



Beyond leadership, it was his high degree of integrity and good humour that is unforgettable.

DR. AVINASH JOSHI
Ph.D., IIT Bombay, 1996



I had the privilege of being introduced to Prof. Sahasrabudhe (SCS) through the good auspices of my guide Prof. S. S. Padhye, while I was doing my Masters at VJTI in 1988. Prof. Padhye was insistent that I complete my Ph.D. with SCS. So, after I indicated my interest, Prof. SCS asked me to come fully prepared for an interview. I cleared the departmental selection process and joined him and Prof. K. Shankar in January 1989, at IIT Bombay. This is how I began my association with SCS.

Over the past 30 years, I was fortunate to receive his guidance, mentorship and advice throughout my professional career. I fall far short of the effusive adjectives I would like to use while describing him. To my mind, he has always been this supremely intelligent teacher, incredibly compassionate human being, friendly, social and always smiling.

I can share a few incidents which highlight his wonderful personality. In the year 2009, DA-IICT had applied for TIFAC funding. Based on

recommendations and a positive assessment of the institute, infrastructure and processes, TIFAC would release funds. SCS had proposed that I, as a representative from industry, be part of the TIFAC assessment team. So, it transpired that an officer from TIFAC, Delhi and I arrived at DA-IICT one evening and were accommodated at the Institute's guest house. On meeting the TIFAC officer, I discovered the reality of bureaucracy when the officer expressed his displeasure that no one had come to receive him. I was taken aback, since in industry circles it is not a practice to receive or see off someone even at the CEO level. Shortly, a DA-IICT liaison faculty member arrived to take us for dinner, at a restaurant nearby, and to discuss the next day's plan of action. I did not call up SCS, nor did he contact me, as this was an official visit. When the faculty liaison dropped us back after dinner, the TIFAC officer expounded on 'bureaucratic protocol' and how well he was received and treated during another assessment at Chennai.

Around 10 a.m. the next morning, we convened at the Director's Office for a brief meeting on the overall plan. TIFAC had provided infrastructure assessment sheets and SCS personally conducted us through the entire facility, explaining everything in detail over the next two hours. He then requested his faculty colleague to continue showing us anything else we required to see and he left for another appointment. After a short lunch break, we had finished with our agenda, so I chose to sit and wait in the Director's Office, while our liaison faculty member went with the TIFAC officer to show him a few more things and keep him engaged. On SCS's return, the DA-IICT faculty liaison also entered the cabin and informed SCS that the officer wanted a quid pro quo to clear the grant. SCS immediately said that this would not be entertained and directed the faculty member to communicate the same to the officer. He was of the opinion that the Institute would be better off without the TIFAC grant than indulge in malpractice. This was classic SCS. A living example of how the head of an institute can influence organisational ethics and culture by displaying personal and professional integrity.

Another incident dates back to 2007, when I had

taken on an initiative, through the IEEE Pune section, to conduct a national level conference on WiMAX in October. I had no prior experience of organising a large conference. I recall that I had gone regarding work to DA-IICT and requested SCS to kindly deliver a keynote address. I waited as he checked his schedule and asked his Personal Assistant Venugopal to get a printout. SCS then got busy signing the paper. He then pulled out a chequebook from a drawer, and proceeded to fill out a cheque. Now, I was under the impression that he was busy completing some important activity. However, after a few moments, he turned to me and said that he regretted that he could not make it to the conference but asked me to take his registration form and the cheque. I politely refused, saying that for speakers and invitees we don't accept registration fees. I still remember his response. He said, "Keep it. Should you fall short of registration, it will come in handy." I was so touched that till date I have preserved his handwritten letter and cheque as a memento of his deeply considerate gesture.

We knew that SCS had done his Ph.D. from Russia. However, I wasn't aware that his fluency extended to reading and speaking in Russian too! It so happened that a Russian delegation had come to IIT in the early 90s. I happened to be at IIT guest house with my colleagues on some work. We were quite amazed to watch SCS conversing with the delegates in fluent Russian during lunch time. Though, we didn't understand a word, from the body language of the Russians, it was evident that they were speaking to SCS as one of their fellow colleagues. I have often wondered how SCS could retain his fluency after a long gap of twenty years post his return to India!

Occasionally, Communications Lab people used to organise dinner outings near the Saki Naka area, Mumbai. I distinctly remember that on many occasions SCS joined us on the BEST bus ride to the restaurant, even when he was a Deputy Director of IITB! SCS was an exceedingly humble human being. His family and Prof. K. Shankar would also accompany us. At these events, SCS was jovial, good-humoured and liberal with his jokes and teasing banter, so it was that we students were always in a cheerful mood after dinner,

on our way back to the IIT campus.

These are just a few of my memories which portray SCS as a highly passionate, modest and student-friendly teacher. He was an able administrator who never compromised on professional ethics and integrity. I strongly believe that he deliberately stayed away from untoward publicity and politics. During my interactions with him, I don't recollect SCS saying anything ill about anyone. He demonstrated high moral values and never engaged in petty gossip. He was a compassionate, loving yet principled human being. It is extremely rare to find so many qualities in a single person. During my formative years, I considered myself lucky to have had such an extraordinary guide, teacher, guru and mentor. He was, and will, remain a role model for me. Whatever my roster of achievements, it is all due to his blessings.

To my mind, he has always been this supremely intelligent teacher, incredibly compassionate human being, friendly, social and always smiling.



*That uncommon guru
who had a
heart of gold.*

DR. APOO KOTICHA

B.Tech (EE), IIT Bombay, 1986



I got to know Prof. Sahasrabudhe from the time I took his class in my 3rd year. I found him to be a great teacher who made a difficult subject easy and intuitive to understand. I decided that I would ask him to be my BTP guide, if he agreed. Which he readily did. He was very helpful, and I was able to get a good project done and get a good grade. Most importantly, once I took him on as my guru, not only did he treat me as his shishya, which would have been the norm, but he also warmly welcomed me as a family member, which was quite uncommon. I look back fondly to my days as his student/shishya and adoped offspring of sorts.



*Punctual and precisely to the point.
The mark of a teacher who knew
the value of both.*

PROF. RANJAN BANERJEE

Dean and Professor, BITS School of Management, Mumbai



I was in Mechanical Engineering at IITB and while I had heard of SCS, I had never really had the good fortune to meet him then. As an indirect consequence of my current role as head of a management school, I served with him on the boards of two engineering colleges. He was punctual, substantive and always to the point. I found him a very nice man and a thorough professional, somebody who was very sincere to every responsibility he took on. He had a gentle way of making even strong feedback palatable. Above all, he came across as a very nice human being. In many ways, he embodied all that was great about the best teachers I have known - depth, sincerity, and a complete lack of malice.

I will remember him fondly.



A tribute to a teacher, a tribute to a legend, a tribute to Prof. S. C. Sahasrabudhe.

DR. RAJEEV AGRAWAL

MD and CEO, Innoviti Payment Solutions Pvt. Ltd.



“Take a series of N real numbers and do a Discrete Fourier Transform on them, what kind of a number series do you get?” asked Prof. Sahasrabudhe, or SCS, as he was known to all of us. “In general N complex numbers” I answered. “How did you double the information, Rajeev?” said SCS with a twinkle in his eye. This was my introduction to the sparkling wit and sheer brilliance of SCS. He asked me to come back in five minutes with an answer. Well, it’s not important what the answer was, but moments like these are what I am reminded of when I think of SCS. Moments in which his genius helped our young minds leap and connect concepts across different mathematical domains, and with humour too. The year was 1991; I was starting my second stint at IIT Bombay after having completed my B.Tech the year before from EE.

During B.Tech, one starts attending department classes from the second year and that is when we first heard about him; his reputation preceding our interactions with him. Getting an opportunity to do a project with him was hard, the project itself would be hard, however if one succeeded in both, an admission to a top US college with scholarship was virtually guaranteed.

That was the reputation he carried. My plans were to stay in India and so I unfortunately did not get a chance to interact with him during my Bachelors. I also missed much of his legendary 3rd year course on Communication Systems Theory as I was unwell for almost a month due to a liver infection (lest this sparks speculation, I am a teetotaller). I just about scraped through his finals. My association with him started with the question on Fourier Transform and continued, albeit with breaks, till a few months before I heard the sad news of his passing away in 2019. He was the co-guide for my Ph.D. and guru for life. I think I was always a little scared of him. He had this incredible ability to see the true potential of a person and challenge them that they were not doing enough to realise it. Interactions with him were brilliant but scary, he knew more about our abilities than we believed in.

I remember this seminar of mine, in the winter of 1992, which he attended. After my presentation, he asked me a question and I gave a standard answer. It was the second year of my Ph.D., the first year having passed by attending classes (I had joined Ph.D. directly after my B.Tech and needed to take courses for a year). He kept probing me and I kept providing textbook answers. What was I to do? The whole format of a Ph.D. was turning out to be quite uninspiring. The Ph.D. scholars’ room on the 3rd floor was gloomy, I was missing the regularity of classes, and most of all I was missing stimulating interactions with other students.

He probed me further and after a few more attempts said, “I am sure you can give me a better answer and I wonder why you aren’t doing that. Your sheer insistence on not thinking more disappoints me.” With that, he left the room pushing the report back to me. This totally deserved rebuke hit me hard. I went back to my guide, Prof. Shevgaonkar, apologized to him and told him I was bored. He spoke to SCS and I started to work out of his lab, the renowned Communications Lab on the 1st floor. This started my real association with him. I would unhesitatingly say this was the hardest, most productive, and most exciting period of my life. A period that opened my mind to the beauty of mathematics, changing my life forever. He asked me about the courses I had attended during my 1st year

of Ph.D. and dispatched me to the Department of Mathematics to take some real courses. Then he gave me a thin 200-page book on Topology, asked me to read it end-to-end and come to the Department only when I was sure I had understood it to my satisfaction. I went back after three months thinking I will be grilled, instead he told me to start discovering a problem to work on. He was an extremely busy person. At one time, he was the head of two departments besides being the interim Director of IIT Bombay and in-charge of the Communications Lab, which is where all of us used to sit. In those days, there were no mobile phones. The only way to trace him was through his PAs in various offices. He was always on the run between his various meetings and it was not uncommon to call his PA only to know that we had just missed him.

I was lucky to get a bit more access to his time than usual. I wonder if he had given each of us more time how much more we could have learned from him. But that is being greedy. His sheer brilliance made complex things simple and his perseverance with us made each of us realise our full potential. What more can one ask of a teacher? He inspired us, showed us the direction, and then left us to find the destination.

There were many interactions I had with him during my Ph.D., each now an indelible memory. Each having helped me find a bit more of myself. The last one, before I left the academic world for a career in industry, was when I was giving finishing touches to my thesis. I met him and Prof. Shevgaonkar to share the draft and set a date for the submission. The meeting had already started. They had been discussing examiners and shared the same with me. As I was about to leave, characteristic of him, he threw a surprise.

I had been inspired by the works of Dr. Klaus Voss, a German mathematician and computer scientist during my Ph.D. Several times I had discussed Dr. Voss’ work with SCS. After fixing the date for submission he said, “Well, why don’t we send the thesis to Dr. Voss and make him the third examiner? After all, he would be the best judge of what you have done.” This was typical of SCS, just when you felt you were finishing things, he would do something to make you want to achieve

more. I was taken aback and a bit scared. Dr. Voss was a highly reputed mathematician and scientist, while I was just a student from an Indian college, having spent all of 2 years on my Ph.D. I was worried that he may not find my work good. His announcement did what he secretly wanted to achieve anyway. I went right back to the thesis and worked like crazy to polish it up for the submission date. I submitted and left shortly thereafter to start my career in Bangalore. One day he called me and said, “Dr. Voss has replied. He says your problems and solutions are worthy of a doctoral thesis. Well done!” He had helped one more student learn how to discover and solve problems, one more student believe in themselves.

I left IIT in 1995 and years went by. I moved into my career and lost touch with him. In those pre-Internet days, news traveled slowly and I would only hear about him once in a couple of years. He was maintaining his super active schedule: travelling, consulting, giving lectures and teaching. Doing all the things he enjoyed. We would run into each other at airports. Even after our active association, I would always approach him with awe and a bit of fear. He would always greet me with his warm smile, sparkling eyes, and brilliant wit. We would chat briefly, exchange phone numbers, me promising to call him up and then some excuse of work would take over.

One day, sometime in 2015, I got a call from him. In his characteristic style he asked me, “Hey, when did you start writing books?” I was taken aback. He continued, “Come on, I have a book in front of me, authored by Rajeev Agrawal.” We laughed about the common name, exchanged notes, and lost touch again.

Sometime in 2018, I ran into him at the Mumbai airport lounge. I was seeing him after a long time, maybe 10 years. Even then the sight of him filled me with awe. He was sitting a few tables away, alone, having dinner. He looked old, but not tired. He looked occupied, as if not wanting anyone to disturb him. I kept looking at him, not wanting to interrupt whatever he was thinking about. He was eating light as always. I saw him stop and get up to go to the sweets counter, his weakness. I decided I had to say hello to him and

greeted him. We chatted, I shared with him what I was doing, and he, curious as always, wanted to know all. He was still very busy, travelling 10-12 days a month, totally comfortable with the changing world of technology around him, and enjoying every bit of his work. We exchanged numbers once again. We got up to leave the lounge and head towards our respective gates, when there was an announcement that his flight had been delayed. “I will stay back Rajeev, you go ahead, stay in touch” he said. I left to catch my flight and half-way to the gate, my flight was also announced as being late. I could not believe my luck. I could spend some more time with him. I rushed back to the lounge but by that time he had left. I searched around but could not find him.

Not finding him left me uneasy - as if something was incomplete. This kept bothering me till, in February 2019, I decided I just had to meet him wherever he might be. He had shifted to his ancestral house in Nagpur. Since I had some work in Mumbai in the second week of March, I decided to go to Nagpur from there, over the weekend. I gave him a call and we decided to meet at his ancestral home on the 21st. He invited me over for lunch with him and his wife. We had lunch and started chatting. He was still travelling, but a bit less. His throat had suffered an ailment and he was refraining from talks. I asked him why he was not writing a book, and he said, “Maybe, one day.” He showed me around his beautiful ancestral house. We talked about many things, people, technology, old times, current times, times to come. He told me about his early years at IIT when industry work used to be looked down upon, and how he would fight for it. We talked and talked.

During the tour of his house, I came across a cupboard full of books. The same books that used to be in his office at IIT. Books we used to refer to, and some of which I still have with me. He asked me to take whatever I liked. I searched and picked up a book on Probability. Without blinking an eye, he told me to read so-and-so chapter that explained the concept of randomness in an entirely different way. He had stopped reading those books fifteen years back; however his memory and intellect were as sharp as

ever. His wit too was intact. He told me that he had joined a gym. As I looked at him incredulously, he said, “That’s the only place I can get clean air. So I go and walk around for half an hour, much to the surprise of the gym instructor, who keeps looking for an opportunity to put me on the tread mill.”

The afternoon that I spent at his place is one of the most memorable moments of my life. I left that evening feeling blessed. Away from our responsibilities, away from the hustle and bustle of airports, this was the first time we had talked for so long and on such diverse topics. This was the first time I learnt a little more about him as a human being, an individual beyond the teacher I had always seen him as. How much he loved his family, how much he missed his daughter. His friends from IIT, many of whom had passed away. His students, each of whom he remembered fondly. His struggles and successes. I used to recall him as a brisk walker, but he was walking a little slower now. His body had aged, but not his spirit. How was I to know it would be the last time I would meet him?

I called him a few months later for some help with an introduction to someone in IIT, but we could not connect after that, work took over.

Then one day in December, I came to know about the news of his being no more. It was a Sunday, I had several missed calls from an unknown number during the day, thinking it to be spam. In the evening, I came to know that the person trying to call me was a friend whose number I had lost, calling me regarding his news. In his inimitable manner, SCS had passed away while busy at work. Just hours before he had to give a talk, that too on a weekend. I planned my trip to Pune immediately but was advised by Prof. Shevgaonkar, who coincidentally was in Pune at that time, that by the time I reached, the last rites would have been completed. In life as in his departure, SCS was a man in a hurry to finish things.

My last memory of him is his smile as he looked back from his verandah when I was leaving his home on the 21st of March 2019.

Dear Sir, Thank you.

Thank you for encouraging me to believe I could do more.

Thank you for showing me the direction to achieve it.

Thank you for listening to my confused thoughts.

Thank you for helping me organise them.

Thank you for allowing me to make mistakes.

Thank you for helping me to learn from them.

Thank you for appreciating my small successes.

Thank you for supporting me through my big failures.

Most of all, thank you for giving me your time.

Your student, still in awe, and still a little scared.

DR. RAJEEV AGRAWAL



Sajama, Sir. Not Saajamma!

DR. SARITA SHEVGAONKAR

Freelance Writer



My memories of Professor Sahasrabudhe go back to the year 1990 when I was pursuing a Ph.D in Electrical Engineering. I needed to earn 52 credits over three semesters, while also managing family responsibilities and raising my two little ones. It was quite a juggling act. However, when I was told that Professor Sahasrabudhe was going to take the ‘Basic Electronics’ course that semester and it would be his last, I didn’t want to miss it at any cost. It was my only chance to hear him in person. So, I decided to audit the course on top of 52 credits, family commitments and my children. Not to mention, the classes started at 8.30 in the morning. Although, he ended up taking the ‘Probability Theory’ course instead of ‘Basic Electronics’, I still decided to go ahead with it. I was a bit apprehensive about whether I would be able to understand anything, so I also bought a big book on the topic by Athanasios Papoulis. Just in case I needed to refer to it during lectures.

On the first day of the class, he entered, took the roll call, started writing from the topmost left corner of the board and continued towards the right. One could refer to the notes written on the board, if required. His

neat handwriting, clear pronunciation and intelligible thoughts were a reflection of his profound knowledge on the subject. His face would radiate more and more as he went deeper into it. Fifty minutes of the lecture were quite mesmerizing. We were all so engrossed that we just kept listening to him, even forgetting to take notes at times! Needless to say, I didn’t have to open the Papoulis book! Making it to the class at 8:30 am in the morning was a challenge for me but I made sure that I never missed any of his lectures.

There is also an amusing memory from the course that I distinctly remember. While taking the roll call, Professor Sahasrabudhe would look at students over his golden rimmed spectacles and call out the names. “Saajamma??” he would read out the name. The girl always corrected him “Sajama, sir. Not Saajamma”. “Yes, yes.. Sajama” he would say, and the same story would repeat almost every day.

All I can say is that I was fortunate enough to learn from a teacher par excellence who also possessed a jovial personality.

“Saadar Pranaam” to the wonderful teacher!



It was my privilege to be his student.

ASHUTOSSH PEWEKAR

B.Tech (EE), IIT Bombay, 1995



As a B.Tech student, it is to my eternal good fortune that I was taught Communication Theory by Prof. Sahasrabudhe. Through every one of his lectures and interactions, SCS personified enthusiasm, energy and love for a subject that was infectious. It certainly played its part in instilling greater involvement and desire to succeed. I will always respect this great teacher of mine. May his tribe increase.



Nothing quite like his keen ability to quickly get to the heart of the subject and draw new perspectives.

ABHIJEET WAKLE
CTO, SigPro Systems



Prof. S. C. Sahasrabudhe was not just a venerable teacher, and researcher par excellence, but also an able administrator and a visionary in the fields of education and technology. As a doyen of higher education in India, especially in the fields of Electronics, Telecommunications and Computer Science, this visionary was the guiding force behind many advances in India's higher education – from the IITs and DA-IICT - which he literally raised from its foundation, to numerous institutes where he was an adviser or active contributor - National Board of Accreditation (NBA), TRAI, DoT, IEEE and many others.

Truly, his illustrious accomplishments need no mention and the numerous accolades he received, speak volumes for themselves. Remembering him, triggers memories of my days at IIT Bombay, in the second half of the 1990s. We were extremely fortunate to have great professors at IITB, in that term, who inspired us and instilled a love for our subjects, which remains unchanged, making us who we are today - Prof. Uday Desai - who later went on to become Director of IITH,

Prof. R. K. Shevgaonkar - later the Director of IITD, Prof. Subhashis Chaudhuri - presently Director of IITB, Prof. Abhay Karandikar - presently Director of IITK, Prof. V. M. Gadre, Prof. Shankar and Prof. Govindrajan. Among these esteemed stalwarts of education, Prof. Sahasrabudhe, popularly nicknamed as SCS, inspired a sense of awe. I recall, he was the Deputy Director at IITB, a position that implicitly brought with it the responsibility of managing the institute's operations. There were many stories that were well known in that era. Prof. SCS had a PhD from Leningrad, in what was then the Soviet Union. This meant that he could speak quite fluently in two complex languages – Russian and Math. Though he came from a Communication Engineering background, he could get to the heart of any subject within few minutes. It was also the reason why he was the Examiner for computer science, mechanical, control systems, microelectronics, power systems and a range of other subjects. All his examinees had to be quite well-versed with the subject and have a solid body of work to really stand their ground. It took him mere moments to gain a fundamental grasp of whatever was before him, irrespective of whether it was PhD, M.Tech, B.Tech, Communication Engineering, Digital Signal Processing, Image Processing, Microelectronics, Combinatorics, Computer Science, Graphics, Control Theory, Hardware... nothing got past his keen academic eye and intellect. Having gained significant operational experience and knowledge of advanced Signal Processing - multi-resolution, wavelets, statistical signal processing, neural networks, computer vision, digital communication and advanced math in the first 3 semesters, my ultimate objective was to breach the final frontier of data and computer networks when working on my Thesis. This was a topic which was covered by ECE as well as CSE department, though the approach and focus areas were slightly different. Moreover, I knew circumstances would not allow me to go for PhD. Therefore, I set out to look for an adviser in the CSE department. One could look for an adviser in another department in IITB, though it was not as simple or straightforward. I met many professors including S. S. P. Rao, Sivakumar, Dhamdhare, and others whose names escape my recollection today.

Somehow, things weren't progressing as I expected and the last date for submitting the adviser's name was quickly approaching. I then met SCS, and he happened to mention that there was a research project in Data Networks that he wanted to build in Communication Lab. Prof. R. K. Shevgaonkar was very approachable and while talking to him about projects available in the department, I expressed the apprehension that SCS may not have adequate time, as he was the Deputy Director. Prof. R. K. Shevgaonkar told me to take his word for it that just half an hour from Prof. Sahasrabudhe was equivalent to hours spent by others. It definitely helped me decide and confirm the project with SCS. This is the kind of respect that he commanded from his peers. From there, I began my closer association with SCS.

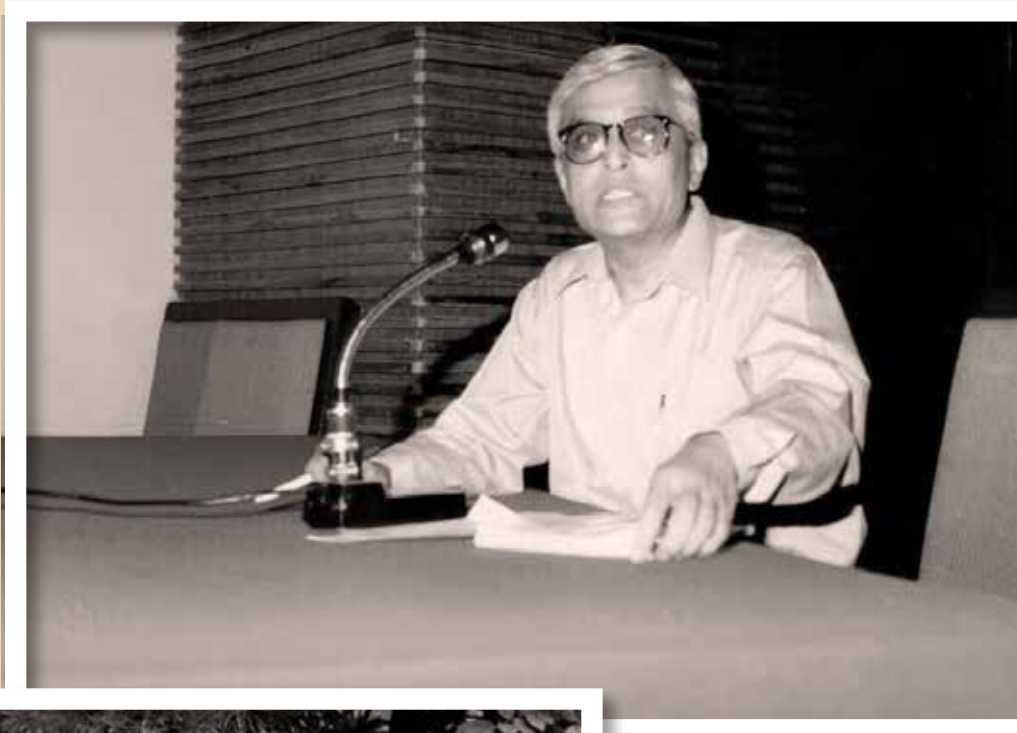
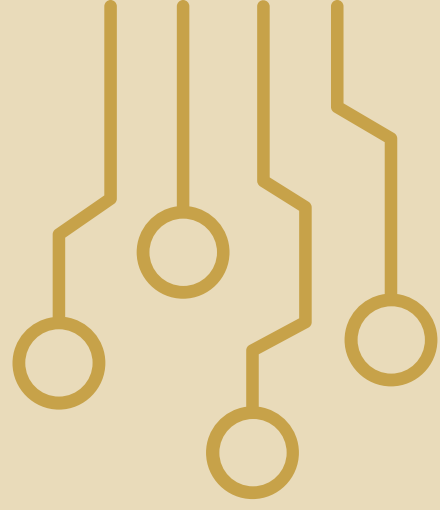
He was my project thesis adviser and my discussions with him were always very educating. His ability to arrive at insights and the speed with which he thought, always astonished me. He was the head of the Communication Lab, where we were working along with the PhD students. The depth and expanse of knowledge that SCS commanded across several fields, was quite astounding. PhD students were working on image processing, networking, digital communication and networking hardware. Later, we got to know that he was instrumental in helping Intel gain a foothold in India and had the first Microprocessor Lab at IITB set up in the 1970s to introduce and accelerate work on micro-processors. In the 1970s, Motorola, Zilog and Intel all had micro-processors and it could have been anybody's game. He taught us two subjects and the lucidity of his teaching left a deep imprint. They say that only someone who truly understands the depth of his subjects can teach with ease and simplicity. What I found most amazing was that although he always had a packed schedule as a Deputy Director (DD), it never caused him to miss a single lecture. He would walk from his office to the department and start writing tons of equations on the board, without referencing a book or notes. This is still etched in my memory.

I was also a Teaching Assistant on his subjects for final year B.Tech students. This way, I got to experience him teaching another subject. It was definitely enriching to

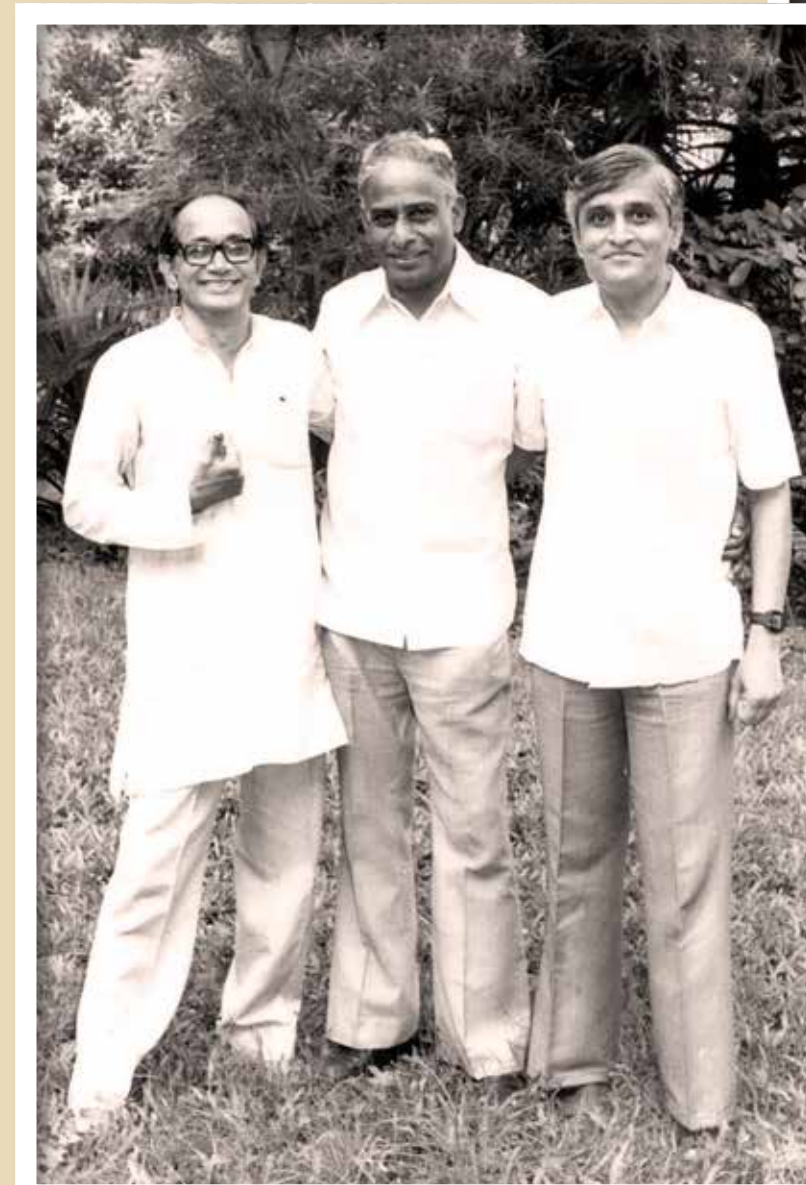
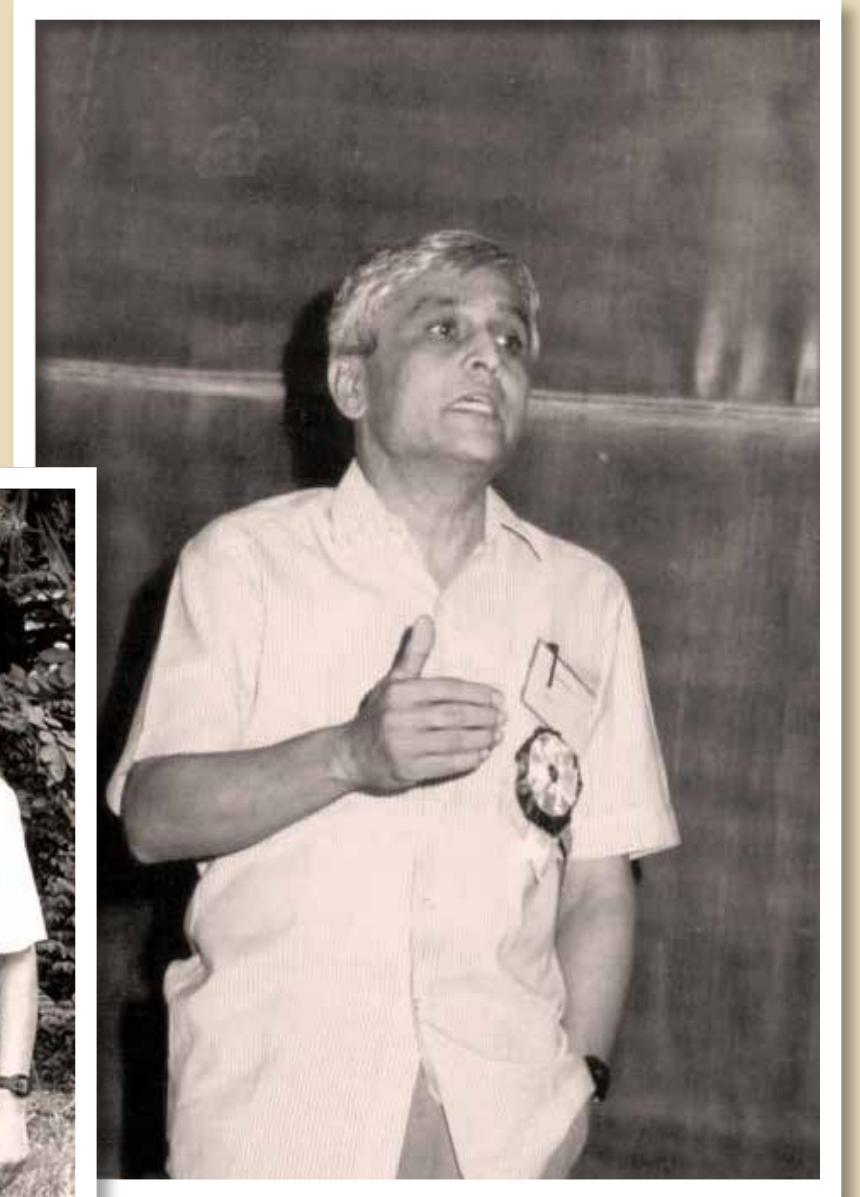
see things from the perspectives he had to offer. IEEE ICPWC 1997, an International Conference on Wireless communications, was being held in Mumbai. I was a coordinating volunteer. In those heady days, the world was about to change, and UMTS – 3G, IMT 2000 and Vision 2000 were among a bunch of hot words; so was Y2K. Back then, SCS was the Chairman of IEEE West India and his office bearers conducted the conference. For me, it was yet another opportunity to experience his administrative abilities and witness the tremendous popularity he had amongst international faculty members and industry visitors.

After retirement in 2000, SCS served as the CTO of Global Telesystems and later as Director at DA-IICT (Dhirubhai Ambani Institute of Technology). He leveraged the wealth of his knowledge and experience in building DA-IICT into a leading institution. His journey, his accomplishments and his laurels are that of a true legend. Articles, though a humble attempt, simply cannot do justice to his inspiring journey of brilliance, scholarship and leadership that touched so many lives. However, I am forever grateful for having had the opportunity to learn and work with him. May peace be unto his eternal memory. Om Shanti!

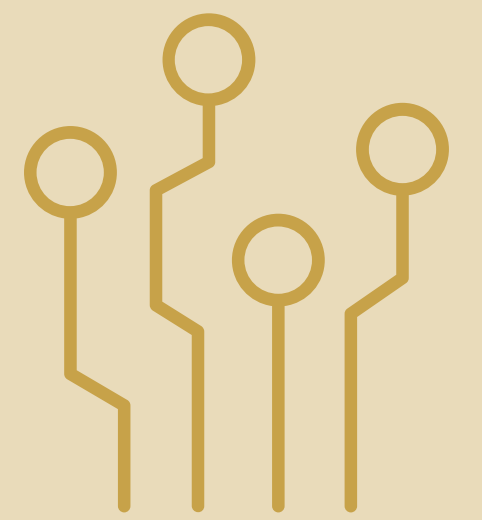
They say that only someone who truly understands the depth of his subjects can teach with ease and simplicity. What I found most amazing was that although he always had a packed schedule as a Deputy Director (DD), it never caused him to miss a single lecture.

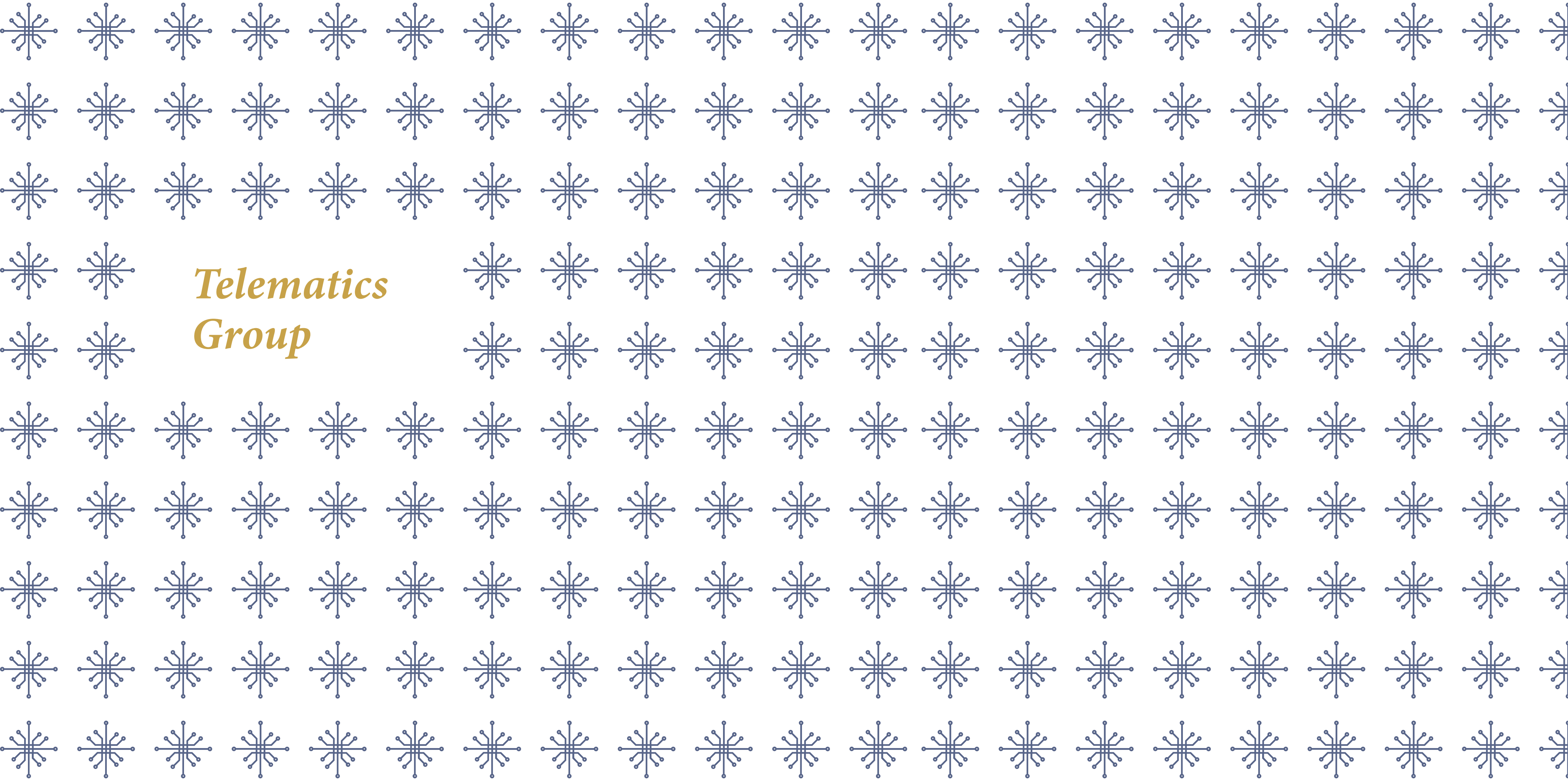


(L to R): Prof. S K Banerjee (Electrical Engg.), Janardan (Registrar), Prof. Chandrashekhhar (Aeronautical Engg.), Prof. K. Shankar (Electrical Engg.), Prof. R. E. Bedford (Electrical Engg.) and Prof. SCS




(L to R): Prof J S Murthy (Physics), Prof. R. E. Bedford (Electrical Engg. & Director, IIT B) & Prof. SCS





*Telematics
Group*


*A great
academician,
a very good
human being
and an
efficient
administrator.*

PROF. S. L. MASKARA
IIT Kharagpur



I would like to start by paying my tribute to Prof. Sahasrabudhe. I can say, I was very fortunate to be associated with Prof. S. C. Sahasrabudhe for more than three decades. I first met him at IIT Kharagpur during a meeting on the Government of India MHRD Telematics Project organised by the late Prof. M. N. Faruqui, who was the Deputy Director at IIT Kharagpur. At that time, Prof. M. N. Faruqui had been directed by the MHRD to initiate three projects on the then very current fields of Telematics, Informatics and Information Technology. Prof. Faruqui and I had a good working relationship so, on receiving this directive, he consulted me on how we could best approach these projects, as all three fields were completely new to us. After some discussion and study, we thought we were capable of taking up Telematics. Informatics would be given to the Computer Science and Engineering Department. Educational Technology would be taken up by some Education Technology cell. Fortunately, a small cell on Educational Technology existed in IIT Kharagpur, so Prof. Faruqui agreed to this suggestion. Regarding the Telematics project, after Prof. Faruqui and I had a detailed discussion, we invited all the five IITs and the IISc institutes to participate in this project and chalk out a plan of action. Accordingly, around the latter half of the 1980s, representatives from these institutes visited IIT Kharagpur. Among the many that came, two were from IIT Bombay, one of them was Prof. S. C. Sahasrabudhe. While this was definitely our first introduction, we soon came to have mutual admiration for each other that lasted many decades.

Our marathon discussions on Telematics began with defining its meaning and what we could do in this area. We realised that digital technology was coming in a big way and that the entire country was going to go digital. As far as communication was concerned, Digital Exchanges had already started operating and digital transmission technology was being used by BSNL. Since most engineering colleges, and even IITs, did not teach much about digital communication like digital telephony and digital transmission in our courses, we decided to begin education courses on digital communication. We identified various topics and created short courses every year - one in July and another during December. We started with training

faculty members of various engineering institutes, so that they could teach this subject in their colleges; inviting participation from various engineering colleges including IITs. The Telematics project had adequate funding, so we were able to provide accommodation, travel and other incidental expenses so that the participants and even their colleges did not feel the burden of cost. We then prepared a roster of topics which could be taught at different IITs and IISc by rotation every semester. I was thrilled that Prof. S. C. Sahasrabudhe was among the leading members who immediately accepted the challenge. We decided that the Telematics projects would not be confined only to training faculty members but also include research activities. Each IIT and IISc identified a field in the area of Telematics, which included computer communication, even though the Internet had not yet gained prominence at that time. The course acceptance was overwhelming. It seemed that everybody wanted to learn this new technology and the participation in the courses was huge. In fact, we had difficulty in managing so many participants but credit should go to people like Prof. S. C. Sahasrabudhe, Prof. Jhunjhunwala and many others who made it possible. With Prof. Faruqui as the National Coordinator and the sanction of the Ministry, we made the programme into a national IIT joint project and formed the National Joint Telematics Group. People from the communication departments of participating institutes became members. To manage and organise the project, we held two meetings every year, where we would discuss challenges, improvements and follow-on action plans. It was quite a dynamic process and all of us became a very coherent and close group of teachers and researchers. This is how my association with Prof. Sahasrabudhe kept on growing. Further, we introduced the National Communication Conference (NCC) for the first time in the country. This was a conference totally dedicated to communication, which would be held every year in February and in rotation among participating member institutes. I remember that the first real problem we faced was deciding on a location where we would launch the first short course. We considered that IIT Kharagpur might be a little remote at the start, so the choices we had were Bombay, Delhi or perhaps Kanpur. I was happy that

Prof. Sahasrabudhe accepted the challenge to hold the first course as well as the conference. The seed was sown and the course went on to become very popular and got a lot of appreciation from the whole country including the MHRD. We also began research activities by distributing projects to the B.Tech, M.Tech and PhD students. The courses went on for a long time, perhaps 15-20 years, till the Telematics project funding was available. By then, a good number of people were trained and the programme became self-sustaining. The conference celebrated its Silver Jubilee in February 2019 at IISc Bangalore, where I met Prof. Sahasrabudhe for the last time. We were staying in adjoining rooms at the same guest house and so we made it a point to have our breakfast together daily.

I never missed a course or conference that was held in Bombay till my retirement. When we used to visit Bombay, Prof. Sahasrabudhe would often invite us over for a meal. Similarly, if there were official engagements in Kharagpur, he would make time to visit our homes there. As you can guess, we were very close, not just through our academic interactions but also our casual meetings. He would freely call me for many things. I never addressed him as Prof. Sahasrabudhe and he never called me Prof. Maskara. Whether it was a formal or informal meeting, we addressed each other as Sahasrabudhe and Maskara. I know from his students that he was a very popular teacher. He would take lectures for the two short courses every year and regularly get over 70 participants from across the country. He used to begin with the fundamentals and take them through to the latest developments in technology. He was considered to be popular, friendly and quite charismatic among his students. As a researcher, I know he was great because he had helped guide some of India's best PhDs who are excelling in their fields. This includes Dr. K. S. Dasgupta who was the Director of ISRO for five or more years. Now, he is the Director of Dhirubhai Ambani Institute of Information and Communication Technology, where Prof. Sahasrabudhe himself was a director for many years. Another one from this group of scholars was the late Prof. Somnath Sengupta, who joined IIT Kharagpur when I was heading the Department of Communication there.

As I have said earlier, Prof. Sahasrabudhe was always ready to take up challenges without hesitation; like organising the initial Telematics courses and conferences. He was highly capable, talented and in high demand with government groups, teaching bodies and institutions - particularly the IITs. He must have participated in numerous project evaluations of the government, NBA committees and faculty selection committees. In fact, I was a co-member in some of them, so I have enjoyed his company even there. His credibility and capacity for cooperation with everyone, while still keeping his independence of opinion, was highly valued. Despite all this fame and adulation, he was startlingly down-to-earth and you would never find him showing off his academic and research credentials or unduly flexing his administrative position. He was kind-hearted and in the three decades or more of my knowing him, I have never once seen him lose his cool. He was ready to accept challenges and every time he used to say, “Let us take things seriously but not be worried about any problem as we will be able to solve it”. While he was down-to-earth in his approach and ability, he was forward thinking in everything concerning the field of education and communication technology. He used to keep himself aware of the latest technology, trends and news. In my opinion, he was a good blend of an administrator as well as an academician, considering that he was the Deputy Director of IIT Bombay for five years and the Director of DA-IICT for at least ten years.

I was personally very close to him and whenever we used to meet - either during the course of official engagements or personal ones at our respective homes - we would share meals and thoughts about a wide range of topics. He was very fond of Bihar and my hometown Begusarai. I don’t know why he had this deep fascination for Bihar but he wanted to know everything about the place, the people and what was it like living there. He was appreciative of the witty comments of the then Chief Minister Lalu Prasad Yadav; he would often quote him and praise his concern about the rural people of India. Prof. Sahasrabudhe would often get so carried away by my stories of Bihar that he evinced keen interest in visiting

my hometown with me. Even at the last Silver Jubilee celebrations of NCC at IISc, he asked me about when we could go there. Unfortunately, this desire was never to be fulfilled. He was always concerned about my welfare and there is a small story I can narrate about the care that he had for those close to him. Once, when he had come to Kharagpur on official work and after the usual meals at my home, he spontaneously decided to walk around Kharagpur Town. I told him that Kharagpur was a very small railway town with tin sheds, small shops, no fancy places to eat and very few places to see. He said that if this was the case, then he wanted to see it even more. So that evening, we walked down the small bazaar; we used to call it ‘Gol Bazar’. One can cover the entire market in ten minutes, so we took two or three rounds of the market and he asked me for suggestions on what he should buy. I told him that it wasn’t really a great place to buy anything special but if he was so keen, perhaps he could buy a saree for his wife. I’m not sure if he made any purchases but in the course of our small talk, I mentioned that I would shortly be travelling abroad on work and I didn’t have a windcheater or cold-weather jacket. At this, he got quite concerned and asked me, how I would manage the extreme cold there. Back then, I was not aware of how extremely cold it got in winter, as it was my first visit abroad. Promptly, he decided that we should start looking for something warm to wear and that he would buy it for me. I protested saying that we could not possibly find something like that in a town where I knew every shop. But Prof. Sahasrabudhe was insistent. So, we visited a few shops and naturally were not able to find anything close to what was needed. However, one shop had a blue windcheater made of a kind of cheap synthetic material that was around Rs. 200. Making up his mind, he bought it for me, saying that something is better than nothing and that I should at least have some protection till I could buy a proper jacket if I visited a bigger town. Till date, this blue jacket is a treasured possession that I use whenever I have to visit a cold place like Delhi during the winter. I have preserved it, and despite its very cheap plastic look, it has served me well till date. It has also become something of a memento for me. Though it is not so cold here, I

sometimes wear it at home.

There is another story I want to tell you about him in his post-retirement years. I was at Dhirubhai Ambani Institute of Information and Communication Technology and after the previous Director retired, Prof. Sahasrabudhe joined as a director. The first thing he told me that he had joined only because I was there. I felt rather touched by this. Unfortunately, in little over a year I had to leave due to a prior commitment, though my term of contract was for many years more. So when I wanted to leave, Prof. Sahasrabudhe was not ready to let me go. He told me that he had joined because of me and now that I was leaving, how would he survive there without me. Generally, I never accepted any farewell celebrations in my entire life - I would just leave on the last day. I was about to do the same but Prof. Sahasrabudhe prevailed on me and because he was such a good friend, a farewell was arranged for me with all the staff and faculty of the institute. He had tears in his eyes when we made our final farewell, though he continued there for ten years. After I left, there was the occasional conference or event held there and I used to visit DA-IICT. I remember one conference in Ahmedabad, where he happened to be the session chair, he presented me with a memento and, as usual when he met me at a public forum, he would embrace me warmly like a brother in front of everybody. His vote of thanks speech moved me, as he described how close we were as associates and friends. I have so many such anecdotes and memories of Prof. Sahasrabudhe that if I list them all, it would probably take a very long time. If I had to encapsulate him in a few words, I would think he was a wonderfully skilled teacher with principles and a modest human being who was nice, yet could face every challenge with vitality. I pay my tribute to him as the great personality who was my friend and I wish that those people, whose lives he touched, will continue to keep his memory alive for a long time.

His credibility and capacity for cooperation with everyone, while still keeping his independence of opinion, was highly valued. Despite all this fame and adulation, he was startlingly down-to-earth and you would never find him showing off his academic and research credentials or unduly flexing his administrative position. He was kind-hearted and in the three decades or more of my knowing him, I have never once seen him lose his cool. He was ready to accept challenges and every time he used to say, “Let us take things seriously but not be worried about any problem as we will be able to solve it”. While he was down-to-earth in his approach and ability, he was forward thinking in everything concerning the field of education and communication technology.

- PROF. S. L. MASKARA



No matter what mood you were in, after speaking to him for five minutes, you would warm up to him.

PROF. VISHWANATH SINHA

Institute Fellow, IIT Kanpur



In 1985, some of us met at IIT Kharagpur to discuss the situation of Digital Communication in academia in the country. By ‘some of us’ I mean: Professor M. N. Faruqui – IIT Kharagpur, who was also its Deputy Director and Professor of Electronics & Communication; Professor S. L. Maskara and Professor T. S. Lamba – both from IIT Kharagpur; Professor H. M. Gupta - IIT Delhi; Professor S. C. Sahasrabudhe - IIT Bombay; Professor Ashok Jhunjhunwala - IIT Madras; and I represented IIT Kanpur.

We found that except for IIT Kharagpur and IIT Kanpur, no other IIT was offering Digital Communication as an undergraduate course. We felt that Digital Communication is a major technology course which must be promoted. After a long discussion, we came to the conclusion that a national effort must be made to encourage Digital Communication as a subject that must be offered in engineering colleges. A project proposal to this effect with research component was sent to the ministry and so the nationally coordinated Telematics Group was formed, with Professor Sahasrabudhe from IIT Bombay and I from IIT Kanpur as the project coordinators, with a funding of somewhere around Rs. 200 crores. Prof. Faruqui was the national coordinator and IIT Delhi had Prof. Surendra Prasad, IIT Madras had Prof. Ashok Jhunjhunwala as the other coordinators from their institutes. We would meet every six months in one of the designated IITs and offer a 7 to 10-day Digital Communications course to faculty members from

engineering colleges. Even if we did not have across-the-board (on digital communication) expertise, faculty members from all the IITs would gather together at the designated IIT campus for seven days and teach depending on one’s expertise. For example, I would teach Satellite Communication and Error-control Coding and Prof. Sahasrabudhe taught basic Digital Communications. This is how we used to meet, and developed a relationship on a first-name basis. He would call me ‘Vishwanath’ and I would call him ‘Sudhakar’ and that is how our interaction started around 1985 and continued till I met him last in 2019 at IISC Bangalore during the Silver Jubilee Programme of NCC (National Conference on Communications).

I actually had a prior family commitment at the time of the Silver Jubilee, so I told him I could not come. He replied saying, “You must come because I don’t know how many of us will be there for the Golden Jubilee”. At that time, I did not realise how prophetic his words would be but I made it a point to reach there just for the day to attend the Silver Jubilee. Little did I know that this would be our last meeting.

When we met in Kharagpur in 1985, except for Professor Faruqui who was Professor and Deputy Director, all of us were young Professors. We grew up in the system and went from being Assistant Professors to Professors to becoming Head of Department and so on. Like Sudhakar became Professor, Head of Department and Deputy Director

in IIT Bombay, similarly I became Professor, Head of Department and Deputy Director in IIT Kanpur. A few years before my retirement, I became the Founding Director of LNMIIT, Jaipur and Sudhakar became Director at DA-IICT. So you could say we would keep on interacting with each other even as directors. He would visit my place and I would visit his, and so on; that was our interaction. During our early days on knowing each other, my daughter was studying in Pune University and she wanted to do her internship in IIT Bombay in Chemical Engineering. Even though I knew a lot of people in IIT Bombay, I wrote to Sudhakar and he obliged to help her. My daughter would visit Sudhakar’s house and that is how we got to know each other even better. During one of my visits to IIT Bombay, he took me to his flat in Hiranandani and showed me how Madam Sahasrabudhe had decorated a wall.

As a human being, Sudhakar was an extremely warm person. No matter what mood you were in, after speaking to him for five minutes, you would warm up to him with his jovial nature. Words are not adequate to describe this aspect of him. He had his own way of tackling an issue or whatever might have concerned you, and he would be along with you. That was something great about him. He always had a twinkle in his eye and a very subtle way of recounting a joke. After finishing the Telematics Group courses during the day, we would have a lively meeting in the evening spiced with Sudhakar’s wit and humour. After Professor Faruqui left IIT Kharagpur and became the Vice Chancellor of AMU, I became the National Coordinator and Sudhakar continued to be the Telematics Coordinator from IIT Bombay. I was there for up to ten years or so, and after I left IIT Kanpur, Dr. Bhaskar Ramamurthy became the Co-ordinator. In 1995, after years of spreading awareness about having Digital Communications as a subject in the country, we felt that the time had come to have a meeting of researchers in the area. Across the IITs, there were graduate students, and courses were available at the graduate level. The Telematics Project gave an impetus in bringing Digital Communication to the undergraduate curriculum in all engineering colleges, across the country. Nobody would probably give us the credit for this but in our opinion, we were responsible for it. Sudhakar would push this Digital Communication

agenda in Maharashtra and I would do it in other places. This is typically why even today when we hear someone who has risen in the profession say, ‘Sir, aapne padhaya tha humein!’, whether it was me, Sudhakar, Jhunjhunwala, Maskara or any one of us, we felt a sense of achievement and satisfaction that we did something significant in our lives. We generally managed everything ourselves, except when we became Directors in Jaipur or Gandhinagar where we had to manage with government agencies. However, we received support from almost all bureaucrats because we were quite upfront about our ideas, offerings and need for support. Sudhakar was a very able administrator, and you can see his imprint in Gandhinagar even today.

I believe that we were all very good teachers in the Telematics Group. Our programme succeeded because Professor Jhunjhunwala, Professor Sudhakar, Prof. Maskara and I felt that we have left an imprint on all our students who were faculty members. Any person, ministry or agency who talked about anything related to Digital Communication or Computer Networking would certainly ask for our opinion. We became known for our work. In fact, we are still known as JTG (Joint Telematics Group). Today, having a conference organised in a hotel is the norm but when we started the National Conference in 1995, we had decided that it would be held only in the premises of an IIT or IISC, Bangalore. Our reasoning was simple: we could meet everyone not only during the paper presentations, but also after the conference in the evening. This became our mode of conducting the conference because it was not the norm in the country or even abroad. We decided jointly and nothing was dictated by the National Coordinator. Generally, the conference would be held at the end of January for various reasons, however In 2019, it was moved to the end of February. Even though the courses have stopped, conferences still continue, and we make it a point to meet.

It was very touching that IISc called all of us including our family members to IISC, Bangalore for our Silver Jubilee. As part of the Telematics Group from 1985 till 2020, I hope there will be a Golden Jubilee, and Sudhakar will be present in our hearts as the drive for better education.



*If ever I could
point out a singular
stand-out aspect,
he was a model of
integrity.*

PROF. T. S. LAMBA
IIT Kharagpur



When I cast my mind back in time, my very first memory of meeting Professor Sahasrabudhe goes back to 1990. This was at a time the nationally prestigious Telematics Project had just begun to take wing. As the scope and pace of the project progressed, so did our many opportunities to meet during events, courses and conferences. I did not have the opportunity to interact with him on a selection committee but definitely did so during the Telematics Projects. As I recall, the Telematics courses back then were fairly short, and I met Professor Sahasrabudhe quite regularly during this time. Perhaps there may have been the odd NCC meeting where either one, or both, of us was not present but by and large, we kept meeting at least twice a year until the Telematics courses drew to a close. As time passed and our horizons took us places, his path took him away from Mumbai. This did not stop us from meeting at various crossroads though. I had the distinct pleasure of meeting him as part of NBA Evaluation Teams for various colleges. Amongst my last personal meetings with him was when we, former colleagues, friends and collaborators, were invited to the IISc Bangalore Conference in 2019. I also did happen to have a fleeting moment with him when we met at a

conference in Calcutta, as he was there for a conference or a meeting as well.

When it came to his professional persona, I understand that Professor Sahasrabudhe was a highly capable administrator. I may not be able to present an adequate perspective on his greatness as a teacher, as I did not have the good fortune to study under him. However, from what I could gather, when I attended his lectures, seminars or presentations, Professor Sahasrabudhe came across as an articulate and well-informed teacher.

To my mind, Professor Sahasrabudhe has always been one of those truly gifted and good individuals one can have the privilege of meeting in life. He had a wellspring of fine qualities, depth of knowledge and an uplifting smile that could put a person at ease in a heartbeat. He was also a very progressive person who loved to keep up with the times. I recall an incident many years ago, when we had all gone shopping, and I casually told the professor that I wouldn't be able to do much shopping as I had not brought along much cash. Now you have to understand that this incident may seem rather trivial in today's age of access to digital payment options, but for me, it took place in those pre-digital times; when India was still getting accustomed to new payment options. Professor Sahasrabudhe was well ahead of the curve. He turned to me and said, waving a credit card, "Look, who carries cash now? We do all our shopping on the card as it offers large purchase limits, you don't need cash and all that. You should get yourself one too". It still amazes me to realise how up-to-date he kept himself. This wasn't his only stand-out quality. I respect honesty in life, and while I have been fortunate to have been acquainted with many who had candour as a character, Professor Sahasrabudhe stood out for his vividly honest nature. I recognised this quality during our interactions in the AICT evaluation teams, where we would be exposed to people from other colleges who would tend to try and bend the lines or even cross them. Professor Sahasrabudhe remained a lighthouse for what it meant to have integrity in teams. If you had to ask me how I would treasure his memory, I think this would be my enduring recollection of his ideals – a man of high principles who guided others with his light.



*A visionary and supportive
technologist and administrator*

PROF. ANURAG KUMAR
*Honorary Professor, IISC Bengaluru,
Director IISC Bengaluru 2014-2020*



It was my distinct pleasure to have known and worked with Prof. S. C. Sahasrabudhe during an era when the Internet and telecom revolutions were yet to hit Indian shores. He was one of the architects of the Joint Telematics Group, which helped bring together the academics in the area, and which launched the NCC conference series. This NCC legacy continues to be an annual event where experts and aspiring researchers in telecommunications congregate each year. Prof. SCS also played a yeoman role in IIT Bombay's administration during the transformative years after which IITB emerged as a top technology and science institute in India.



A cheerful friend and mentor!

PROF. SURENDRA PRASAD

Director, IIT Delhi, 2005-2011,

Chairman, NBA, 2013-2019



Even as I start to write this brief note, in the memory of a dear friend, it is still difficult to believe that he is no longer around us with his forever light-hearted, teasing banter, but invariably kindly demeanor. It is now about a year since we last met each other, but it appears that we met just a few days ago. In fact, I last met him in November 2019, in Hyderabad, where we were both speakers at a workshop attended by hundreds of teachers from that part of the country. We shared our usual bonhomie and had discussions, some light-hearted, and some serious, interrupted by his quips that always filled one with delight. I had no idea that this encounter would be our last face-to-face interaction.

My professional journey with SCS goes back nearly 40 years, when we first became part of the so-called Joint Telematics Group (JTG) of the five IITs (later to include other institutions). This was a group consisting of telecommunication professionals from across the IIT system, which recognised the importance of new technologies and their rapid development and deployment, when this industry was still in its formative stages. Together we took up the task of disseminating professional knowledge and building competence for new telecom technologies across the country, primarily through training of teachers in this rapidly developing area. I am sure the details of how we went about this task, and our success in contributing to a movement that would gear India up to be part of the 1990s Telecom Revolution, would be available elsewhere. Suffice it to say that it brought

together the finest minds in the country to focus on a common goal of raising the level of education in this field, at a crucial moment in time, and bringing it up to international standards.

What I would really like to portray here is the sense of camaraderie that we enjoyed. Somehow our common mission became more meaningful because of this camaraderie. The team comprised of wonderful people who shared a passion for the task, and worked wholeheartedly with a sense of missionary zeal. Being a participating member, it is easy for me to single out SCS who led on these qualities and inspired the team to take up difficult but achievable tasks. There was rarely a meeting in which we did not have contentious debates, as each of us had our own distinct views, teaching methodologies and subjects, about which we would argue passionately. But at the culmination of these meetings, the tradition was to spend the evening at the host's residence. Such was the bonhomie that the group always looked forward to SCS' cheerful and light-hearted disposition in smoothing away any residual tensions that may have manifested in such encounters.

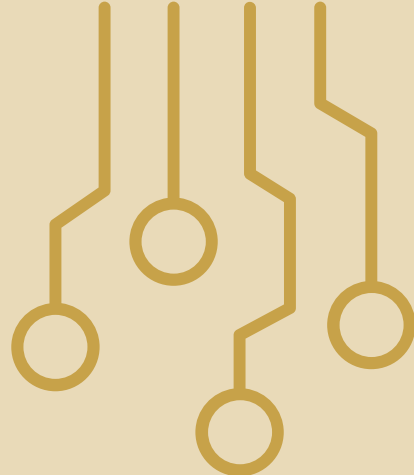
My journey with SCS continued after his voluntary retirement from IIT Bombay, when he took over as the Director of the DA-IICT at Gandhinagar. He invited me to be on its Academic Council, which I happily accepted. It was wonderful to see him take on this leadership role with the same combination of professionalism on one hand and light-heartedness on the other. This is a rare combination to see in such leadership positions. I had the good fortune of observing him as he carried out the task of building up that institute with great care and attention. It was rare to find him speaking to anyone in an abrasive tone or a raised voice. Whether it was a faculty member or staff, he would engage with everyone as if he was a long time friend. This obviously endeared him to all, and made it easy for him to get them to develop an 'esprit de corps' that helped the institute achieve a leadership position in a short time. It was amazing to see SCS bring together a diversity of talent at the Institute – eminent retired professors from the IIT system, accomplished personalities in arts, humanities, design, and of course, in electronics, computer science and

telecommunications. In fact, many of these academic council meetings became important platforms for me to learn - engaging in thoughtful and insightful discussions on teaching undergraduate and graduate students. As is common in such meetings, each member brought unique insights and points-of-view on what works and what would not in these settings. Each member had a rich font of experience and knowledge to share. There were delightful sessions with the likes of Professor V. P. Sinha, Professor D. Nagchaudhary, Professor R. N. Biswas, and many other greats, with a repertoire of stories to back up their wisdom. And of course, the common factor was Professor Sahasrabudhe himself.

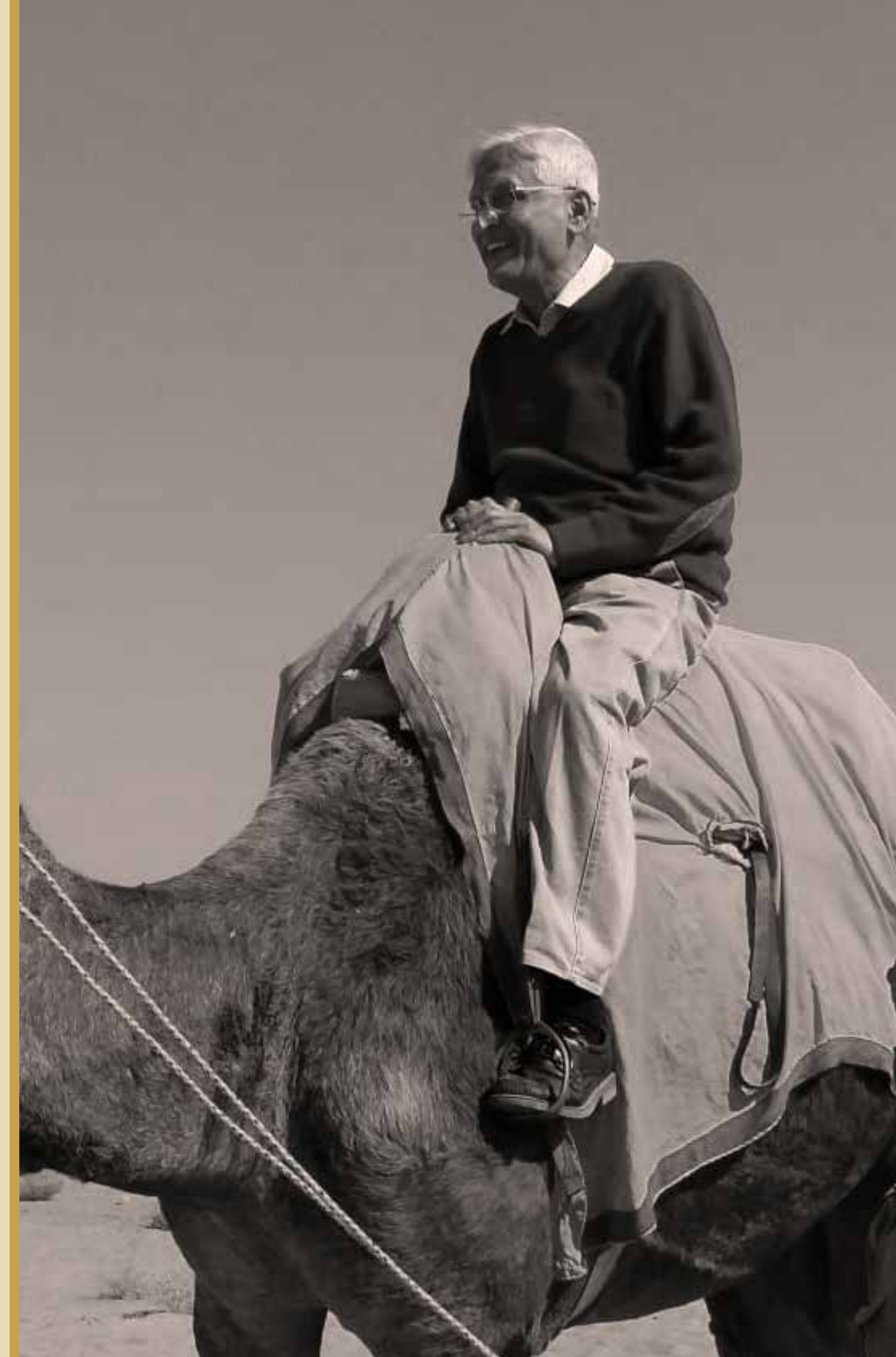
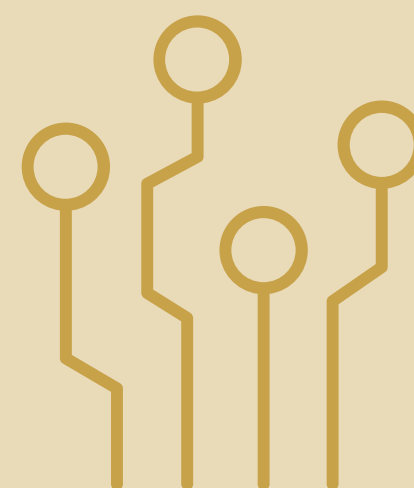
I was constantly amazed at the administrative acumen and personal charm that SCS exercised in getting the best minds to come to the institute and contribute to its educational goals. To my good fortune, I was able to interact with a doyen of Indian linguistic heritage preservation and famous linguist, Dr. Ganesh Devy, as a visiting professor and member of the Academic Council. I was intrigued by his remarkable achievements in compiling hundreds of spoken Indian languages and dialects and running a social organisation to sustain this legacy in a remote rural corner of Gujarat. I observed the teamwork of SCS and Ganesh in bringing grassroots level experiences to young graduates by involving them in rural social projects - creating an important interplay between information technology and rural societies. But hadn't it been for SCS, I would probably never have met such wonderful and inspiring people. It is interesting to note that I had greater engagement with SCS later, when I was the Honorary Chairman of the National Board of Accreditation. This time, it was my turn to request him to serve on several of its committees. It so happened that both of us, almost by coincidence, were drawn into the technical education scene at the national level. Professor Sahasrabudhe got involved with the development of the accreditation system, which led to the evolution of the outcome-based accreditation system, more aligned to international practices back then. From 2012 to 2014 our paths crossed again, in the technical education world, when we helped NBA organise for a review of its operations and make a serious bid for a much sought after membership in the Washington Accord. This was a challenging

task, requiring a major upgrade of our accreditation processes, and also motivating the technical education system to align with the outcome-based education system. This objective brought the two of us together again, and with the support of member secretary, NBA, Dr. Anil Nassa, we were able to successfully defend our case for the membership of the Washington Accord countries, a matter of great pride for the country at that time. I am mentioning this here, since it also generated a new enthusiasm in all of us for making a difference to the technical education system of the country at the grassroots level. The next few years, saw all of us get deeply involved in organising training workshops all over the country to educate college teachers and managements about outcome-based education and accreditation and what it takes to achieve it. For me, it was a new version of our work together in the JTG. In fact, Professor SCS was a speaker at one such workshop in Pune, when he finally breathed his last – karmyogi that he was until his last breath! SCS gave the impression of being and looking every bit a young person when he passed away. In fact, many of us marveled at his physical and mental agility even as he advanced in years. It was not that he was free of the usual trammels of the world. Who can ever be? But he took those concerns in a stride, that was truly inspiring for his colleagues and friends alike. It is still a joy to remember many good times that we had together – in official work, and in personal interactions. Our families too developed very close relations, and we were fortunate to enjoy the hospitality of Professor and Mrs. Sahasrabudhe several times. He was a devoted husband, father and grandfather – a thorough family man. My younger son, Sumedh, who unfortunately is no more, enjoyed a very special and affectionate relationship with SCS and was always happy in his company, whenever he visited our house.

SCS was a lovable personality, and his smile, even when it was filled with mischievous intent, was always infectious. He has made a difference to the evolution of engineering education in the country that will be remembered for long, both for its quality and for his endearing passage through it - a lasting legacy. He is missed greatly. The good thing is that the imprint of people like him lives on long after that final journey towards the unknown.



**L to R: Dr. Anil Nassa, Mrs. Usha Prasad, Dr. Surendra Prasad,
Prof. S.C. Sahasrabudhe in Alaska, June 2017**





*Charismatic and considerate,
he was a man of integrity
with a passion for
excellence in education.*

PROF. ASHOK JHUNJHUNWALA

Institute Professor, IIT Madras



It was probably in 1987 that I met Prof. Sahasrabudhe at IIT Kharagpur. There Communication faculty of the five old IITs was meeting to explore the potential of working together to strengthen telematics R&D. I had gone with the explicit idea of opting out of such an effort as we were caught up with too many things. But there was this handsome and very pleasant professor from IIT Bombay, some ten years older to me. He figured out what I was trying to do and started addressing me like an elder brother would. It took him less than half an hour to convince me to become one of the strong votaries of the Joint Telematics Group (JTG). He became a mentor and a close friend ever since.

All of us knew a bit of Communications. None of us knew how to build and commercialise things. Prof. Sahasrabudhe taught us signal processing and some aspects of Communications that we were not familiar with. He said that Communications is a huge subject

and it was not adequate to remain buried in our specialisation. We needed to get acquainted with its knowledge as a whole. He took the lead in seeing that we would together offer short-term courses to college teachers. He would repeatedly emphasise that we needed to do it as a team, as each of us knew a part. Most of us attended the course along with some 30 to 40 teachers from other engineering colleges. He said that unless we upgrade these teachers' skills, they would not be able to provide an integrated understanding of telecommunications to their students. He would remind us that our Masters and PhD students came from these colleges. Only when we were able to strengthen them, could we ourselves be strong.

At IIT Madras, we were not content with teaching and R&D; we wanted to build things and impact the industry. On one hand, we wanted telecom and

later, the Internet to reach every village and person in India. We wanted to see the manufacture of telecom equipment in India, rather than just import it. We wanted to create patents. Prof. Sahasrabudhe understood it all too well. He would mentor us, figure out ways to do things and help us overcome obstacles. He was a person who contributed greatly without ever wanting an iota of credit.

Little did I know that he had his eye on me fairly early on in my career. I was an Assistant Professor at IITM since 1981. In 1990, I decided to apply for a higher post. Prof. Sahasrabudhe and Prof. Faruqui (from IIT Kharagpur) happened to be on the interview committee. I am told that after the interview they insisted that I be given professorship. When the director pointed out that I was not even an associate professor back then, Prof. Sahasrabudhe (I am told) was blunt. He said that I was far-better than the five other faculty from my department, who had been interviewed for the post, and if I was not given the position, the others would not get it either. They would take me to IIT Bombay / Kharagpur. I became a professor. I talked to him later about it. He said that both he and Prof. Faruqui had noted that I was to make a significant contribution in times to come. As a senior professor, he had a role to see that every young talent is groomed to excel. He taught me that this is the only 'Dharma' of a teacher. I must do this for others.

Soon, he also got to be great friends with my wife and could communicate with her better than with me. He and his wife, Madhuri, would spend hours with my wife, regaling her with stories about their family, upbringing, culture and home in Nagpur. They spent a whole day giving my wife and son a tour of Bombay, while I was busy in some meetings. It showed his incredibly friendly human side.

The Joint Telematics Group started the National Conference on Communications (NCC) every year by rotation at the five IITs. Later on it was extended to other IITs and to IISc Bangalore. Prof. Sahasrabudhe was part of the founding group that had conceptualised it. Last year, we celebrated 25th

NCC. It has become 'the' academic conference in the area of communications in India. His students are all over the industry. Every IITB student that I met would talk about how Prof. Sahasrabudhe had helped shape their life. He soon became Deputy Director of IITB and remained in that post for a long time.

When Reliance Communications decided to build a high-quality private IT institute, he was the obvious choice as a Director of DA-IICT. He asked me to get on the Board and I saw him build this top quality institute, brick by brick. There is a story that I would like to relate. The daughter of a Personal Secretary of the CM of State, where the institute was located, was admitted to DA-IICT. Unfortunately, she did not do well and failed in almost all the subjects. She was given the opportunity to repeat the courses, but once again she failed. As per the institute's rules, her eligibility was to be discontinued. When her well-connected father heard about it, he got wild and leveraged his position on DA-IICT. The Board met and decided to give the student another chance. Unfortunately, she failed again. Now, there was a huge crisis on our hands. On one side was the powerful Personal Secretary of the CM, on the other, Prof. Sahasrabudhe. When the next Board meeting was called, Prof. Sahasrabudhe narrated how IITs have become great institutions because they never compromised on quality. If DA-IICT was to acquire the same status, a compromise on academic matters could not be accepted. He was ready to face the consequences.

This was Prof. Sahasrabudhe, an academician, teacher, mentor, leader, and a person with the highest level of integrity. We met him at Bangalore in August 2019. My wife did ask him why he was looking so frail. In his usual style, he made light of the matter. We talked about the 25 years of NCC and what all we had done together. He agreed to visit us soon at IIT Madras. Never could we imagine the sad event that would happen instead. The news came as quite a shock to us. He always looked like the youngest and most energetic amongst us all. But God has his own ways.



*He was a person of staunch
integrity and filled with
a youthful energy.*

PROF. BHASKAR RAMAMURTHI
Director, IIT Madras



Like a few others, I have had the opportunity to engage with Prof. SCS over several points in his career. I used to interact with him as part of the Joint Telematics Group, when he was Director at DA-IICT, when he came as a subject expert for faculty selection, and lately, as the Chairman of a Domain Expert Committee to review Uchathar Avishkar Yojana projects. I can say that I have always had pleasant memories of all my interactions with him. I found him to be eternally bubbling and youthful, even if his head had greyed. I unfortunately do not have any insightful anecdote or interaction that I can recall. All I can tell you is that Prof. Sahasrabudhe was a man of integrity – a very upright, what-you-see-is-what-you-get kind of person. No undercurrents or multiple faces for different situations. I will always remember him this way.



*Passion for knowledge and
candour created an environment
where ideas were liberated*

PROF. TIMOTHY GONSALVES
*Professor Emeritus (Hon) IIT Mandi,
Director IIT Mandi, 2010-2020*



I had the pleasure of first meeting Prof. Sahasrabudhe in the early 1990s as part of the Joint Telematics Group. As you may be aware, this group was a collaboration of 5-6 IITs and IISc, Bangalore. At that time, I was a young Assistant Professor at IIT Madras. Thereafter, I met him at the Telematics meetings and also during the annual NCC conferences.

What struck me about his persona over the years is that he was driven by a great passion for his subject and teaching. This was leavened with a liberal sense of humour. I don't know too much about him as an administrator, except for his serving on the Finance Committee and Board of Governors of IIT Mandi. There, he was always championing the autonomy of IITs and the importance of quality in academics -- the ideals that make IITs special.

The last time I met Prof. Sahasrabudhe was on the 19th December 2019, when he attended an IIT Mandi

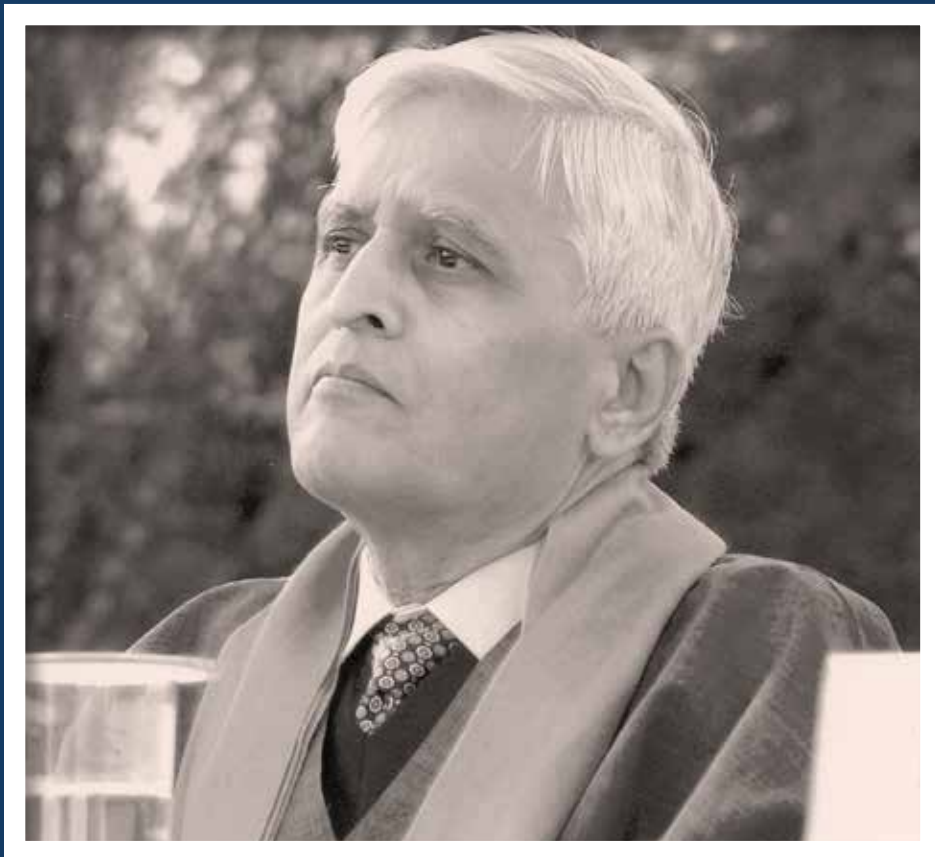
Finance Committee meeting in Delhi. He was quite upbeat about a planned teaching visit to IIT Mandi at the start of the February 2020 semester. This was actually an existing plan which had been postponed due to his doctor's advice on resting his voice.

He had made a few visits to IIT Mandi but had not taken part in the teaching schedule. On every visit of his, I noticed that he made it a point to spend as much personal time as possible with students and project staff working on research projects. To ensure that he could have a candid conversation, he would request me to leave him alone with the youngsters. I realised that his candour got them to open up about their work, in a way that most students generally don't engage with senior faculty.

His passion to be there for students and his disarming charm in getting them to interact more openly with him, are some of the most poignant and lasting memories I have of Prof. Sahasrabudhe.



Projects



*Weighing candidates for the known
was far more important in his eyes than
probing them for the unknown.*

PROF. ARUP. R. DASGUPTA

*Former Deputy Director, Space Application Centre (SAC),
Ahmedabad*



My association with Professor Sahasrabudhe began when I took over as the Director of the Image Processing and Analysis Group in Space Applications Centre - ISRO. At that time, Professor Sahasrabudhe was working with us to develop an image processing module - if I remember correctly it was on texture analysis in imagery. We struck a common chord and he used to invite me to IIT Bombay as a viva voce examiner for his students. To my pleasure, I discovered we shared many common interests and, as we were both active members of IEEE, we had many occasions to meet and discuss the latest trends in the world of electronics, communications and technology in general. Another common meeting place for us was in the ISRO review committees, where he would be the external expert. On these occasions, he used to say that we need to know how much candidates know and not how much they don't know. Later, when he became the Director of DA-IICT, Gandhinagar, my interactions with him reached a whole new phase. On his persuasion, I became an adjunct faculty - teaching remote sensing and GIS. We would spend much time together ruminating over the education system and policies. I wonder what he would have thought of the new education policy. Unfortunately, I regret that his views on the subject will forever be a question unanswered. He passed away too soon in my opinion, but his memory will live on with me as a professional colleague and a friend.



*A standout person
and real leader who
was greatly admired
by all those who
entered his orbit.*

DR. AVINASH CHANDER

*Scientific Advisor to Raksha Mantri,
Director General DRDO & Secretary, 2013- 2015*



I first got to know Professor Sahasrabudhe in 1992. I recall that it was around the time that we had just begun looking at a new project for SCAN. We were exploring radar and optical imagery, and correlation to positional fixes in space. Missile atmospheric re-entry was at a very nascent stage in the Indian context and, as such, there was very little work being conducted in the field of image processing. While searching for people who might have expertise in this field, we discovered that Professor Sahasrabudhe from IIT, Bombay was regarded as a leading expert. You could very well say that he was the founding member in this field. Besides him, there were just a handful of experts like Professor Venkatesh from IISC and a few others from Kharagpur. As I mentioned, image processing was still an emerging technology in India,

and the biggest challenge was that radar imagery was not controlled by anybody at that point of time. Even while having a dialogue with people, it was difficult to make them appreciate the difficulties of the situation. However, with Professor Sahasrabudhe, it was quite different. I was quite relieved to finally start working on surmounting the challenges we faced. He got so deeply involved, not just in image processing but with the entire concept, right from image gathering and processing to the end product. Applying his keen and insightful mind to meticulously analyse every detail, he would come up with new ideas. From this first interaction, I was delighted to continue having the opportunity to work together. He was no longer just someone working on a DRDO project but a key thinker who, as part of the IIT Bombay team, worked out strategies and structures on how to operationalise concepts.

As this project progressed, we kept meeting frequently every two or three months. As he used to also visit Hyderabad, we got to know each other's families quite well. I confess that some of those visits happened so frequently that the memories are fuzzy, and I often forgot precisely which visit had happened when. It was usually up to our respective partners to keep track of all the comings and goings. So, you could say that we definitely had a very close and warm relationship as friends, which lasted for a long time. We bonded over image processing technology, and moved up through ancillary subjects like missile technology, control and guidance, etc. When he visited our missile laboratories, he was enthused to see the commitment of government people diligently working day and night. In this way, our professional relationship continued for a while but the project of course, eventually drew to a close in the year 1998. By then, we were well ahead in achieving our technological objectives. However, other factors like material sciences, with which we needed to support the programme, were not easily attainable. So our effort and thinking continued, as did our meetings in this regard. Professor Sahasrabudhe became an integral part of the DRDO think tank. He was on several committees, including many project and control schemes, as well as part of many

assessment interviews. Apart from his technical acumen, I regarded him as a wonderful human being. He would always look at the positive side of people; what they can do, what they can achieve, appreciate the mode of work they have done and be totally unbiased while doing so. He never thought about region, caste or creed. He was one of the very few people to have that ability for detached assessment. They say that 'the best minds talk of ideas, average minds talk of events and petty minds talk about people'. Professor Sahasrabudhe always talked about new processes and new ideas. I never heard him speak ill of any individual, anywhere, in any context, in any organisation. With these impeccable qualities, we were expecting him to be appointed as the director of IIT Bombay, because he was already the Deputy Director and Head of Department of Electrical Engineering. My next meeting with him was when he left Mumbai, as at that time, the Dhirubhai Ambani Institute was coming up in Ahmedabad. He invited me to speak to the students at this institute. It was inspiring to see him building a foundation of Information Technology in the Private Sector, from the ground level. Dhirubhai Ambani Institute quickly grew under his guidance and leadership, showing his expertise in the development of education. We interacted on other platforms after I became Director of the Advance Systems Laboratory, as we used to be part of various related committees. I remember an occasion at his residence when Professor Sahasrabudhe's son mentioned how his father started out in image processing and then progressed to the CST domain as he was very interested in this challenging and upcoming domain.

After his tenure at the institute, we did meet on a few other occasions. The most recent one being when he visited the C. R. Rao Institute where he was leading a very important project review team, where Prof. D. N. Reddy and I were also participants. I am not at liberty to discuss details about those reviews but the kind of leadership and respect that he commanded, from people across domains, was impressive. From the outset, it was quite a challenging endeavour, as there were not many people with expertise in this kind of totally new technology domain where things had to

happen. That was the kind of diversity of interests that Professor Sahasrabudhe had and the work that he was involved with.

The last time I met him was just two or three months before his passing away. I happened to be in Nagpur and visited him at his beautiful family home. He was born and brought up there and I truly appreciated the great care that he had taken in renovating it without losing its intrinsic ambience or heritage appeal. He loved the place and I found it to be quite charming too. We had a wonderful time over a leisurely dinner, appreciating and discussing his collection of books and other things. I remember him telling me that he still spent about 60% of his time in meetings and travelling to different places. He was also an active member of the AIEEE for a long time.

Today, I really miss him as a friend and a person to whom I could easily relate and communicate. In fact, we were considering him for a major role with an organisation in Nagpur that was into supporting educational institutes. We were working out a way that we could collaborate and build this institute. So, I was really shocked when I got news of his demise, as I was under the impression that he was fairly fit for his age. I have always considered him to be a standout leader, trendsetter and pioneer in his field. Wherever he was, whether it was in IIT Bombay, Dhirubhai Ambani Institute or any other place with which he was associated, I found that he would always add a positive value to its legacy. This was why people used to seek him out. He was always so full of vibrant energy that when you met him, you felt positively refreshed. That was just the kind of person he was. That is the way I will remember him.





*His legacy is a flame of great enthusiasm
and knowledge that we should all keep burning,
to inspire future generations.*

R. MURALIDHARAN

CTO, Tata Advanced Systems, Mumbai

Past Chair – IEEE India Council & Bombay Section



Some of the tallest trees have the deepest roots. This is akin to the relationship I shared with Professor Sahasrabudhe. What you may have seen above ground in our evergreen relationship, has deep roots far back to 1977, when I first joined IIT Bombay as a student, and interacted with him from 1978, through the IEEE and Communication Program. After my student days, I was drawn back to this nurturing ground like iron to a magnet. Soon after I began my career with the Tata Group, I found myself once again a part of the IEEE Bombay section as a junior volunteer. Under the mentorship of Professor Sahasrabudhe and his close friend Prof. K. Shankar, through the IEEE Execom and other programs, I found my pace. Their guidance helped me rise through the ranks and become the Bombay Section Chairman and then IEEE India Council Chairman. For me, the most memorable part is the way they supported us students beyond just being our teachers; they guided us as if we were part of their extended family. What started as a humdrum teacher-student relationship, grew from our frequent IEEE, continuing education activities and other interactions, into a firm friendship that saw us visiting each other's

homes as often as the occasion would permit. I recall so many instances of him inviting me over for a cup of tea and a chat whenever he was at his Hiranandani flat in Mumbai.

My memory of Prof. Sahasrabudhe is that he always wanted to explore new and futuristic concepts. This would often lead to us working together on cutting-edge subjects that were unheard of in India, at the time. I remember, once for the first continuing engineering programmes, he wanted to talk about X.25 interfacing; so it fell to me to make what was perhaps IIT's first video tutorial on the subject.

Another example was the time that the Tata Group wanted to explore Low Earth Orbiting Satellite (LEOs) technology and 'switching in the air' which means 'fibre switching in the air' between LEOs. These satellites switch in the air and exchange data with each other rather than signals coming to earth and going back. This looked like a project with an achievable goal, so I asked Prof. Sahasrabudhe for assistance and we decided to do some preliminary

study and simulations to send and exchange signals. Unfortunately, we discovered that moisture and rain in the atmosphere effectively rendered the concept inoperable. At this, Prof. Sahasrabudhe immediately suggested we pull the plug on any further work in this area. Now, a lot of people were dismayed by our decision but it proved to be the correct one, as subsequently many others explored the same concept and failed. So, Prof. Sahasrabudhe actually did a great service to the nation and the Tata Group with his astute analysis. This was also a breakthrough moment for my career as I remember that in the early days I used to pushback a lot on the project with him. However, he neatly outlined his reasons and convinced everyone with the technical issues on why this would not work.

He deserved tremendous respect, which is why I never took the liberty of addressing him casually by his first name. Mind you, I could easily have resorted to being so informal considering how close we had grown to him and his family over the course of the annual IEEE get-togethers. It was a relationship that transcended time and distance. In fact, just about 7 months before his untimely passing, I had visited him in Nagpur and we reminisced over our golden memories of technology, workshops, seminars, IEEE and other topics. You could say we did a deep analysis on everything from telecom and indigenous technology to communication as a critical national need. As expected, there were topics and threads of discussion we could really agree on and some things we were at divergent directions. Apart from this, another thing close to his heart was 'education'. Ever since I have known Prof. Sahasrabudhe, he always had dissemination of knowledge through education on his mind. Inevitably, he would come around to coaxing me to give talks and lectures at some or the other college in Maharashtra. His view was that I could motivate these young students to aspire to higher education.

In him, and his close colleague Prof. Shankar, I have always seen a keen focus on technology and education. Without doubt, he had the finest combination of a thought leader, fine technologist and phenomenal educator. He was always thinking of future generations; how he could attract the best engineering students,

create the most effective syllabus, put in place an advanced curriculum and implement it all seamlessly. I really salute his capability of wearing so many hats and being good at everything he did. As you can imagine, when he made a suggestion of inspiring the less privileged to reach for more, I was completely on board and willingly volunteered for the task. I was always ready to give him my best even if I had to squeeze out extra time from my packed schedule. On many occasions, when we were on committees, he used to trust me to analyse the projects and present a report. This is where I absorbed a great deal of experience from him, in looking at problems from different angles, analysing methodologies and exploring new technological concepts.

The two of us were a rare combination. Though I did not have a direct connection because I was in the computer science department, I used to attend his communication class in order to understand new things because of the IEEE connection. I was a computer person who evolved into a communications person with software-defined concepts, software-defined networking, software-defined architecture and all things software defined. I was also the examiner for many of the MTech students and used to be in his lab guiding them on their ideas. During the course of this time, I used to often tell him about how I believed computer and microprocessors would soon revolutionise communication. Prof. Sahasrabudhe was skeptical, as he believed that the future lay in software itself. We used to have intense arguments about software designed communication radios and little did either of us know that I would eventually become the Worldwide Director of the Software Defined Radio Forum or WinnF Board of Directors, known as the Wireless Innovation Forum today. When Prof. Sahasrabudhe discovered my achievement, he proudly and happily recalled our discussions in those early days while congratulating me. I couldn't resist telling him that I saw this coming, I worked on it and now I am on that Board of Directors for nearly ten years.

I also have many memories of our association with IEEE. In 2000, Professor Sahasrabudhe received the

IEEE Fellow and Millennium Award. Now, I was the Chairman of IEEE Bombay at that time and he used to keep telling me that I should take the award. I told him that I could not possibly get it but he could. I kept motivating him to apply for the fellowship and he would ask me why. Finally, I convinced him by telling him that unless he became a fellow, he could not recommend me. That was the pivotal moment. He was considering recommending me either this year or the next for the award but destiny had other plans.

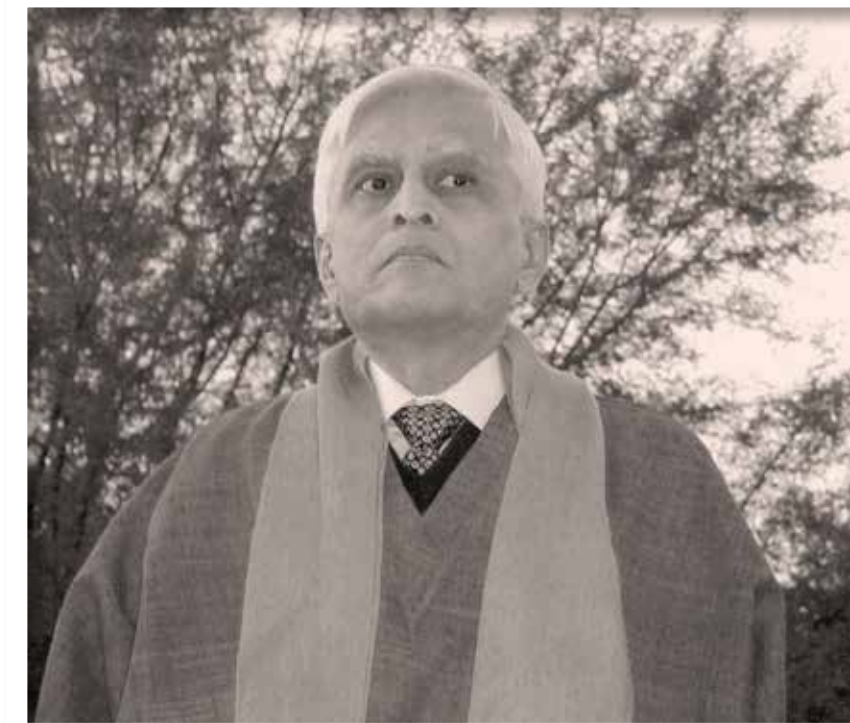
A hilarious incident I recall occurred somewhere between 1986 and 1988. We both used to make the local arrangements for speakers who came from abroad. So there was this IEEE President who travelled to Bombay to give a talk at the EE seminar hall, which was on the ground floor. During the course of his talk, a cow wandered right into the hall and complete pandemonium ensued. In those days, and even now, a cow can walk around freely with complete authority. But we still took photographs of this epic experience. The standing joke was that the cow was totally captivated by the speaker and had come to join the audience.

I maintained a close relationship with Professor Sahasrabudhe across his positions at IIT, Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT) - Gandhinagar and at GTL. Anything he wanted done, he would turn to me. I would be a member on his committees, be invited to give talks, conduct interviews, be on the expert advisory panel. If he had a tough problem to solve, he would turn to me and consider it done. You could say he was my friend, philosopher, guide, mentor and so much more right from my first interaction with him in 1978 till just a month before he left us with his unparalleled legacy.

I aim to keep his memory and enthusiasm alive in a way that would make him proud. As always, I want to step forward for him and volunteer to the support of the community as a whole, right from bringing new students into the realm and training them to achieve more beyond just graduation. You can say that this is my way of honouring him for life.

*Without doubt, he had
the finest combination
of a thought leader,
fine technologist and
phenomenal educator.
He was always thinking
of future generations;
how he could attract the
best engineering students,
create the most effective
syllabus, put in place an
advanced curriculum
and implement it all
seamlessly. I really salute
his capability of wearing so
many hats and being good
at everything he did.*

- R. MURALIDHARAN



*Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time..*

From a 'A Psalm of Life' by H. W. Longfellow



A leader with passion and purpose

Chapter II : Global Telesystems Limited



A legend of a man whose legacy will remain for all time.

RAVI PANDIT

CFO, GTL Limited, 2002-2010



It was sometime in 2002, during a Global Telesystems Ltd. (GTL) conference that I was introduced to enthusiastic and smiling Prof. Sahasrabudhe, who radiated youthful vigour and happiness despite his head of gray hair. Mr. G. V. Desai, then a senior board member, introduced me, saying that I would be interacting with him more often as he was joining our Board. To my surprise, Prof. Sahasrabudhe greeted me very warmly, as if I was the newcomer and he was already a long-time veteran of the organisation. This was just the beginning of our friendship.

Soon, I was transferred from the Ballard Estate office to the Mahape, Navi Mumbai office, where all operations were located. This was a consequence of my taking over as the Chief Financial Officer (CFO) of the Company. Although Prof. Sahasrabudhe was a Non-executive Director, he was allotted a spacious cabin in Mahape, as he was to be instrumental in guiding the young technocrat generation in his field of expertise. It is from this point that we built a relationship so close-knit that anyone would conclude we had been friends for generations. Prof. Sahasrabudhe was senior to me in both age and position, but that in no way affected our relationship.

I recall that he had a young and equally energetic

personal assistant named Shilpa, who he held a great affection for, like a daughter. Prof. Sahasrabudhe used to call me 'CFO', whenever he was in a great mood (which would be most of the time) or, occasionally, by my first name - Ravi. Ever so often I would receive a sudden phone call from Shilpa with an urgent summons from Prof. Sahasrabudhe. Wondering what the urgency was, I would hurry over to his cabin, just to find out that Prof. Sahasrabudhe simply wanted to share a few moments with me over a tea break. I would always accept his invitation with pleasure. As most finance professionals are aware, a job in finance, and that too within a large organisation like GTL, was always high intensity. At times, it would seem like a pressure cooker environment. So, a tea break with someone like Prof. Sahasrabudhe was undoubtedly a welcome relaxation.

I often wondered how it was that a man from the most prestigious institute like Mumbai IIT, retiring as a Dy. Director, put on no airs at all. Quite unlike the general stereotype, he was ever-smiling, well-meaning, full of teasing banter and extremely grounded. He entered IIT Bombay as a student, graduated from there, and worked his way up to the level of Dy. Director over a period of forty years. With Prof. Sahasrabudhe, and his way of living, time seemed to fly by, and I am quite

sure that the forty years were not as long and dreary as we might imagine.

He was an extremely energetic and active person, who seemed indefatigable. Through his tenure at GTL, and well after too, he had an unending travel itinerary; seamlessly giving lectures on different platforms.

Though he was highly involved in the field of advanced communication technology, he used to detest some aspects of modern communication. A pet dislike was PowerPoint presentations. He used to declare that PPTs should be banned for at least three years in GTL. I agreed with him wholeheartedly. For the most part, the PowerPoint presentations were unnecessarily long-winded, dull and boring, without really going anywhere in terms of objectives. Prof. Sahasrabudhe was an inspiring orator and needed no such artificial supports to deliver his lectures or make his point. He was also a great advocate of experiments. For example, with Microsoft licenses being expensive, he was always pushing for the use of Linux, which he considered to be equally good but not as much in vogue despite it being free-to-use. However, not many were open to follow this experimental path as metaphorically, people's tastes only gravitated to tried and tested wines.

Speaking of food and wine, Prof. Sahasrabudhe was fond of food, but was a poor eater. He would prefer bland food, which was low in spices and sometimes indulge in a glass of red wine. Food for him was more of an occasion for interesting social interactions and getting to know people.

After GTL, he joined DA-IICT in Gandhinagar as the Dean. Once again, he was traveling regularly and, at times, living out of his suitcase. This new location greatly impacted the frequency of our meetings. I did, however, visit him at the institute in Gandhinagar. He had great pride in the institute and insisted that his faculty members invest a significant amount of their time reading and in study. To ensure that they were able to keep to this standard, he gave them just 4 to 6 lectures a week.

Prof. Sahasrabudhe passing away in Pune came as a severe shock to me. He was my guide and close friend. So, I continue to feel a huge void in my life; of having lost something extremely precious and irreplaceable. I was in the US when he passed away and I still feel upset that despite being a Pune resident, I could not bid him farewell on his last journey. It was God's will. I will always miss you, dear Professor.

He was an extremely energetic and active person, who seemed indefatigable. Through his tenure at GTL, and well after too, he had an unending travel itinerary; seamlessly giving lectures on different platforms.



I would call a man like him - 'Ajatshatru', a man with no enemies.

CS VIDYADHAR APTE

Company Secretary - GTL Limited, 1992-2018



If I remember correctly, Prof. Sahasrabudhe was with GTL as the full-time Director from 1998 until 2004 when he left to join DA-IICT. We rarely worked together as our areas of expertise were different, however we would meet each other quite frequently. He would sometimes call me for work – to understand the agenda or minutes of a document I shared with him or to get help with accounting related issues. I always found him to be an active and cheerful person, and I never heard anything negative from him.

Although he had joined GTL after IIT Bombay, he never felt out of place in the new environment. It can be difficult to strike a balance between being an educator who's dedicated to sharing knowledge and being a professional who's committed to profitability of a business. Professor Sudhakar played both the roles quite effortlessly.

As the Company Secretary of GTL, I have nothing to do with technology. So I never understood technical conversations in our board meetings. But I have seen

Prof. Sahasrabudhe participate in those conversations with ardour and eagerness. Always inquisitive and exuberant, he would ask questions and make relevant suggestions in these meetings.

Even though Prof. Sahasrabudhe was elder to us, his enthusiasm was unmatched. I don't remember ever seeing him lethargic or listless. There was another Director's cabin next to his. Whenever I used to go to him for work and Prof. Sahasrabudhe's office was open, I always noticed him in the middle of a conversation with his secretary, business executives or occupied in some work. He would always have visitors meeting him. Sahasrabudhe was a man of action, even when he was alone in his cabin! He would be reading, ideating or thinking something. He was forever a student and passionate about education. For instance, law was an unfamiliar subject to him; he would still want to know everything about it. He was so curious, he would keep asking me questions – 'why this, why that?' He had that kind of thirst for knowledge. If I wanted something from him, I just had to explain once.

I never had to follow up with him or repeat anything. Even after he joined DA-IICT board as the Director, he would call me for help whenever he had any legal doubts or questions. In the end, he would always say "If you are saying this, Apte, it must be right. I am going to implement your solution."

Sahasrabudhe was also quite witty. He would constantly pull everyone's leg. Whenever I went to him for work, he would tease me, 'Apte is troubling me', 'Apte is doing this... and that...'. Whenever he saw me having lunch with my regular group of 2-3 colleagues, he would ask, 'Tell me, Apte. Why won't you have lunch with me?' Interacting with him has always been a pleasant experience. He was our senior in knowledge, age and in many other ways. So we used to like whenever he teased us, but he never tried to throw his weight around as the Director of the company. He was an expert in his own field but he would never make a fuss about a small mistake or issue in someone's work. He never misused his power and position like many might. He was so simple and sweet. I would call a man like him - 'Ajatshatru', a man with no enemies.

Even after he left GTL, I stayed in touch with him. I used to call him on every 5th of July, with a little bit of hesitance though. I knew he used to visit the states every now and then, so I didn't want to bother him or disturb him. But the moment he would answer my call, he used to sound his witty and mischievous self, even after all those years. 'I knew you would be calling me today. You never miss it' he would say gleefully.

When I came to know about his passing, I was shocked. His former secretary Shilpa was transferred to our department. She wrote in our group that he was no more and I just couldn't believe it. I immediately called up Sahasrabudhe's number which was answered by Mrs. Sahasrabudhe. I spoke with her and expressed my sorrow.

There is a song in Marathi - 'पराधीन आहे जगतीं पुत्र मानवाचा', our life in this world is controlled by the higher forces. But the heart still aches when such wonderful people leave.

*He was so
curious, he
would keep
asking me
questions – 'why
this, why that?'
He had that
kind of thirst for
knowledge.*

- CS VIDYADHAR APTE



He had this one objective in his life – to share the immense wealth of knowledge he possessed, to dedicate his life towards education.

SHILPA NAHA

Operations Manager, GTL Limited



Where do I begin?! Mere words are hardly enough to describe the genius of Sahasrabudhe Sir. We met in 2001, at the GTL, Mahape office, when he had joined as a full-time Director and CTO. I was a relative newcomer to the organisation, having just joined GTL in 2000 myself. Despite this relative newness to the organisation, I was given the big responsibility of being his Personal Assistant. I might confess that I had a bit of trepidation about my appointment. Here was this man with a great persona, and I was apprehensive about the idea of working with him. However, from the very first day we met, I saw the innate kindness and sweetness that permeated his attitude and personality. In that moment, my imagined clouds of anxiety simply vanished.

I noticed that his working style was quite different from that of others. He never used to pressure anyone. Even meetings with him were quite smooth and easy. Although he was the full-time Director, he also created a new job role – Chief Technology Officer and started working on Artificial Intelligence. He had a separate team under him. His schedule used to be so busy that on one side he had this big company with its overwhelming responsibilities and on the other, he was a panellist for IIT, MIT and many such other colleges. I was constantly on my toes scheduling his meetings. Most of the time, he used to be travelling on work. Most of us are already aware of his penchant of giving nicknames to others and he had one for me too - ‘Thake’. So, while scheduling his calls, he would say to me ‘Thake, don’t try to make time for me by upsetting someone. Schedule my meetings in such a way that I can give my time to everyone. I don’t know how you are going to manage it. This is your task that you don’t upset anyone.’ As you can imagine, this was quite a herculean task for me – not to disappoint anyone yet, at the same time, share his time among so many people.

I believe I spent five years working with him; as long as he worked with GTL. After that, he joined DA-IICT in Gandhinagar. I recall an interesting incident from the time that he had just taken on his new role at DA-IICT. His then appointed secretary – Venugopalan from DA-IICT used to call me and ask me how I used to manage his travel schedule. Also, he used to mention Sir always

appraising my work and teasing him for not matching with the same. Subsequently, I met Venugopalan once when I was in Gandhinagar for some official work where he emphasised on this topic again.

I have visited the home of Sahasrabudhe Sir at Powai many times. He and his wife were such a perfect match. The kind of affection they had for me, it felt just like the love I experienced from my own parents. Both of them always treated me like I was their own daughter. Till date, Mrs. Sahasrabudhe and I talk over phone. Again, I can’t adequately describe the closeness we share in words. Our colleagues used to say that I was his ‘Manaskanya’ (like an adopted daughter). They would say that he tells me everything and we both have a relationship like a father and daughter. I recall that he never missed my birthday and every April, from 2001 to 2019, he would call from wherever he was. Frequently, he would travel to meet his daughter Meghana, and stay with her for a month or two. On such occasions, where his travel dates would preclude his ability to call me on my birthday itself, he would call me a day prior to wish me happy birthday. He would wish me and say, ‘If I don’t get time to call you tomorrow, I don’t want you to get angry with me. Which is why I am calling you today itself.’ I reciprocated this with heartfelt sentiment on his birthday every 5th July. This year, I really missed him on both his birthday and mine. His absence has left us with an immense sense of loss.

I remember that he would also ask about my family and children- what they are studying, what their interests were, and more. He would tell me that I should never pressure them and let them choose their own career paths. He always said this about the future generation, ‘You should never tell them what to do. They grow on their own.’ It’s only because of his advice that I never pressured my kids. Today, my daughter is a Chartered Accountant and my son is doing his LLB. They chose their own careers and are making progress in their respective fields. Often during their exams, he would stop me from taking leave saying, ‘You sit here in office. Don’t take leaves to bother your kids at home.’ He would instantly know if I was tense due to their exams. Just like a father, he could quickly gauge the stress from my face and ask me for the reason.

I requested Sir not to leave GTL when he was considering joining DA-IICT. Everyone was feeling bad that he won’t be around at work. He said just one thing, ‘My heart has always been inclined towards education. I feel at home among kids, at institutes. I can’t enjoy corporate life, so I am better off there. So, let me go to my students and institutes, that’s where I truly belong.’ Later, he also worked with GTL on the board as a Director, and we would catch up whenever there was a meeting. He would call me whenever he was in Mumbai or even from Mumbai Airport to tell me that both he and Mrs. Sahasrabudhe had just landed. So, we would just talk – where they would be going next, what was happening with the kids... everything really. So, from the initial apprehension of working with him to sharing a warm and beautiful relationship with him and his family, I had come a long, long way.

Hats off to him, he would never consider his age or busy lifestyle. He would always want to be everywhere for work. I used to ask him whether he even gets tired. He would go for overnight meetings, travel to many places; Delhi, Ahmedabad, Nagpur, Pune, he would always be on the go. While making his bookings, I used to often feel bad that he didn’t have time for himself. He would say, ‘I’ll take a quick nap at the airport’. If I asked him out of care, ‘Sir, look at your age now. You will get tired’, he would quickly reply, ‘What? I am perfectly fine! Not at all old.’ Even in office, if someone came to meet him, I would say, ‘Sir, first you eat something and then meet.’ He would decline my suggestion of his taking a break and go for the meeting where 30-45 minutes would whizz by just like that. But he would be like – nobody should be kept waiting because of us. Work is work!

At GTL, many management decisions were taken only after discussing it with him. Ours is a telecommunication company, with technology at its heart, and which was also his expertise. So, he used to be present for each and every management meeting.. Therefore, his opinion was important in everything and he would be there for every internal panel meeting. He also played an integral role in the development of new technologies. He would have a ton of ideas even before they would be released or implemented. Back

then, in 2001, he was working on Artificial Intelligence. He also ensured that people selected in the department, would have a high level of thinking, just like him. One of them was Swaraj Sir, from Delhi. Then there was a girl he had selected, who is now in a big company in the US. There were a lot of people he selected who were of that high intellect and education. Even the ones he had hired for junior levels are now working at higher designations in big organisations. He simply knew the calibre of a person; see a spark in them and hire them.

He always guided students in their careers. He would tell them how they could take it further, where they could apply based on their field and which specializations to achieve. They have all progressed in their individual lives because of him. All these students were always in touch with him, all of them! In my discussions with Sahasrabudhe Sir, he would tell me, 'This one had called me the other day, she is here. That one had called me, he is doing this.' Two of his students are also in touch with me today. It was his nature that he would always think about everyone, inquire about them and guide them to help them grow. He would always wish well for everyone. No matter when you called him for help, he would always be there for you. Be it a driver or canteen boys, he would be nice to them all. Many people are too conscious about their designation, but he was friendly to everyone. He was different; he would wish them on Diwali and inquire about how they were doing. He was genuinely that attentive and caring. You can be sure that he was well liked by all those he came into contact with. I don't

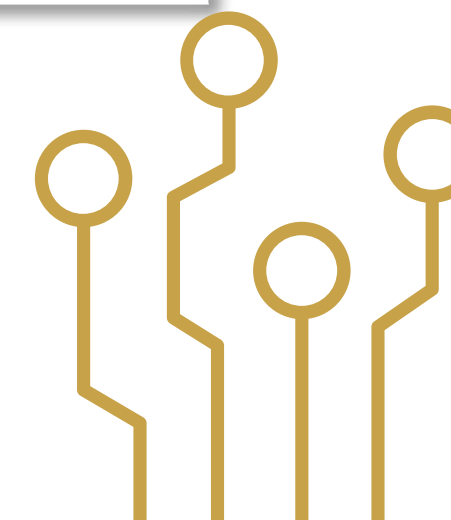
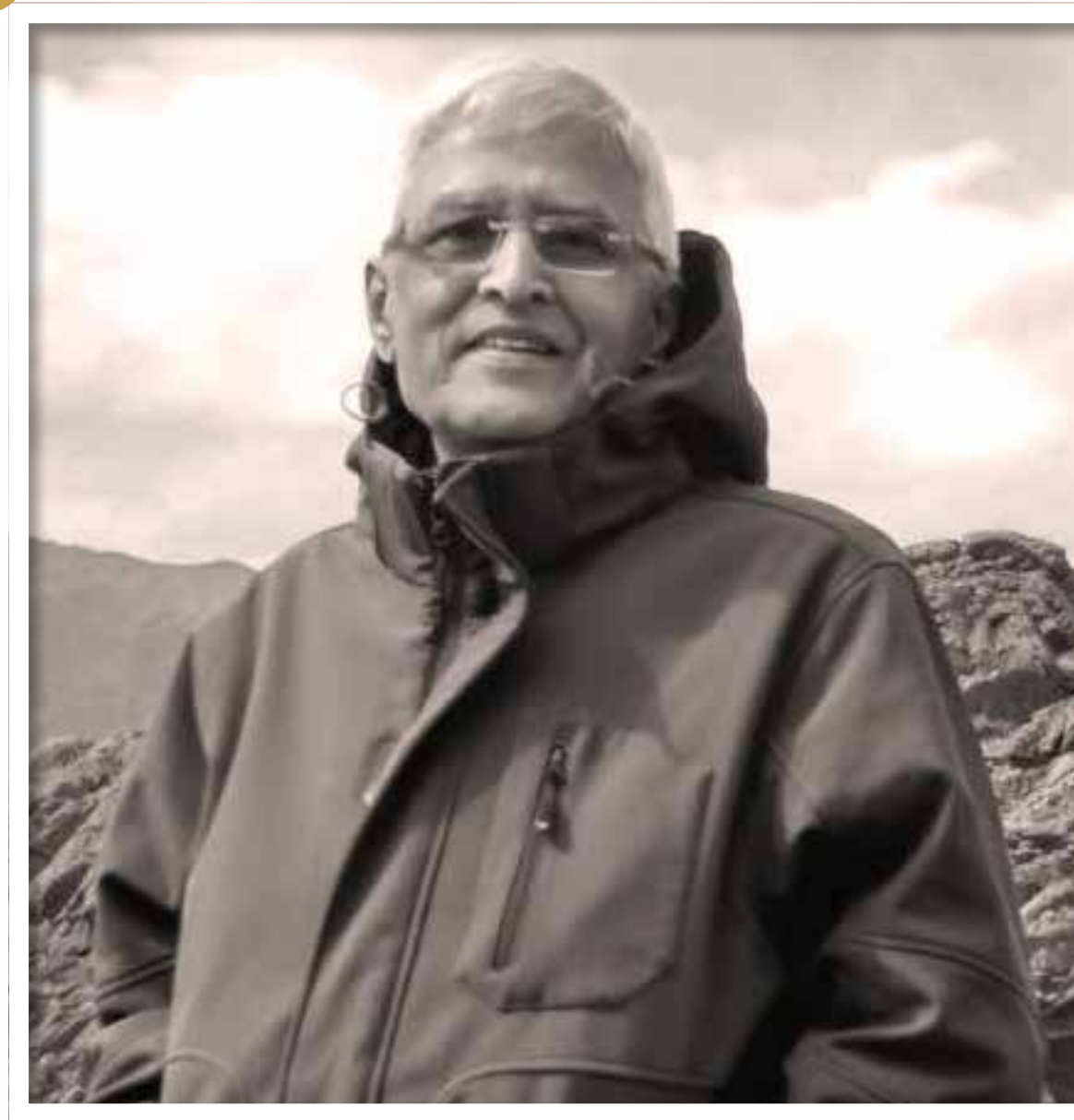
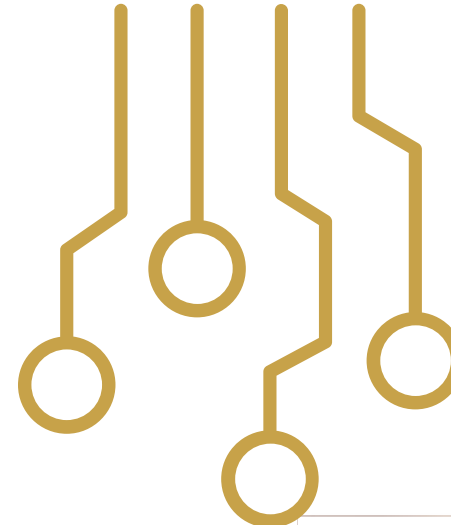
really remember seeing him angry, but he could never tolerate lies. He would like people to be upfront and straightforward.

When people got to know that Sir was going to leave GTL, they all had tears in their eyes. We even requested him to visit us at least once or twice in a month - which he did, every now and then.

I can't find the right words to express my feelings but I feel lucky that I got an opportunity to talk about Sir. He was a great combination of an educator and compassionate human being. That's what makes him special. Merely teaching students was not everything; he felt that guiding them, telling them how to use their knowledge and directing them was important too. Because teaching theory is not enough, it should be useful in life too. He would see to it that students benefited from their education. He wouldn't just stop at their degree and education; he would want to know what they were doing about it and how they were using that knowledge. He had this one objective in his life – to share the immense wealth of knowledge he possessed, to dedicate his life towards education. Honestly, until the last day of his life, he never stopped working towards it. He had gone to Pune that fateful day for this very purpose.

One rarely comes across such a dedicated person in one's life. I was lucky to have met two in my life – Sir and Madam. Even if Sir is no more, I believe that his blessings will always be there in my life.

He always guided students in their careers. He would tell them how they could take it further, where they could apply based on their field and which specializations to achieve. They have all progressed in their individual lives because of him.







*Generations of students
have benefited from his passion
for teaching.*

PROF. JAIDEEP MULHERKAR
DA-IICT, Gandhinagar



The main reason I applied to DA-IICT was because my brother-in-law had recommended it because his ex-teacher at IIT Bombay, Prof. Sahasrabudhe, was the director.

While at DA-IICT, I worked closely with Prof Sahasrabudhe when I was the convener of the admissions committee. He usually gave people a free hand but when things required his intervention, he would step right in. On one occasion, a prospective candidate had sent an email to the Director, threatening to take legal action against the institute for violating a particular government directive. Prof. Sahasrabudhe intervened and began by reading up on the government directive thoroughly. He called me to his office late in the evening to discuss the same. I was amazed that with just one quick reading of the government directive, he understood its nuances and had a very strong grasp of the issue. He instructed me to be ready to meet with the institute's lawyer the next day. He had a very sharp intellect and was decisive when he wanted to be.

I recall an incident when I was the faculty mentor of the annual cultural festival and an accidental fire resulted in a big hue and cry. As Prof. Sahasrabudhe was away, he called me over the phone to discuss the incident. When I told him that there was no malicious intention and the fire was simply accidental, he immediately told me not to worry and never brought up the matter again. He trusted his faculty members both academically and in administrative capacities.

Prof. Sahasrabudhe was a very good teacher and was keen to teach subjects to students even while performing his duties as the Director. I observed him teach Probability Theory and it was a wonderful experience. Many generations of students have greatly benefited from his passion for teaching.



*His presence was the keystone
that raised the caliber
and reputation of DA-IICT.*

PROF. ANISH MATHURIA
DA-IICT, Gandhinagar



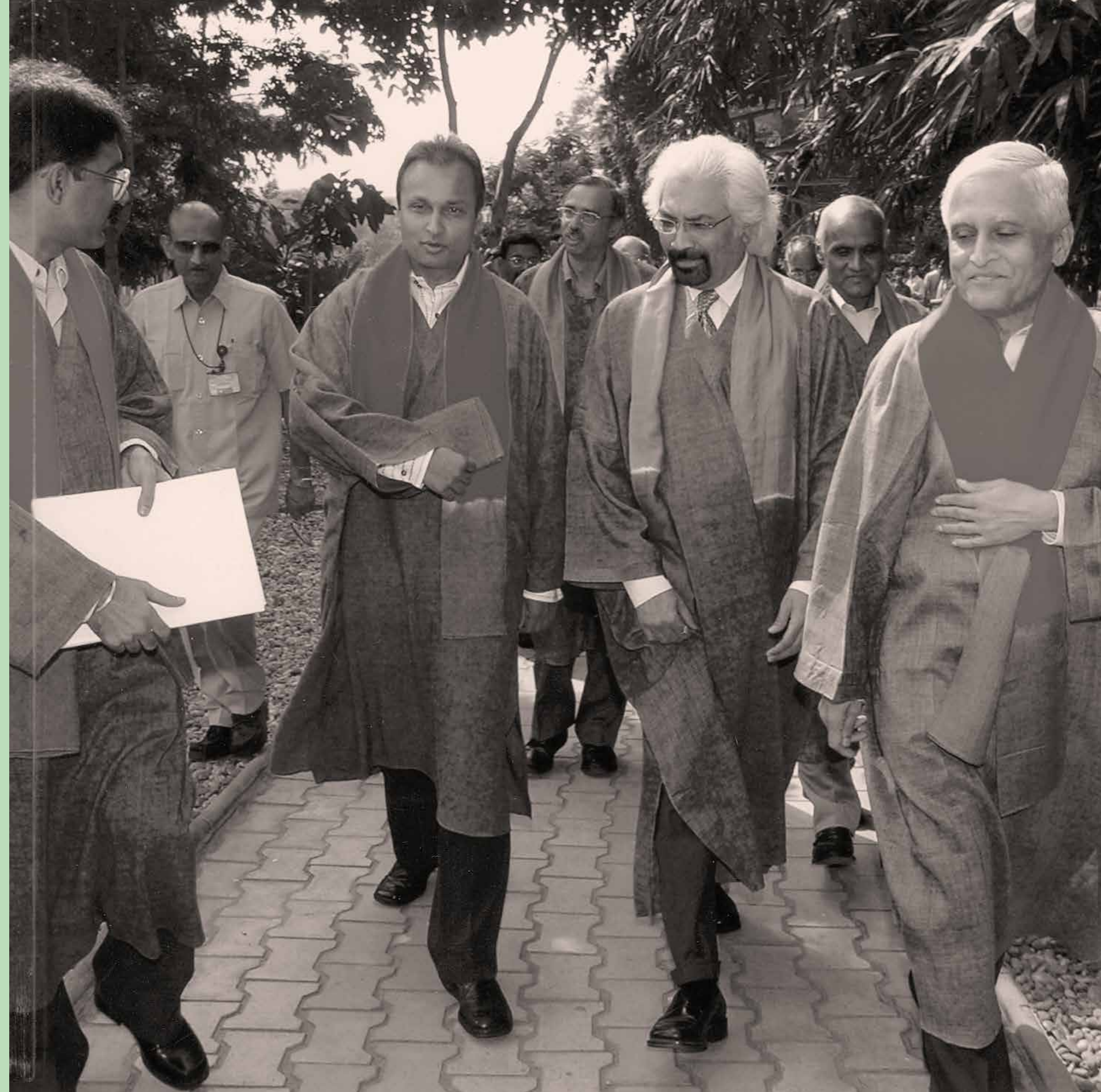
Prof. SCS joined DA-IICT as Director in 2005, when the institute was still very young. During his tenure, the institute made a huge stride towards enhancing its academic and research reputation. In a first-of-its-kind achievement for a private institute, DA-IICT was offered the mentorship of IIIT Vadodara. The institute also became a consortium partner in several national-level R&D projects.

I had the good fortune to serve as Dean Research, while Prof. SCS was the institute's director. As an administrator, he showed a firm attitude towards scholarship and excellence, and emphasized the importance of quality of teaching and research. He was a strong believer in faculty autonomy and responsibility.

My professional association with Prof. SCS later turned into a personal friendship. After retiring from DA-IICT, he kept in touch with me despite his busy travel schedule. Every time I spoke to him, I found him to be as witty and jovial as ever. His colleagues and students will fondly remember him as a passionate teacher and mentor. I will dearly miss my friend and mentor.



Prof. Sahasrabudhe receiving 'Dewang Mehta Award' for outstanding contribution towards education





*He stood as
solid as a rock
for his faculty and
colleagues.*

PROF. HEMANT PATIL
DA-IICT, Gandhinagar



I joined DA-IICT, Gandhinagar, on 14th Feb. 2007 and after just a week I got a call from the Dean declaring that I was to be a co-teacher on subject called Telecommunication Networks. Now, I had not even heard of this field prior to his pronouncement. To make matters interesting, my co-teacher happened to be IEEE Fellow, Prof. S. C. Sahasrabudhe. I was a bit puzzled as to what would happen if I was bracketed as the course instructor with such a senior authority in the field; one who also happened to be a director.

My mind was put at rest when I did meet Prof. SCS. Within the first meeting itself, he gave me a good background on the topics I would teach and his insights. Yet, I can tell you that I took the first few classes with a degree of anxiety. I also happened to be doing the In-sem evaluation for the same course, and when a student had reservations about the marks I had awarded, I took him to meet with Prof. SCS, as he was the course instructor. When I began justifying the evaluation, Prof. SCS stopped me right then and immediately berated the student on his impudence. You can imagine that this created a deep impression on me. Here he was clearly indicating his confidence and trust in the professional integrity of the faculty body, including even teachers like me who had only been with the institute for a few weeks.

Prof. SCS always held to higher standards in academics and research by encouraging the publishing of articles, student guidance and writing proposals for sponsored projects. He would constantly encourage me saying that he would congratulate me if I got my articles published in reputed journals of IEEE or ACM. In addition, he immediately approved my leave during summer vacation to work under Prof. B. Yegnanarayana (IEEE Fellow, ISCA Fellow) with a fellowship from Indian Academy of Sciences, Bengaluru during summer 2008, and also with Prof. Keshab K. Parhi (IEEE Fellow) as a short term scholar at Department of ECE, University of Minnesota, Twin City Campus, Minneapolis, USA during Summer 2009.

He appreciated my co-edited book on Forensic Speaker Recognition. He even recommended me as a speaker for the reputed international conference on Global Maritime Security, 2012, and as a visiting professor at YCCE, Nagpur, based on my teaching feedback of Signals and Systems.

When I went to Surat as an Observer, to conduct the first online MSc (IT) entrance exams, I had to deal with a student who was facing issues with exam logistics. Prof. SCS calmly told me, “I have spoken to the Dean and you need not worry about it”. He was equally supportive during the organisation of O2 CEP Workshops and Winter School on Speech and Audio Processing (WiSSAP-2015) – the first time it had come to a Private University, as earlier editions were organised by IISc and IITs. I met one of his colleagues during a conference who punned on his name saying, “Prof. SCS is a real Sahasrabudhe (brave man)!”

He used to trust faculty to such a level that in meetings he sometimes used to say, “During admissions, I ask candidates to think twice before taking admission to DA-IICT. Otherwise why struggle with a personality like Prof. Hemant Patil?”

Being in the Director’s position, Prof. SCS had the self-assurance to introduce technically solid and new elective courses, such as Telecommunication Networks and Statistically Communication Theory – which were highly appreciated by the student community. Furthermore, Prof. SCS had a very pleasant personality, full of energy and was highly sociable. Every year, around March, he used to organise a faculty get-together with a wonderful and homely dinner. This event really bonded us and made us consider DA-IICT as part of a larger family.

In light of all this, I am privileged to say that Prof. SCS played a significant part in shaping my professional career. His impact on me will last forever and mere words are insufficient in expressing my real gratitude to him; rather I would always like to remain in his debt!

*Prof. SCS always
held to higher
standards in
academics and
research by
encouraging the
publishing of articles,
student guidance and
writing proposals for
sponsored projects.*

- PROF. HEMANT PATIL



*Once you got to really know him,
he was warm, friendly and charming.*

PROF. MADHUMITA MAZUMDAR
DA-IICT, Gandhinagar



When I joined DA-IICT in May 2005 and met our Director for the first time, I was in the somewhat awkward situation where I was recruited by his predecessor, Prof. Kudchadker - who thought highly of me, but whose term ended soon after I had joined. So, in a way, I started out as a complete stranger to Prof. Sahasrabudhe who seemed to have left me to my own devices. A whole year went by without us ever meeting or talking. Then in the spring of 2006, something changed. At a faculty dinner, which he hosted at his bungalow every March, he suddenly walked up to me and Vishvajit Pandya and started talking about the erratic winters of Ahmedabad. Within minutes, our conversation took us to his student days and to the bitter winters of Leningrad where he did his PhD, following his Masters at IIT Bombay. Our conversation took us from Leningrad to Moscow; to the rhythmic patterns of Russian and Slavic languages and, of course, to the warming delights of Vodka on wintry evenings. It was as if I was discovering an entirely new person, warm, friendly and charming, in an odd sort of way. Prof. Sahasrabudhe's unease with social critiques of science and technology never left him and, we seemed to have different viewpoints on many occasions. It took several years for him to appreciate our presence at the institute, when he conceded that the Humanities and Social Sciences were integral to the education of Engineers. I am sure many students and faculty will be aware that Prof. Sahasrabudhe served as Professor and Head of Department of Electrical Engineering at IIT Bombay, and was its Deputy Director too, before he joined DA-IICT. His track record as a teacher and institution builder was impressive. I spoke to him last year during a visit to Mumbai and told him how much we missed our faculty dinners every spring - we never had one after he left. When I told him rather ruefully, "DA-IICT has changed". He laughed and replied, "I'm sure it has changed for the better. It's a place close to my heart".



*When things needed to be done,
he had a way of making it happen.*

PROF. RAHUL MUTHU
DA-IICT, Gandhinagar



I first met Prof. Sahasrabudhe at the time of my joining interview for DA-IICT. His astuteness and quick wit was immediately evident. During the interview I mentioned that between when I received the interview call and appearing for it, I had received a one year post-doctoral fellowship position. His immediate reaction was to tell me to join, go on leave as early as necessary and rejoin after my post-doctoral stint. He was very knowledgeable, alert and always had an incisive retort ready to keep people on their toes. I believe this quality helped him greatly as an administrator and was visible in faculty engagements, convocations, parent or prospective student meetings and general interactions. I remember an occasion where there were deliberations with local and external resources regarding the setting up of a proposed Computational Science programme. Professor Sahasrabudhe quickly called the C-DAC member and requested a favour in return for what he had done in the past for the organisation. I also had good interactions with him during a workshop we had organised - he had a way of livening up the atmosphere.



A man who deserves praise for his unstinted commitment to education.

DR. G. N. DEVY

Literary Scholar & Cultural Activist



A series of unlikely coincidences played a major role in evolving my friendship with Prof. Sudhakar Sahasrabudhe. Had it not been so, the friendship between a distinguished mathematician that he was and a somewhat wayward cultural activist that I am, would have hardly been possible. I started my career as an academic by becoming a Professor of English at the M. S. University of Baroda. Soon after, I had an epiphany of sorts and felt disconnected from academia. Instead, I decided to move to a tiny tribal village on the eastern border of Gujarat and work with adivasis. For years together, I was entirely immersed in my work and had almost completely forgotten the university environs. However, in 2002, I made an unexpected visit to the DA-IICT; a new born institute for ICT in Gandhinagar. It was pure chance that the Director of the institute, at that time, was Dr. Kudchedkar - a former IIT professor who I had met once before. He asked me to visit again and lecture at the institute for a semester. So I did take up his offer, and when I was about to say goodbye to DA-IICT, the Director handed me an appointment letter with terms of service I could hardly believe. I was given the freedom from being attached to the campus and could visit and lecture at my leisure. I accepted this, knowing that my first love would always be my work with the adivasis in a village 200 km away from the institute. When Dr. Kudchedkar was the Director, I continued working

at the DA-IICT under those liberal terms, visiting the institute maybe two days a week, and not visiting it at all during the long-term breaks. Some years later, Dr. Kudachedkar's term came to an end, and a new Director arrived on campus. As one can imagine, I kept away from him, trying my best not to be noticed and reprimanded for my infrequent presence on campus. I was told that the new Director, Dr. Sahasrabudhe was an exceptionally brilliant mathematician. After he had settled in, he called me for a meeting. I entered his office with some trepidation, but he rapidly made me feel quite welcome with his characteristically warm smile. He did not ask me any questions about what I was teaching. Rather, he spoke to me about A Mathematician's Apology by Hardy, an all-time great in the field. I had heard about it but had not read it till then. Dr. Sahasrabudhe offered to lend me a copy. In return, I offered to bring him a copy of one of my recently published books on the adivasis. So the next time I was on the campus we exchanged books and he began telling me about his friends who had done distinguished work outside their academic fields. He made me feel assured that the work I was doing for the tribal community was of great value. A few visits later and our comfort level saw us conversing fondly in Marathi. Not only did he show respect for my work by his words but actually made me a member of the institute's academic board - the highest body in DA-IICT. For me, it was a source of great delight to present him with a copy of each of my new books as I completed them. During one of our conversations, Dr. Sahasrabudhe told me that he and his wife Madhuri were planning to visit the adivasi academy I had established in Tejgadh, a four-hour drive from Gandhinagar. They kept their word and soon paid me a visit. On the campus of the Adivasi Academy, I was perhaps more real, more myself than anywhere else. During this visit I learnt that Mrs. Sahasrabudhe was studying for her Ph.D. On experiencing the multilingual school I had established at Tejgadh, she decided to make it the laboratory for her research. It was quite a distance from their home to the Academy but week after week and month after month, she undertook that long round trip and taught the children English, using a new language learning tool. She introduced

me to several such tools developed by the Infosys Education Foundation. Probably, it was this association that caused them both to develop a special love for the Adivasi Academy.

Though my work was mainly centered at the Tejgadh village, my wife Surekha and I lived 90 km away, in Baroda. It was very natural for us to invite the Sahasrabudhe couple to visit our home in Baroda. They accepted the invitation over a weekend and joined us, and some of my friends, for dinner at our home. Among this interesting friend circle was the Baroda District Collector, who later rose to become the Secretary to the Prime Minister; another was a High Court Judge, a former student of mine; and a third was an IAS officer working as a secretary in Gandhinagar. The conversation was lively and our time together was enjoyable. From this day on, every time my wife Surekha, who is a scientist, and I travelled to the DA-IICT together, we had an invitation for meals with the Sahasrabudhe family. If I happened to plan any special events in Baroda, the Sahasrabudhes were among our most distinguished invitees. They rarely disappointed us. Even after Mrs. Sahasrabudhe completed her research and the visits to the Adivasi Academy came to a close, they were always amenable to visiting us in Baroda and other cities in India. I recall that there was a time when I had to receive a cultural award in Bombay, with a lot of glitz and glamorous celebrities in the audience. The Sahasrabudhes were there to join me for the function. When I organised a pan India language conference in Baroda, Dr. Sahasrabudhe participated in the event without a murmur about his precious time. In September 2013, I had organised an ambitious ceremony at the memorial of Mahatma Gandhi on 30th January Marg - the location where he was assassinated in 1948. I was keen that Sudhakar and Madhuri Sahasrabudhe join me, and so they found the time to travel to Delhi. I have very clear memories of our pleasant time together at the India International Centre, where our respective families stayed for a few days.

Dr. Sahasrabudhe's friendship was selfless. There were many times when our views on matters related to the DA-IICT differed; but he was extremely accommodative. His own achievements in the field of mathematics

were splendid; yet, he always gave me a sense of how generously he viewed my work, in my field of scholarship. There was a unique combination in him of dignity and simplicity, of generosity and realism. It was not as if his life was challenge-free. Yet, I do not remember him ever sliding into gloom. And even when he earned many coveted laurels and distinguished medals, there was not a shade of undue pride in his act or speech. He always, and invariably, came across as a graceful person with a high degree of aesthetic sensitivity and an impeccable dress sense. He may have been taciturn with his colleagues but was quite free while conversing with his friends. I held strong views on political matters and lectured and wrote newspaper articles expressing those views. This was something that was normally not tolerated at the DA-IICT. As Director of the institute, he was expected to caution me but he never did. Rather, every time my articles appeared in various papers and magazines, or when news related to me appeared, he made it a point to ask the librarian to display a copy in the library foyer.

When his term at the DA-IICT ended, I felt that I should no longer continue to work there. So, I sent in my resignation. Some newspapers in Ahmedabad gave this a rather mischievous spin and so I thought he would be asked to explain this by the management. He did not worry about it and continued his friendship in the years beyond the DA-IICT. When I visited Nagpur a year later, the Sahasrabudhes invited me to their magnificent 'wada' house which had a very tasteful decor. Sudhakar was still travelling for his lectures and meetings; he was very active. Mrs. Sahasrabudhe probably participated in one of the public meetings I had organised in Nagpur. A year ago when I heard about the untimely demise of Dr. Sahasrabudhe, I felt a pang of grief that was sharp, cold and pierced right through my heart. I had lost a true friend. Alas, we met each other rather too late in life, but the years during which I knew this outstanding mathematician were filled with joy that only a true friendship can bring. When I paid my respects to Mrs. Sahasrabudhe, I was struck by her quiet dignity in adversity - a rare gift even if one is highly-placed or well-educated. How beautiful the world would have been, had there been many more like this wonderful couple. May they be blessed forever.



*He pushed you gently
but firmly in the right
direction.*

PROF. PRATIK SHAH

IIIT, Vadodara



My days at DA-IICT were formative in many ways. I consider myself fortunate to be at the right place at the right time. Real academic interactions with SCS started during a course jointly taught by him and Prof. Chatterji on probability and random processes. Prof. Chatterji covered the Measure Theory and SCS covered the random process part. I remember his neat board work and the clarity of thought while explaining basic concepts like ensemble average, time average, random walk, etc. SCS had this habit of inviting students to solve tutorial problems on the board. Even if you did not know the solution, he would prompt you till you eventually reached the solution on your own. What a learning experience. Following the course, I became a teaching assistant for his course on Statistical Communication Theory. It was a wonderful experience. He used to give me one-liners, my job was to set up simulation problems around them. What I learnt through these interactions was that it is easy to expand and extrapolate but very difficult to summarise concisely; it requires a lot of internalisation of the knowledge.

His cryptic and less than a line emails are also part of my fond memories of him. It used to take almost two to three hours for me to write an email to him and

responses received were: “Ok”, “fine”, “good”, “no”, “rewrite”, “think more”! This continued even after I joined as a faculty with IIIT Vadodara.

Being a director and a teacher simultaneously is not an easy task. I am an admirer of his time management. As a faculty when I look back at his way of working, it is all the more inspiring and motivating. He managed his time very well, occasionally he used to prompt me on that front. Once, I confessed to him that when I sense that a problem is solvable, I leave it there. He used to call that lazy. He said that teachers cannot afford to be lazy. It is only because of him that I worked on my attitude-block and eventually managed to be a little less laid-back.

One day at 9:00 am, a knock on the door announces a message from the warden that there is a call from the director’s office. I had an appointment with SCS at 9:30 am and I somehow managed to reach the office on time. Entering the office, SCS gave me a piece of paper (literally a very tiny 2x3 sq. in. of paper). He asked me to get the function plotted, with some modifications, to improve upon a cost function. I was clueless, and went back to my seat where I played with the function for a while. I prepared a small routine to plot the function explaining the effect of various parameters on its behaviour. At around 4:00 pm, I had to report back with the plots. To my surprise, when I went to his office, he asked me to present the details to some five individuals. He introduced me to the committee and said, “Pratik, not everyone gets a chance to teach gray hairs”. It was a committee trying to set up guidelines for accreditations and an evaluation metric for benchmarking an institute. It was at this point that I came to understand that I was essentially analysing the impact of various parameters like number of students, faculty members, collaborative projects, publications, programs, alumni, and more, on the metric! I finished in about 5 minutes. The people present there were part of an NBA core team setting up processes and guidelines. In the end, it took me a week to understand and appreciate what was going on with the function! A great learning experience.

DA-IICT had been very active and aggressive in terms

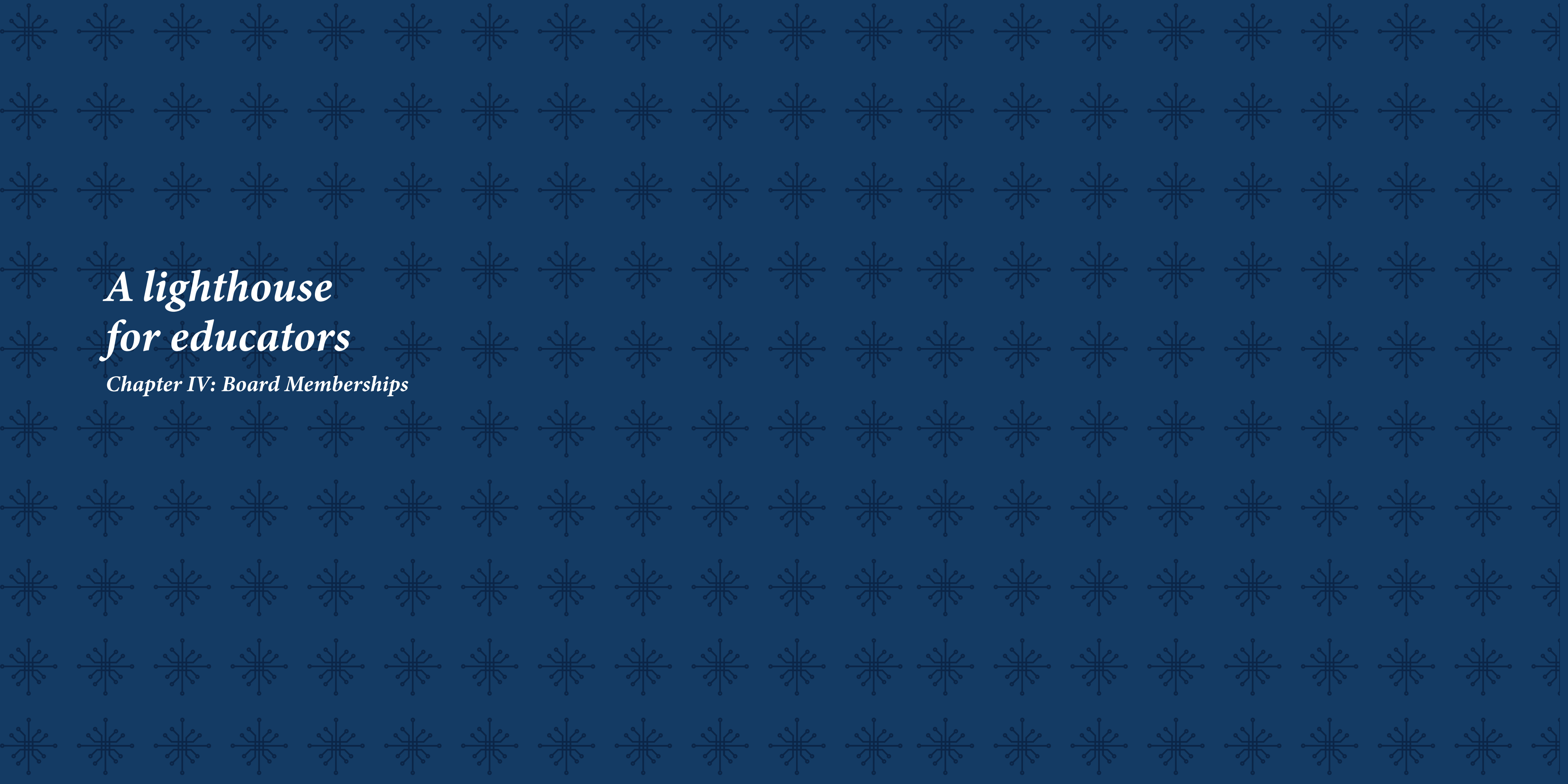
of faculty induction. Almost every alternate week there used to be seminars by candidates, visitors, guests and experts on diverse topics. SCS insisted that all Ph.D. students must attend such talks. I was a regular attendee and never missed any talk. In a few of the talks, he used to take a back seat and join us in the audience. Just at the time when the experts would start discussions with the candidates, he would say, “Hey, pay attention and listen carefully to the questions posed by the experts. The maturity of an expert is reflected in the quality of question asked and the maturity of the candidate is in understanding the question”. On several occasions, he said that, “... understanding a question, developing a strategy to approach it and eventually arriving at a solution is commendable, but the art of posing an interesting question is what makes you a better teacher and a scholar...”

Before he left IIIT Vadodara, all of us (four faculty members, two staff members) invited him for lunch at the institute. He accepted the invitation. Each of us cooked a dish and brought it to the table as a potluck lunch. If you are curious as to the reason behind this potluck lunch? Well, SCS used to say that to build an institute; we need people who can cook their own food. We had a wonderful time together and I still remember that smile on his face. In one or two interactions, he could identify the abilities of an individual. His ability to channelise these abilities towards constructive activity is what I have witnessed as a faculty and a student also. It looked as if he always had a plan and there were sub-plans and sub-sub-plans! He knew how to convince. It is difficult for me to quantify his influence on my life.

I met him during the maiden convocation of IIIT Vadodara in November 2018. We had a casual chat, cheerful as usual, he asked about my family and friends. I walked with him a few steps towards his car after the convocation and here is what he asked me, “How far have you reached on action at distance (Quantum Entanglement) front?” He made me look at quantum physics, in the first place, when I used to be a teaching assistant for a course on Electromagnetics. This was his way of saying keep learning. His pursuit of learning was contagious. I believe there is no better way to remember my last meeting with him.

*I remember his neat
board work and the
clarity of thought
while explaining basic
concepts like ensemble
average, time average,
random walk, etc.
SCS had this habit of
inviting students to
solve tutorial problems
on the board. Even if
you did not know the
solution, he would
prompt you till you
eventually reached the
solution on your own.*

- PROF. PRATIK SHAH



A lighthouse for educators

Chapter IV: Board Memberships



*He always had a pleasant
disposition, a balanced
temperament and a helpful attitude.*

DR. R. NATARAJAN

Director IIT Madras, 1995-2001,

Chairman AICTE, 2001-2004



Professor Sudhakar Sahasrabudhe has been one of my very good friends over the past three decades. He was a fellow IITian, member of several National Committees, member of the Board of Governors of Dhirubhai Ambani Institute of Information and Communication Technology, fellow Resource Person of several Faculty Development Workshops in different institutions and active participant in many other academic activities. I know the foundational role he has played in the design of our National Accreditation systems, processes and in NBA becoming a Permanent Member of the Washington Accord. I have always known him to have sported a pleasant disposition, a balanced temperament and a helpful attitude. His lectures were very interesting, informative and popular. I consider myself fortunate in having had the benefit of his company and association for over three decades. In his loss, the academic fraternity has lost a beloved human being.





I will always remember Prof. S. C. Sahasrabudhe as being quite methodical, down to earth, committed to quality and honest to a fault.

PROF. ANIL SAHASRABUDHE

Chairman, AICTE



Academically, my discipline is quite different from that of his, so I would not be able to comment much on his area of research. However, it might be said that first and foremost, we are Sahasrabudhe brothers (Sahasrabudhe bandhu). Our family name being the same, I am certain that somewhere in the family tree, perhaps going back 10 or 15 generations, we are somehow connected genetically. Jokes aside, I first got to know of him through my paternal aunt, who happened to meet his wife, Madhuri, when they were both in a journalism media course together. My aunt once asked me if I knew of another professor from IIT who had the same surname as mine. Now, Professor S. C. Sahasrabudhe was senior, and I didn't really have any direct knowledge of him, although I had heard his name, so I answered, "We don't know each other, but I know of him." Suddenly one day, we happened to meet each other in IIT and that is how our relationship began. After that, when I was a faculty in IIT Guwahati, Professor S. C. Sahasrabudhe used to visit us as an expert, to interview candidates for faculty positions. At that time, the Director was also from IITB, Mumbai, Prof. Buragohain and the next director after him, Prof. Gautam Barua, was also a student from IITB. Prof. S. C. Sahasrabudhe was absolutely methodical, keeping

a lively environment for candidates, at the same time crisp and pointed in his questions for testing the concepts and abilities. That is how, we used to always request Professor S. C. Sahasrabudhe to be a part of the selection committee. Later, as a Deputy Director and Dean, I used to sit with the other members on the selection committee, interact with him and see several facets of his personality. I often observed how Prof. S. C. Sahasrabudhe used to ask detailed questions on the fundamentals of a subject, to evaluate people and discover just how talented they were. I believe this was the mark of a good teacher.

As I have mentioned earlier, we seemed to be brothers by our surnames. I recall that he had once stayed on the Guwahati campus with his family and we used to go jogging or on quiet walks in the evenings. This continued even when there were meetings in other IITs and we used to attend them on behalf of our respective IITs. Our friendship also deepened as we kept running into each other during IIT Delhi or JEE meetings. Later, when I joined as a Director in College of Engineering, Pune, Prof. S. C. Sahasrabudhe had left IIT Bombay and joined DA-IICT in Gandhinagar. At this point, we used to request him to be a part of the selection

committee panel at the College of Engineering, Pune (COEP) too and he used to gladly accept and make himself available. There was another event of IETE in Pune, which was a workshop-cum-conference for telecom engineers where he had delivered a fabulous keynote address. I still remember it because during that one-hour keynote speech, he had beautifully explained how students could smoothly be conducted through the course from the fundamentals. He had also shared the right way to create those foundations based on his personal experience. We really got to understand his calibre as a teacher during that event. No wonder, he had received Best Teacher Award at IIT Bombay and was very popular amongst his students.

From here on, we gradually started working together more often. One of those instances happened to be at the Shiv Nadar Institute in Chennai. The institute had asked Professor Natarajan, who was the former Director of IIT Madras and Chairman of the AICTE, to visit the college and recommend modifications that could improve the standard of education and excel. Professor Natarajan called in Professor Sonde from IISc Bangalore, Professor S. C. Sahasrabudhe, a former Director of IIMB and me as members of the team. Although Professor Natarajan himself was from the field of Mechanical Engineering, and I was the youngest of those selected, he asked me to join him. Over the course of three days, we made observations on how every aspect of the institute functioned. Professor S. C. Sahasrabudhe made some key recommendations, which were implemented by the institute later. During this time, we got a close-up view of how he strove to take the educational institute forward and raise its standing. After this exercise, I moved to Delhi as the AICTE Chairman. At that time, Professor S. C. Sahasrabudhe and then Chairman of NBA (National Board of Accreditation) - Professor Surendra Prasad, were working closely together to put the accreditation systems in place by India's entry as a signatory of the Washington Accord. The team worked relentlessly towards this objective and contributed significantly towards its eventual achievement. We used to meet in NBA office and there used to be two Anils (myself and Anil Nassa) and two Sahasrabudhes (myself and Prof. S. C. Sahasrabudhe) and whenever they used only name or only surname, there used to be joke and

lighter moments. Prof. S. C. Sahasrabudhe used to be always jovial, making mention of his interesting experiences and though elderly, we all used to feel as though he was our contemporary.

There is an annual world conference that explains the process needed to be followed for evaluation during accreditation. Prof. S. C. Sahasrabudhe endeavoured towards it and became an expert in accreditation of institutes not just in India but anywhere in the world. For this purpose, he travelled to Singapore and other cities where these events would happen. We always felt that India did not have the requisite number of accreditors who could properly understand outcome-based education and evaluate the self-assessment report shared by institutions. Which is why, training faculty members was very important for us and Prof. S. C. Sahasrabudhe, together with Prof. Surendra Prasad, ensured that this was accomplished. We kept meeting during these activities, even in Delhi, where he was a member of the executive committee. There we developed new formats for various categories of educational institutes after a lot of discussions. He kept doing this kind of work. When he moved to Nagpur after retirement, he kept going to institutes whenever they called him.

It was during one such visit to the Dhole-Patil College in Pune that he had a sudden heart attack in his hotel, right after he had completed his work on that day. We still struggle to understand how an active and healthy person like him could pass away so unexpectedly. When I look back to that day, I feel a sense of heavy loss even today. I remember that none of those present at the hotel had his Nagpur home contact details. We tried to get his home contact details through the NBA. Eventually we were able to get in touch with one of his close friends, Avichal Kapur, who was also from Nagpur, and who was able to share Prof. Sahasrabudhe's home contact details. This is how we were able to inform his family. Our long journey which had started with us being merely acquaintances and graduated to us being friends, came to an abrupt end. I will always remember Prof. S. C. Sahasrabudhe as being quite methodical, down to earth, committed to quality and honest to a fault. My tributes to Prof. S. C. Sahasrabudhe's refreshing memories for over two decades.



A priceless asset to technical education foundations, he played a pivotal role in gaining Washington Accord membership for India.

DR. ANIL NASSA

Member Secretary, NBA



The first time I met Prof. Sahasrabudhe was somewhere in 2003 or 2004. At that time, we had not developed much of a relationship or association of any kind but my impression of him was that he was a very honest, decent and straightforward person. I joined the National Board of Accreditation in October 2013 and it was happy chance to see that he was also present on one of the committees. So I should say that our friendship grew during the one and a half months of that programme. The moment I joined, we had to face the Washington Accord team, whose visit was expected in the first week of December 2013. I can say that we really put our heart and soul into the work at that time. Prof. Sahasrabudhe was instrumental in talking to the Washington Accord team and we travelled together quite frequently for meetings to New Zealand, Kuala Lumpur in Malaysia and Anchorage in Alaska. We must have been a part of at least three Washington Accord meetings and attended one Outcome-based

Accreditation Workshop conducted by ABET in Pittsburgh, USA. It was from there that we started our main exercise in spreading awareness of Outcome-based Accreditation in the country by conducting many workshops. This raising of awareness among faculty members of technical education institutions was a strong contribution to the country.

I was quite lucky to have Prof. Sahasrabudhe along as he was ever ready to help us in whatever capacity it was needed. He was a key member in almost all our committees - in the General Council, Executive Committee and Academic Advisory Committee. After working with him closely, I developed a really good rapport to the extent that we could poke fun at each other in a good-natured way. To my eyes, he seemed a forever calm person who was never stressed and could manage the most difficult situations in a manner that everyone would be at ease. When it came to integrity and positivity, he was incomparable. He had all the

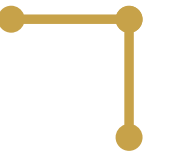
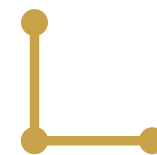
important qualities a man should have in life.

I can say that the NBA Chairman, and I, truly appreciated his foundational contributions in helping the NBA attain a credible system globally while raising awareness across the country. In terms of the technical education system, India has lost a great personality and a priceless asset to the cause of spreading Outcome-based Accreditation. In fact, while the recent NPE has placed emphasis on Outcome-based Education, this is an area we were working on together since 2013. During the first Washington Accord meeting in New Zealand, we faced a tough challenge, as India was really striving hard for a permanent membership. To defend our application, we spent close to 36 sleepless hours, endlessly discussing and strategising. There were instances when we were so involved in document preparation that we lost all sense of time. We would begin at 10 am in the morning and work up to 2 am and then again start the next day at 10 am. How we attained credibility for India's membership was that we would discuss everything in detail to iron out even the slightest differences before a final decision was taken. There was no voting on a subject, as most of our decisions were unanimous and if they were not, we could convince each other on the right course of action for the benefit of the country. Prof. Sahasrabudhe

was a true mentor, guide, philosopher and friend, so we had a good meeting every time. We could talk to each other as friends, share experiences and discuss personal issues as all friends do. Being junior to Prof. Sahasrabudhe, I would be the one sharing a wide range of personal things with him and he would treat me as a younger brother while giving me advice. When it came to how he interacted with faculty and teachers, he was a very good communicator and liberally peppered his presentations with unique examples, so that everyone who attended would find it interesting. Usually the role of the teacher is to teach, and not to listen, but with him it was very different. He had a very unique appeal and could easily get all the faculty members to listen avidly to his talks for up to two hours a day. His IIT experience, his NBA visits and knowledge of the technical education system in the country was a unique blend that helped further the foundation of technical education in India.

For me, his passing is great personal loss, though I still feel his presence in everyday life. There are things about him that I will always remember, like his fondness for thin-crust pizza and coffee or tea breaks almost every 2-3 hours. He will always remain a bigger than life influence for me as well as the education system of the country.

I can say that the NBA Chairman, and I, truly appreciated his foundational contributions in helping the NBA attain a credible system globally while raising awareness across the country. In terms of the technical education system, India has lost a great personality and a priceless asset to the cause of spreading Outcome-based Accreditation.





Briefing meeting of NBA International Review Team held on 10th September, 2019 at India Habitat Centre, New Delhi





An attitude that put students' interests before his personal comfort, and education before everything else. This was his commitment.

PROF. ANIL TAVILDAR
Professor Emeritus, VIIT, Pune



Sometimes one's orbit takes longer than others to revisit the path it once crossed. You could say that this is how I regard my association with Prof. Sahasrabudhe. I first got to know him back in the 1970s and early 1980s when I was a post-graduate student, initially at IIT Bombay, and subsequently at IIT Delhi. However, it wasn't until much later, in the years between 2006 and 2012 that I reconnected and forged a friendly association with him. This latter association began when I was the principal at Vishwakarma Institute of Information Technology (VIIT), Kondhwa, Pune. It is from this time period that I would like to recount some treasured memories I have of Professor Sahasrabudhe. From what I knew of him, he was an eminent scholar and educationist; a fellow of the largest international technical society – the Institute of Electrical and Electronics Engineers, USA. This is a highly regarded achievement as even today, as there are still very few fellows from India in this field. Perhaps, Professor Sahasrabudhe was one of the distinguished few who received this premier recognition at such a young age because of his keen knowledge and sound technical expertise. Far from hoarding the gains of his achievement for himself, Professor Sahasrabudhe unhesitatingly took the path of sharing his technical prowess and knowledge with experts, friends, students and all those who could benefit. I can imagine there must be hundred or even thousands of students from professional institutes and experts who have gained invaluable because of his choice to guide them. His path was teaching and he used whatever means he had at his disposal to enhance his ability to teach. As a distinguished member and professor of various technical bodies like the National Board of Accreditation, he contributed immensely to the overall development of different academic institutions in India. His contributions were of most impact in the domain of engineering education. Through his prominent position on the governing body of the Vishwakarma Institute of Information Technology, he played a pivotal role in shaping its academic excellence and created a permanent research orientation amongst the faculty and students of the institute. His passion for research was such that he never chose to delineate between

research in Science and research in Engineering. We used to have a specific rule that those who researched for PhD would get specific concessions like leaves or adjustment in work schedules and benefits like that. I remember Mrs. Bhalerao, who at that time was a Physics lecturer, was conducting research on nano-materials in NCL. You could say she had a thesis background and was delving into the field of science. If I remember the details correctly, she had been given a two-year study leave to pursue her research activities. At the end of those two years, she had made a great deal of progress but her research had not come to a conclusion. Her guide specially came to plead her case for a year's extension; so that she could conclude her research and also earn her PhD. As she was from the science stream, in an engineering institute, you can understand that there was considerable internal opposition to her request. Most did not approve of the idea of giving another year as extension. When I asked Professor Sahasrabudhe for his opinion, he suggested that I bring up this researcher's request in one of the governing body meetings and he would support it in such a way that everybody would understand its critical value. Little did I know that he would go the extra mile to ensure that this researcher's request receive the importance it was due. Now, the governing body meeting was to be held one afternoon but Professor Sahasrabudhe tacitly arranged a tour of our institute's Physics research lab that very morning. Here Professor Garde was in charge and used to work on Material Physics Research, in a laboratory specially set up in collaboration with Tata Institute of Fundamental Research. Professor Sahasrabudhe smoothly conducted the governing body members around the laboratory and showed them the kind of research projects and studies being conducted. So when the governing body meeting was held later that afternoon, everybody unanimously agreed that one could not distinguish between science research and engineering research and the researcher should be allowed to continue her studies to their logical conclusion. This was the way that Professor Sahasrabudhe managed the issue and the contentious one-year extension was passed without a hitch. It was a remarkable way to create a research mindset and bring about change in quality standards.

He held this very attitude and desire to pass on knowledge and expertise to his students even when he came for just governing body meetings. There is one particular instance that is a great example of his focus. Since our institute was located at a considerable distance, we only had five work days per week. Therefore, we also used to have our meetings on Fridays, when students were available. However, it happened that one particular meeting had to be arranged on a Saturday. As an alternative, we had the meeting in the morning followed by a break for lunch and a lecture from 3 pm that afternoon with IEEE at Cummins College for Engineering for Women. All arrangements were made accordingly but for unforeseen reasons the governing body meeting got extended till 1 pm. As soon as the meeting wound up, Professor Sahasrabudhe insisted that he was not interested in lunch, and that we should just have a quick snack and hurry over to Cummins College where students were waiting for him. He did not want to inconvenience the students, especially the girl students, waiting for him in the heat of the afternoon. He always put teaching and students before his own comfort. So much so that he would forego lunch and rest to ensure that his students would always get the best of him. I will always hold this steadfast determination of his in high admiration. To my mind, this will truly be his most precious legacy to education.

I pray to almighty God to give his noble soul eternal and everlasting peace.

Far from hoarding the gains of his achievement for himself, Professor Sahasrabudhe unhesitatingly took the path of sharing his technical prowess and knowledge with experts, friends, students and all those who could benefit.



One could get to learn so much from people like him, that it is difficult to explain in plain words, as how much I have learned from him.

PROF. M. J. KHURJEKAR

*Coordinator for Affordable Agriculture Projects,
IEEE Pune Section*



Though I had previously attended a lecture on telecommunications, at IIT Bombay, given by Dr. Sahasrabudhe, it was only in 2001 that I finally got to meet him in person.

I had gone to Surat, for a week-long training course, where several lecturers had come from various universities. Dr. Sahasrabudhe and another professor from IIT had come too. Every lecturer was given a different topic every day. It was announced that Dr. Sahasrabudhe's session was going to be held over almost of entire day. As he had to leave at 4 pm, he started his session at 10.30 am and continued until 3.30 pm with just half-an-hour break in between for lunch. Once the lunch break was over, he immediately started his lecture again. This was how he paid attention to his lecture and why he stood out in one's memory. He had a very simplified style of explanation. When you heard him, you could feel how easy the subject was. But later when you think about it, you would realise that it was easy only because of the

dedication and effort that went into it. He would have some references on his slides, which we would copy and later study in detail at the library. I was quite impressed with him.

I was in Vishwakarma Institute of Technology (VIT), Pune before joining Vishwakarma Institute of Information Technology (VIIT) Pune. So when I was at VIT, Dr. Sahasrabudhe had come to Prof. Abhyankar, Principal of VIT, for some work, and here we met again. We had a casual conversation and afterwards, I attended his short lecture of 30-45 minutes. Later, when I was the Principal at VIIT, he was on the Governing Council of the institute. We used to interact a lot during that visit; sometimes meeting at least once or twice in a year, whenever there used to be a Governing Council meeting. At that time, I think, he had joined DA - IICT. Of course, I used to be intimidated by his position, designation and knowledge in his subject. But he would talk with such friendliness and he had this simple, natural openness in his attitude.

In 2008, Professor Tavildar and I thought of conducting the Short-Term Training Programme (STTP) that was essential for colleges. Many distinguished people delivered lectures, in that programme including Professor Dr. Avinash Joshi, Professor Dr. Mukul Sutaone and others from Pune. We desired to have a lecture by Professor Sahasrabudhe, which he was willing to accommodate, if a mutually convenient time could be worked out. Luckily, this was possible and he was able to come and deliver this lecture. As a part of the arrangement for this programme, we held a planning meeting of Governing Council, where Dr. Sahasrabudhe graciously offered to help us by sharing a list of people with Professor Tavildar and me. We contacted all of the people on the list including Dr Ravinder David Koilpillai, whom we had invited for a full day session on the emerging technology of 4G. Nobody wanted to miss these sessions, especially that of Dr. R. David Koilpillai, who is a great orator. It was an amazing experience and Dr. Sahasrabudhe was the one who really made it happen.

Every time Dr. Sahasrabudhe used to visit VIIT for meetings, we would request him, for an hour and a half, of his time. As he would often tell us in the morning when he wanted to take a lecture, I would make an announcement to that effect and request people to attend. Many who didn't have lectures during that time slot used to attend and we would also hold a lecture for the students. Dr. Sahasrabudhe would generously give us his time whenever he could. If he had a prior appointment at 11 am, he would still come at 9.45 am and tell us he was ready to take a lecture from 10 am to 11 am. This is an example of how easy-going he was. He would approach me directly whenever he was visiting and ask, 'Let's go, Khurjekar, where do we sit?' He wouldn't even wait for a cup of tea. He would say, "If I feel like I need a tea, I'll have it before my meeting". Even the students were quite impressed with him over the course of the three or four lectures he gave while I was there. For all these lectures, Professor Tavildar or I would escort him to a class & introduce him to the students, but he would say, "Don't waste time in introducing me!" and would immediately start lecturing.

It was quite typical of him. He always had a small note and two or three slides which he would use during his lecture. He would develop thoughts from the note and explain to the students what the topic is or how the features of circuits were different. He would explain communications, electronics, and the basics of electronics, how the world was taken from simple transistor circuits to multiple chips and so on. He was quite skilled in getting students to discover things that they hadn't noticed while studying. You could say he was 'zabardast' in teaching and could easily talk for one and a half hour with utmost ease. All of us would prepare so much before every lecture but he would just go in, say unprepared, without any stress or tension. He would always be prepared for a lecture, at any time, anywhere. While walking down a corridor, he would ask for a report on whether or not students were doing anything about the topic taught in the class that day. It was important to give him an open view as he was on the governing council. We had initiated some experiments because of him and successfully completed them. I have always been in awe of his wonderful personality, and it remains to me so today.

I have recollections about NPTEL when we needed some Compact Discs on the subject. The CDs we required, were not available in Chennai, so Dr. Sahasrabudhe recommended we get them from Mumbai. Together with another professor, who knew IIT Bombay better, we travelled to Mumbai IIT to get the CDs. I sent a message through an email to Professor R. K. Shevgaonkar about the same and he told us that Dr. Sahasrabudhe had already spoken to him about this. We got these National Programme on Technology Enhanced Learning (NPTEL) CDs and placed them in the VIIT library. However, Dr. Sahasrabudhe told us that we should not just place the CDs in the library; we also needed to motivate students and staff to use them. I agreed and told him that we needed to make more people aware about NPTEL. I wanted to call all college heads for a session with Dr. Sahasrabudhe. However, Dr. Sahasrabudhe informed me that Professor Shevgaonkar's field of work was more closely aligned to NPTEL, and he had even spoken with Professor Shevgaonkar regarding a lecture. We invited Professor



Shevgaonkar, who was very skilled at explaining the NPTEL concept to many college heads who attended his session. Coincidentally, Dr. Sahasrabudhe also had a meeting in VIIT at the same time and so he also attended this session to estimate people's reactions towards it. For him education was everything.

Another memory I have, is when I asked Dr. Sahasrabudhe why he had done his PhD from University at Leningrad, in Russia. He answered that IIT had a collaboration with them back then, so young people like him used to get the opportunity for scholarships. After studying in Leningrad, he came back to keep teaching at IIT.

Another time, I informed Dr. Sahasrabudhe that I was visiting Ahmedabad for a 3-4 day conference, and my wife and I would like to meet him. He gave me a location, which I was not able to understand. He told me not to worry and that he would explain it to the taxi driver who would get us there. When we arrived, Dr. Sahasrabudhe was glad to meet us both. He told us, 'My wife has just stepped out for some work, I'll introduce you once she is back'. Then he called his assistant and asked him to give us a tour of the institute, while he in meanwhile finished a lecture. When we met up again, we discussed what we could do at VIIT. We knew some of the things were a challenge as it was a private institute. He made some suggestions to improve our library, which

improved after his suggestions. He was very interested in elevating the standards at the college and would occasionally visit the library and spend at least five minutes just getting a pulse of what was happening there.

We would also reserve a few IEEE lectures for him. I recall that, one of these was at Cummins College of Engineering for Women, Pune. We invited faculty from various colleges and Dr. Sahasrabudhe would explain why an IEEE membership was beneficial and how it opened the doors to so many possibilities. I remember his sister lived somewhere nearby and he stayed with her. While we wanted to send a car to get him, he declined and came walking to the seminar. He was that humble and simple a person. He had fluency in Marathi and English, and we loved being part of his conversations. I would also say that he carried himself well and exuded a vibrant personality, not at all like the stereotypical imagery of a professor.

I have so many fond memories of him. One final thing I want to share is, that every year on Diwali and New Year, I would send message him a personal greeting and he would immediately reply. He always kept in touch with us like that.

You get to learn so much from people like him. It's difficult to explain in plain words just how much I have learned from him.

When you heard him, you could feel how easy the subject was. But later when you think about it, you would realise that it was easy only because of the dedication and effort that went into it.



Being a teacher always came first.

PROF. S. M. UMRANI

Ex-member of Governing Body, VIIT Pune



I have been a teacher for a very long time. I would say that in all my forty-five years of experience as a professor in the field of Electronics and Telecommunication, I have rarely come across a more dedicated and driven educator than Professor Sahasrabudhe. I first got to know him when we were both on the governing body of Vishwakarma Institute of Technology (VIIT), Pune. Ever since, I have been associated with him for almost seven years. We used to frequently meet as part of our governing membership duties. During this period, I noticed how he always batted from the front foot for education with strategic suggestions to elevate the academic standards of the institution. He had a soft yet commanding tone that he used to good effect in persuading even the most recalcitrant of us into doing what was right. It always worked no matter how much the managing leadership may have diverged from his viewpoint at the start. His conviction was powerful and people found themselves drawn up to do more in the aura of his confidence. Even if he had only come for a governing body meeting, he always made it a point to interact and engage with the students and the staff of the college. Before the meeting, it would be normal to see him spend at least two hours with the students and teachers understanding their points of view. I was intrigued by his personality and attended a few of his lectures myself. He was undoubtedly an excellent teacher, in Marathi we would term it as 'haadacha shikshak'. He was a fount of wisdom and guidance with suggestions that always created

a better way forward, for teaching methodologies as well as presentations. When I look back on the way he went about his art of mentorship and guidance, I realise that he was constantly nudging people in the right direction; creating opportunities for academic excellence. His compelling wisdom played a pivotal role in improving standards to such a degree that we were privileged to receive permanent affiliation to the University of Kondhwa in the short period of just six years - a rare feat.

While Professor Sahasrabudhe always held positions of great leadership, he never forgot the art of teaching. For him, this was his touchstone, the one thing he wished to be remembered as – a great teacher. I will give you an example of just how highly he valued the necessity of teaching students. One day we had made a 12 noon appointment to meet him at DA-IICT. So, we arrived fully expecting to be ushered into his presence at the appointed time. Imagine our surprise when his registrar profusely conveyed Professor Sahasrabudhe's apologies as he had gone to take a lecture and would be slightly delayed in meeting us. This is how education was always a priority, and even though he was the director, he would never miss his lectures. Such was his high commitment to teaching.

Perhaps I will pay homage to him in this way: to always regard him as a good person who had dedicated his life to the cause of education. May destiny gift us more of his kind.





*His greatness was
seeing the future and
committing to a path
with firmness and clarity.
No in-betweens.*

PROF. PRACHI GHARPURE

Director, NMIMS Indore



Destiny has a way of bringing people together. In the beginning, because we were based in colleges that were in the same city, we used to occasionally meet the IIT Bombay professors. We had common ground as Dr. Sahasrabudhe was in the Electrical Department at that time and I was in the Electrical Department of Sardar Patel College of Engineering. After I became the Principal of SPIT, we inducted Dr. Sahasrabudhe into the Governing Council as an academic member. At that time, he had just retired from Dhirubhai Ambani Institute, Gandhinagar. For me, it was quite a step up, as I was a typical professor with a PhD, and suddenly thrust into this position of leadership as a Principal when I was not quite familiar

with administration. You can understand then, why I looked up to mentors like Dr. Sahasrabudhe, who was an Ex-Director from Dhirubhai Ambani Institute, Gandhinagar, and Dr. Bhatt who was the Ex-Principal of VJTI Mumbai and now also Governing Councilor with us. Their mentorship has been greatly valuable for me in my career. As an Ex-Principal, Dr. Bhatt had a keen sense of administration. Dr. Sahasrabudhe with his IIT background had tremendous foresight and was also well-versed in how a private engineering institute functioned. He had an uncanny knack of creating balance by incorporating the rigor of an IIT structure into our system with due consideration to our limitations. I emphasise this aspect, as sometimes

a decision maker with an IIT background would automatically benchmark to that same pinnacle of achievement. For most regular engineering colleges, this cannot happen overnight; it requires a generational evolution that could take several years.

Dr. Sahasrabudhe was a strategic genius but also a realist and he understood this necessity of natural growth perfectly. He was also not the one to just sit there attending meetings and listening to agendas. He was a hands-on person who rolled up his sleeves and helped you when you requested him. Often he would do much more than just give his support or assistance, he would also commit to a position that could make a big difference in the long run. I recall that in a 2016 General Governing meeting, he strongly advocated autonomy for SPIT. He was of the opinion that remaining within the university system would stunt SPIT's growth prospects as changes required would never be incorporated. He went so far as to give this autonomy a definitive one year goal. Understanding his position, we all committed to this goal, and by 2017 were on the path to autonomy. It took us about 2 years, which is a normal transition period, where we really had to work hard to sort out administrative, curriculum and faculty mindset challenges.

Dr. Sahasrabudhe was generous in volunteering his time to take sessions with faculty. Actually, it would be a misnomer to term them as teaching sessions, as they were more like friendly conversations with the faculty. So he would come for two or three days and every day he would have an in-depth conversation with each department faculty member on goal setting and forward planning for the next four years. He did not just help suggest a roadmap for every department; he was there on-the-ground helping us implement this golden path. I found his contribution as pivotal because it was crucial to dovetail academia and faculty mindset seamlessly. Though SPIT was a private college, its sister college SPCE was a government college, and it so happened that its culture would seep through. Recognising the issue, Prof. Sahasrabudhe reassured me saying that the original faculty has been in place for 20 years and that some of them would find it difficult to change and others would take time

to adjust. He suggested I take a bypass solution and concentrate on the new recruits, so that they were imbued with the desired cultural characteristics from day one. In his mind, he knew that the energy of the younger and newer recruits would drive the cultural identity forward, automatically supplanting the older one in time. I realised the value of his recommendation and we started actively inducting the newer faculty for all new experiments that had to be conducted. We gave these new faculty participants sweeping project ownership and responsibility to request for training or call in experts; whatever it took to achieve success. It definitely saved us a great deal of heartburn over people management challenges. We did not want faculty to self-isolate by saying that "This is not my subject". So it was a tactically superior move that enabled the highly-paid senior-most and mid-level faculty to continue being valued teachers in a position they were best suited for, while we could have the resources to conduct more experiments, introduce new teaching methodologies, induct new courses and explore inter-disciplinary programmes. Dr. Sahasrabudhe's idea of creating a new malleable layer while bypassing the old, paid rich dividends in a short time. Within just a year of autonomy, we had experimented all we could and the results were fabulous. We also got our first placement post autonomy. To be sure, SPIT was always getting very good placements in the past but it was even more remarkable after autonomy because of our across-the-board experiments in introducing new courses, inter-disciplinary teaching, multiple lab-based courses or simply because of changing the way things were done in the past. It was a roller-coaster ride for both students and faculty. I would often have students raising flags in my office exasperated by the changes but at the time of leaving, these very same students thanked us ten times over. This sublime change was appreciated even more at the interviews because there was growing realisation that no other college had reoriented to offer what we had. In academics, we had introduced courses like music appreciation, art appreciation and similar small courses, which encouraged students to develop a multi-faceted personality. To make all these changes, I was thankful I had the unstinted support of the

Governing Council. If they had been people who insisted that engineering would be diluted and we should only stick to mathematics as a strong point, we would have stagnated. Here is where Dr. Sahasrabudhe's quality as an extremely forward-looking academician showed through and why I had such great confidence in him. His guidance and mentorship was of such a high standard, that even if my experiment failed for some reason or the other, he would encourage me to try something else. There was no question of being reproved for trying. You must know that Professor Sesha Iyer is the chairperson of the Governing Council. He is also an academician, a principal for 25 years in an engineering institute and the Dean at SPJIMR Institute. Currently he is a full-time professor and the chairperson of the Governing Council as the Bharati Vidya Bhavan nominee. So he and Dr. Sahasrabudhe used to give me full support as this was the level of faith they had in me. I recall that Dr. Sahasrabudhe would often jocularly tell me that I had full autonomy since he had retired from the governing council and had no more to contribute. However, both my Chairperson and I used to reply, "Till we say, you are not going anywhere..." I don't know if it was prescient of him but in one of our final meetings, he said, "Prachi, now that everything is well settled, should you not induct some younger member?" I replied, "If you feel it necessary, we will induct a younger member but not at the cost of replacing you". He was always very supportive and sometimes if we had any faculty issue he would dissect it logically and give his opinion on whether our decision should be favourable, opposed or whatever was required. We never felt that he went along with us just because he was a management member or opposed because he wanted to play Devil's advocate. He would have complete clarity on the course of action.

There were a few people who were a comforting presence for me when I was a newly appointed principal. I could just pick up the phone and ask them how things needed to be done and they would then ensure that we're doing it correctly. Now, Prof. Sahasrabudhe was very particular in administration and always reminded me to check processes. So having people like him around to guide me was a great

advantage. If you had the good fortune to talk to Prof. Sahasrabudhe, you would know him to be a fantastic conversationalist. He could chat about virtually anything and everything as he was well-travelled and had a great network from AICT and NBA. Now, NBA was a frequent topic because we also had Mr. Mhatre, an Ex-TCS person who was also on the Governing Council, join our discussions. Usually, academicians get engrossed in our subjects or doing research, but he was not like that. He would teach his subject and do his research but he had a multi-faceted life besides that, which used to make him really good company. As a member of our Governing Council, he was very particular that he would not conduct NBA workshops in our institute because he thought that it might be a conflict of interest. However, he would always be helpful in suggesting who we should approach or the training required. So, I would always verify details with him. However, he would always maintain integrity of the highest degree. Once when we visited NBA, there were minutes that had to be passed in the core meetings, he immediately walked out of the meeting saying that as he was only Governing Council member for the college he would not participate in the decision making. He later told me that he had no idea what was discussed at the meeting as he had walked out before it began and that since it was my college, I had presumably done well.

Now there is an incident which happened and which I will never forget because normally such conversations seem surreal. It was the farewell meeting of the Governing Council because I had left SPIT in July. During the special lunch I had arranged for everyone, Prof. Sahasrabudhe asked me when I was going to Indore and who all were going where. He told me that he had to visit Pune and he really wanted to enjoy the thrill of driving down the expressway. Unfortunately, as his family had specially requested him not to drive, a car had been arranged. Here's where Professor Chitle, another Governing Council member and former principal of Bhavans, joined in the conversation saying that even his own family members were not allowing him to drive after he had a heart issue. So in a joking manner I told Professor Chitle, "Sir, if you feel like being a little reckless now it is okay." At this,

Dr. Sahasrabudhe jumped in saying, 'If we aren't reckless now, then when would it be the right time? We are living a bonus life.'" He continued to reiterate that since everyone was settled, we had lived our lives and now this was our bonus life, so what was the harm in being reckless now. At this, I commented that honestly even I would dissuade my own elderly parents from driving. I told Prof. Sahasrabudhe, "Sir, a bonus life is fine, as long as it lasts it is good. If it is not there also, it would not make a difference to you, but if you are stuck in between, then not only will you suffer but also the people caring for you will have a tough time bearing your suffering. That's why don't wish for anything in between. If you want to go and if you feel you have lived your life, no harm, but nothing in between". After a moment of listening to my solemn pronouncement, Dr. Sahasrabudhe agreed and said, "You are right. It's the truth". He assured me that since a vehicle had been arranged, he would use that only. So that is how we parted. Just three days after that I got a message from Professor Mhaiskar, Ex-Principal SPCE and Pro-VC NMIMS that Dr. Sahasrabudhe had passed away. For some reason the clarity of his initial message had not penetrated the fog of my mind, so I asked him which Dr. Sahasrabudhe he was talking about? It was too difficult for me to even begin to imagine that it would be the friend I knew, since we met just two days ago over lunch. When Professor Mhaiskar wrote back that it was our friend and compatriot Dr. Sahasrabudhe, I was incredibly shocked and in grief. I got a confirmation from B. N. Chaudhari who was in Pune. Now that last conversation with Dr. Sahasrabudhe has etched itself in my mind. It seemed prescient to have had such a conversation with him.

In retrospect, he literally lived like that: either here or there, nothing in between.

Here is where Dr. Sahasrabudhe's quality as an extremely forward-looking academician shown through and why I had such great confidence in him. His guidance and mentorship was of such a high standard, that even if my experiment failed for some reason or the other, he would encourage me to try something else. There was no question of being reproved for trying.

- PROF. PRACHI GHARPURE



A great administrator, an accomplished academician and above all, a venerable teacher!

DR. SWATI MUJUMDAR

*Pro Chancellor Symbiosis University of Applied Sciences Indore &
Symbiosis Skills & Professional Universities, Pune*



Symbiosis Skills and Professional University, Pune and Symbiosis University of Applied Sciences, Indore are India's first skill development universities. And it was in the context of establishing these two that I first came in touch with Dr. Sahasrabudhe. While working together, I got to know him quite closely and personally. His personality had many facets to it. He was a great administrator, an accomplished academician and above all, a venerable teacher. His multifaceted capabilities played an essential role in the process of building both the universities.

We met him at Symbiosis about 8-9 years ago. At that time, he was still with Dhirubhai Ambani Institute of Information and Communication Technology. However, as a governing body member of many colleges and institutes, he used to frequently visit Pune. During those trips, we would converse about what the university model should be, which engineering initiatives and academic programmes we could offer and so on. He not only helped us develop curricula for many of our engineering programmes, but also put us in touch with other professionals who could contribute toward the development of various other curricula and syllabi for both the universities. In the world of skill training, laboratories are almost indispensable, which were also designed and set up with his guidance.

As he was actively working in the field of academia at national as well as international levels, his broad perspective and insightful inputs helped the universities during their inception. It was exactly the kind of

experience and exposure needed for both. As a matter of course, his expertise benefitted us every step of the way, but knowingly or unknowingly, we also got to learn many other things through our interactions – especially about administration of universities, academic excellence and quality standards. For many years after that, Dr. Sahasrabudhe was on the governing bodies of both the universities. During which, he significantly contributed towards their development, strategic decision making, policy matters and more.

Another notable thing about him was his affable nature. He could interact with people of all age groups with utmost ease and enthusiasm. He could sincerely guide a young faculty member and also spend hours discussing a technical topic with senior experts. Students never hesitated to approach him with their questions or doubts. He always connected with them whenever he visited the university.

Last time I met him was for the first convocation ceremony at the Indore University on the 1st of December. Since he was a member of the governing body, he was also part of the milestone event. He was there for two days, indulging in endless conversations and jokes, even on the stage. Amidst all of that, he continued guiding us about the future roadmap of the universities.

We never thought those two days would be our last with him. All of us at Symbiosis will always miss him.



A guiding light that was extraordinary in every way.

S. P. DIXIT

Director, CDAC, Pune, 2006-2010



Prof. Sahasrabudhe has been my role model, guide, mentor and guru, in the truest sense throughout my professional career. I can say that he has enlightened and enriched my life. It is rare to come across such an outstanding and extraordinary personality imbued with unique qualities. I consider myself extremely fortunate to have associated with this great individual within my professional circle.

Though his is an irreplaceable loss, I will forever keep his memory alive in my heart.

May his soul rest in peace.



*He was a role model for many and
a teacher to teachers.*

PROF. B. N. CHAUDHARI

Director, SPIT Mumbai



My interactions with Prof. Sahasrabudhe were few. We both were advisory board members of Yashwantrao Chavan Group of Institutions. It is a group of four engineering colleges in Vidarbha region and the advisory board is common for all. We had had 2-3 meetings related to it. Another point of interaction, as I recollect, was a couple of years later in 2017, at Cummins College of Engineering workshop on NBA. I was also a speaker scheduled after Prof. Sahasrabudhe. When my turn came, I started my speech with the following Sanskrit subhashita:

*खद्योतो द्योतते तावद्यावन्नोदयते शशी ।
उदिते तु सहस्रांशौ न खद्योतो न चन्द्रमा ।।*

(Meaning: A firefly glows in darkness until the moon rises in the sky. But when the Sun rises neither the glowing firefly nor the moon exhibit their brightness).

Usually, he leaves after his session. On that day, he stayed at the venue. When my lecture was over, he appreciated and told me that he would tell Dr. Anil Nassa (NBA secretary) to invite me for the national seminars. The last interaction was etched in my mind permanently as it was a very unusual one! Prof. Sahasrabudhe was on Sardar Patel Institute of Technology (SPIT), Mumbai's governing board since 2017. Though I hadn't officially joined SPIT, I was invited for a board meeting on 26th December 2019. When our Chairman introduced me, Prof. Sahasrabudhe told him that he knows me and I would be useful for them. After the board meeting, during lunch, we talked on various topics. Somewhere in the midst, strangely the discussion turned to life. He said I still drive a car. Someone told him that at this age, he should not do it and take any risk. His prompt response was "I am prepared". I continued the conversation saying that in India we have less wisdom in education sector and people like him should keep mentoring institutes. Further, our society needs such people. He was somehow not convinced. He responded "I don't think so. I am done, ready to exit anytime." Call it a coincidence or anything, but he did exit this world in the next 48 hours! It was a strange conversation, and I was shocked to hear that he was no more! He was a role model for many and a teacher to teachers. May his soul rest in peace.



*Here was a man who understood
the value of ideas and technology.*

PROF. DHADESUGOOR R. VAMAN

*Texas A&M University System Regents Professor
and Texas Instruments Endowed Chair Professor (Retired)*



Dr. Sahasrabudhe was a close friend, mentor and a great source of inspiration to me for many years. I connected with him when I was the CEO of Megaxess. He visited our organisation and gave a stirring tribute on our technology innovation and as the first producer of Quality of Service Products from 1997 - 2002.

At some point, Dr. Sahasrabudhe also invited me to consider taking over his position at DA-IICT, as he was retiring. I felt quite honoured that he had considered me to take over the baton from his illustrious hands.

Every opportunity I got to visit Mumbai, I would meet up with him in the EE Department and exchange ideas and notes on the incredible pace of trends, inventions and innovations occurring around the world. More recently, in 2019, he was invited to the Diamond Jubilee celebration at NIT Warangal as a Chief Guest, which unfortunately turned out to be our last meeting.

Dr. Sahasrabudhe was a truly magnificent person with unusual qualities. Our friendship was at a very high level, considering the fact that I was not even a student of IIT Bombay. I really miss him and hope that his family finds peace through this moment in life. I pray to God to give eternal peace to this great soul.



**Prof. Sahasrabudhe's last visit to
Dhole Patil College of Engineering, Pune**



Chapter V

Awards & Accolades

- *Jeevan Gaurav Puraskar was given at 2nd National Teachers Congress, 2018*
- *IEEE Fellow, 2007 for academic leadership in creating and managing an electrical engineering education system*
- *Lifetime Achievement Award, IIT Bombay, 2005*
- *Best Teacher Award, IIT Bombay, 2002*
- *Silver Jubilee Medallion IEEE Bombay Section, 2001*
- *Fourth IETE Prof. SVC Aiya Memorial Award for outstanding contributions in motivating research work in Electronics and Telecommunication Engineering, September, 1998*
- *Gold Medal – The Metallurgy and Material Science Division, Institute of Engineers (India), 1986-87*
- *S. K. Mitra Memorial Award from IETE, 1981*



IIT BOMBAY

Lifetime Achievement Award

The IIT Bombay Lifetime Achievement Award recognises outstanding individuals whose pioneering spirit and demonstrated inventiveness throughout their careers have improved our society and inspired others. This is considered the most prestigious award of IIT Bombay.

IIT Bombay has recently (February 2021) renamed the Lifetime Achievement Award as “**Prof. S. C. Sahasrabudhe Lifetime Achievement Award.**” The award comprises of a cash prize of ₹2,50,000 and a citation. The cash award will be given from the money collected from donation contributed by students, friends and colleagues of Prof. Sahasrabudhe.

The institute conferred ‘Prof. S. C. Sahasrabudhe Lifetime Achievement Award 2021’ on Prof. Krithi Ramamritham, professor in the Department of Computer Science and Engineering, who recently superannuated. This award ceremony took place on IIT Bombay’s 62nd Foundation Day on March 10, 2021 at the Convocation Hall in hybrid mode. Mr. Rajesh Gopinathan, CEO and Managing Director, Tata Consultancy Services (TCS) was the Chief Guest on the occasion.

The first recipient of Prof. S. C. Sahasrabudhe award, Prof. Krithi wrote a special note on this occasion for the memoir.

It is with great humility that I accepted the Prof. S. C. Sahasrabudhe Lifetime Achievement Award on the Foundation Day of IITB - 10th March, 2021.

I myself was informed about it only a couple of days earlier and it made me ecstatic and extremely happy. I had gotten an award named after my good friend Prof. S. C. Sahasrabudhe, someone I immensely admired for his sharp practical mindset and mentorship.

We were campus neighbours and that gave the two of us and our families many opportunities to come together. Mrs. Sahasrabuddhe, Madhuriji as my wife Saraswathi calls her, was the source of strength and a perfect companion to Prof. SCS. Often we used to run into them during their after-dinner walks. We have had very pleasant memories of enjoying the festivities during their daughter Meghana’s wedding next door, visiting them at Gandhinagar and meeting them by chance at IIT Mandi three years ago.

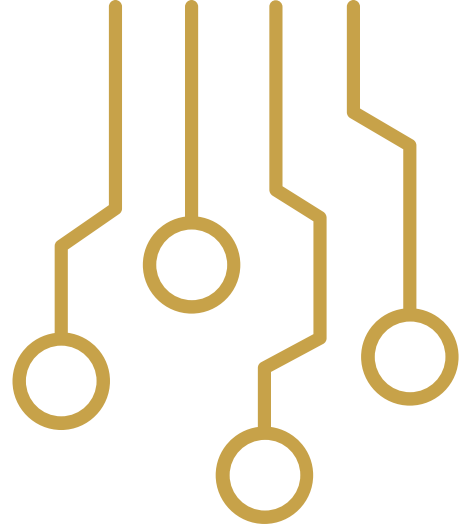
From all that I had heard from his students, here at IITB and elsewhere, he was a captivating teacher. He was keen on replicating the experience IIT students received by way of education, of the abstract as well as practical kind, at other colleges. I felt fortunate to get calls from him to serve on interview panels and to deliver talks, which I, of course, gladly accepted. In hindsight, the experience I got from these interactions was enormous, I looked forward to more.

My thanks to his family and students for instituting this award and to the IIT Bombay committee which selected me as its first recipient.

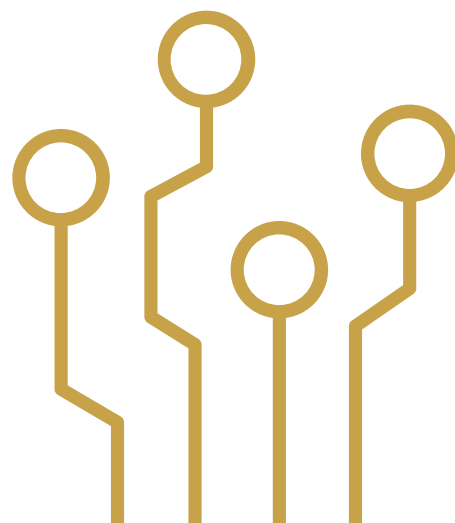
Best wishes to everyone touched by Prof. SCS.

Prof. Krithi Ramamritham

Recipient of Prof. S. C. Sahasrabudhe Lifetime Achievement Award



*Heartfelt memories
for all to treasure.
Of a guiding light,
that gave beyond measure.*



Is it possible to really know someone without having met them even once? Working on this memoir was quite an intimate experience. For weeks, we went through the material we received, to read and listen to what people had to share about Professor Sahasrabudhe. All of them spoke fondly of him. Some of them would linger a little longer in classrooms and corridors, while some would recall an incident from his workshops. Some would laugh while sharing an anecdote, while some would even have a lump in their throat while talking. We often found ourselves shadowing Professor Sahasrabudhe through vivid experiences shared by all these individuals who have contributed towards this book. Their loving words and nostalgic memories conjured up an image in our mind – a youthful person with a wide smile on his face. Later, when we saw his pictures for the first time while working on this memoir, he was exactly the way we imagined him to be.

The name – Professor Sudhakar Sahasrabudhe, evokes a sense of respect. Even today, it reverberates through each and every life he has touched with his gentle yet dynamic presence. His dedication towards education and balanced approach toward challenges have inspired us on a deeper level too. It has made us realise our passion and dedication towards work. And at the same time, we felt encouraged to make a difference in the world around us through our ideas. As they say – everything happens for a reason. Probably, this memoir happened so Professor Sahasrabudhe could help us and many others discover the true meaning of ikigai.

***Lakshmi & Shruti**
Fawn Design team*