HERITAGE
(An Autobiography)

For
RIYA, DAVE, JAY
&
Their Cousins

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Neither the beginning we know nor the end,
Neither the time nor the space,
One who knows all is GOD
A: FOREWORD

Autobiographies are generally the prerogative of celebrities or famous personalities having a wide fan base that render the effort lucrative. At the same time, life of each and every one will have unique events, attractions and amusements, comparable to that of persons of eminence who are widely heralded of their success and contributions. Also, it is not uncommon that a large section of people, having not necessarily a celebrity lineage, at some time in their life seek to know their ancestry or roots, in search of the purpose of their life on earth. In this context it is desirable, that everyone should leave a record of their life experience for posterity of those intimately connected with their lives. For some if not for all, such a legacy might help in their pursuit of meaning for existence.

Our three grandchildren along with their cousins, 29 of them as of now, constitute up and coming generations. My family life experience that is unknown to any, like millions that have gone by is only one part of this disposition. Alongside, I have also made an attempt to provide a glimpse of what is generally known of our life and the universe. Such an awareness falls into two broad categories. The first, relates to ancient wisdom based on our religious belief. Such beliefs do vary as there are many religions. This aspect of the past is addressed under a section – Sages, Scriptures and Society. The second relates to the modern perceptions based on scientific discoveries and technological developments supported by perceptible facts. As this being of a very recent origin compared to life span on earth and more so the age of our universe, knowledge of the distant past can become hazy. This aspect is addressed under a section – Ancestry. A third section – Timeline is prepared to provide a combined birds’ eye view of the past arising out of both ancient wisdom and modern concepts.

Even though the primary purpose of the exercise is to address up and coming generations within the family, substance other than family life specifics, can be of a general interest to anyone. As electronic is media being chosen for dissemination on the internet – www.legacy4posterity.com, possibility of exposure to outside the family always exists from friends and acquaintances to the extent the content finds its way out. Many family members being active on the social media that is likely to catalyse the process. Ultimate aim of the endeavour is to make this a reference site on the human legacy.

A long cherished dream of mine has been to undertake such a task and it became compelling now as I turned 80 this year. It is difficult to foresee the success or otherwise of the venture. If the site lasts my lifetime, the responsibility of keeping it alive will be with my daughter Kavita, with a hope that one of my grandchildren or their cousins to whom this venture is dedicated would take it up further.
A: EARLY LIFE & EDUCATION
(1939 – 1959)

An aspect common to everyone is that none have had any control on or choice of their birth. Only after-the-fact, it is possible to relate the time, the place of birth and the lineage for identity and gratification. We belong to the Srivaishnava clan of families from Southern India, believers in Vishishtadvaitha philosophy and followers of Saint Ramanuja. Therefore, the day I was born in 1939, happens to be an auspicious one and celebrated as Thiruvadipuram, the day on which a saint from Tamil Nadu, Andal, one of the 12 Alwars (Apostles) recognized for their efforts in spreading the Vishishtadvaitha philosophy. If we were to suffix our surname, we would have been known as Madabhushis.

My mother, Rukmini, lost her mother when very early after her birth. She was brought up along with her elder sister Kamala, by their widowed grandmother, Alamelu, living with her eldest son A. K Char. My mother and her sister were the first to grow up in their household started calling their grandmother pati and their maternal uncle mama. This practice continued as everyone fondly called them pati & mama. He was at that time in-charge of the Krishnarajasagar Dam close to the river Cauvery (popularly known as KRS) to Mysore in Southern India. Before retiring as the Chief Engineer in the State, he was in charge of many irrigation projects in the country like Hirakud in Bihar, Chambal Valley in Madyapradesh and the Ranapratap Sagar Dam in Rajasthan. Government of India awarded Padmashree, a national honour, in recognition of his services. I was born in their house and was inspired by his life as I grew up. Incidentally KRS dam the first in India was the brain child of Sir M. Visweswarayya, who was also responsible for many other engineering feats in the country. I was also inspired by the lives of Dr. Visweswarayya and Sri. Rajagopalachari, (popularly known as Rajaji) the first Governor General of Independent India. Rajaji, was an astute politician of the times, a social reformer, a writer and a philosopher, and a poet. Rajaji happens to be a cousin of pati.

Cauvery, is a sacred river worshipped by all in the region with many temples all along its banks. Notable among them are three temples for Lord Ranganatha. The first one the Adi Ranga at Srirangapattanam very close to KRS, the second, Madya Ranga at Shivanasamudram, close to Bangalore, both in the state of Mysore and the third, Anthya Ranga at Srirangam, in the state of Tamil Nadu before the river mingles into the Bay of Bengal. Srivaishnavas consider Srirangam as a replica of Vaikuntam (abode of Narayana) on the earth. All these three places are islands formed by the river. Besides its religious importance, only people born on its banks in Tanjore district, in Tamil Nadu are popularly referred to as Cauvery Waters to classify them as a special group of brainy persons even though millions are nurtured all along the river. I consider myself a fortunate one like others to have drunk Cauvery waters to begin with. Wedding of my parents incidentally, took place in a temple at Pashimavahini on the banks of Cauvery.

My forefathers originally hailed from Kotur, a village on the outskirts of Bangalore near Whitefield now popularly known as Silicon Valley of India. My grandfather’s grandfather whose name is given to me was a celebrated pious person of the village. I believe he had attained saintly powers. Recognizing his stature, the then King of the state had gifted him Jodigrama – two acres of land. Eventually my grandfather, Anantharama Iyengar left the village in search of livelihood and found service in the state Government and kept moving within the state. My father was one of the three siblings. My father’s elder brother, Ramaswamy Iyengar, perhaps the first graduate in the family joined the Government Service like his father. My father, not fortunate enough to complete his education started a career in a private transport company but he was also compelled to join to serve the Government subsequently for reasons of stability & job security. The earliest my memory can
recollect was when I was around 4 at which time my father was working in Mysore, in a Government Veterinary hospital of the State Animal Husbandry Department as a compounder.

For my mother, only solace and security was her grandmother and therefore, whenever possible she used to visit either of her two sons depending on where she was at that given time. Once, I vaguely remember having gone to Mandya, 25 miles away from Mysore with my mother to her younger maternal uncle, A. V. Char, (fondly known as chin Mama) working there at a local sugar factory. My early memories recollect going to temples during such visits. As a child I am told of being sick very often and one can imagine my mother’s anxiety. Once, around the age of one, when severely sick with typhoid I believe my mother took me to a nearby temple and placing her child on the pedestal near the sanctum-sanctorum entrusting my life in the hands of God. From then on, I am there.

God’s grace and unshakable faith in Him have been the only strength and security for myriads of people in India. My father had been a staunch devotee of Shirdi Saibaba all his life and on His providence all of his eight children, without exception, are able to live well in the society. Innumerable times I have realized God’s intervention at times of need.

I vividly remember the time I spent in Mysore till early 1947. We used to live in a small house that had one bedroom, a living room and a kitchen like a train within the compound of a house owned by a doctor, Puttaiah. My father had to walk only five minutes to his work place behind our house. Most of the time my grandparents also lived with us. Then it was pre-independence days or British Raj. Mysore was the seat of the King ruling the state. I remember going to Dusserha festival to witness the King’s procession in the city during September - October months. I used to be much pampered by my grandparents, more so by my grandfather. He would dream of me as a collector in the Government. Once I remember the person from my father’s hospital took me to a celebration in the Mysore palace and lost me in the crowd. I walked all alone in the night from the palace back to home in by-lanes dressed in a suit like a collector with a walking stick. It was in Mysore that my younger brother Raghavan (Raghu) was born in 1946. Water supply to Mysore is also from the river Cauvery. I should consider him also fortunate to first drink of water from Cauvery. Raghavan grew up to become a Mechanical Engineer, got a Ph. D. had a long research career and a stint in teaching as well. He is still working with a Consulting Engineering Firm after retirement from Bharat Heavy Electricals.

While in Mysore, my primary schooling I believe was for hardly a year, with three months in a local convent. In January of 1947 my father was transferred to the head office of the Department in Bangalore where I started going to middle school. This was on the strength of home schooling by my mother and a few months of attendance in a convent at Mysore. I do not know my loss in missing four years of traditional elementary school even in India.

Life in Bangalore even then was tough and made a hell and heaven difference compared to Mysore. As soon as we arrived, we moved to live with my uncle - father’s elder brother. They had five children. Their house, with one bedroom, a living room and a veranda was not adequate for all of us including my grandparents. There was no way my father could have even rented a house with his meagre income in Bangalore.

First of my cousins, Rajagopal, was actively involved in RSS. I do not know all the details of his involvement. However, he found handy to include me in the evening drill he was conducting in the locality. The three months I stayed in their house kept my evenings so occupied. Second cousin,
Raghavachar, was studying commerce for graduation and later worked for Indian Telephone Industries. The third cousin, Srinivasa, was in school later graduated in science and subsequently worked for General Electric in Madras. As I write this none of them are alive. I was close to the last two of their three daughters, Ramamani, Mythili, and Radha, being close to my age. However, three months were too short for any bonding.

The Director of the Department, Narayanaswamy Naidu, where my father worked was personally known to my grandfather. One day the Director greeted my grandfather on a morning walk that he must be very happy since both his sons are together contrary to the fact that it was a woeful situation. It must have taken quite a bit for my grandfather to explain the real predicament. As luck would have it and by God’s grace, within days my father got another transfer. Such transfers in Government are not easy. This time it was to one of the cattle breeding station (Farm) in the state 140 miles away from Bangalore near a town called Ajjampur connected by rail and road on way to Poona. We travelled from Bangalore to Ajjampur by overnight train along with my grandparents. Early morning when we got down at the station a bullock cart from the Farm where we would be staying was ready to take us.

The main attraction for us was that the post came with free living accommodation and that was a boon. Many of my father’s contemporaries would have been envious of him for these were some of the prime positions for comfort and convenience. Still the location was 1.5 miles away from the town of Ajjampur that one had to reach for every need including school. The office provided free bullock cart transportation to the children in the Farm to school and back. One should consider this a novel royalty since other school going children from surrounding villages used to run behind our cart.

The Farm was set in a beautiful surrounding on the banks of a lake known as Parvatharayan, overlooked by Bababudain range of mountains of the Western Ghats in the state. The objective of the Farm was to propagate Amrita Mahal breed of cattle in the region. All facilities required for the purpose were available. Because of the cattle population, milk was readily available to the staff at a discounted price and excess milk was sold in the town. As the nation progressed, the quota and the discount slowly diminished while price steadily increased.

I got admitted to first year of Middle School in the town, in continuation of my studentship at Bangalore. This was the beginning of my formal education. The beginning was in the month of May-June 1947. I remember the fanfare and celebrations in the coming months on 15th August 1947, the first Independence Day of India marking liberation from the British rule. At that time little did I realize what was happening. My grandfather was one that did not have a liking for Indian National Congress or for that matter Mahatma Gandhi and my father never expressed any feelings for or against. Now I know that there were a few who did not hate British Rule. For them life was fait-accompli.

When you think of India and its independence one has to remember that great person Mahatma Gandhi. Even though his greatness is being heralded all over the world not all has really appreciated his wisdom. While he succeeded in liberating India from the British rule, he fell short of his ambition in retaining greater pre-independence India. At any cost he did not want separation of India. Had he succeeded, today world would have been so much a better place to live in. But not to be! Incidentally, Mahatma Gandhi’s last son Devdas Gandhi married Rajaji’s daughter Lakshmi. They fell in love during India’s Independence movement. Devdas was 28 and Lakshmi 15. They were told to wait for five years without seeing each other and were married in 1933.
The major change that country was going through did not make any apparent difference in our lives. Life was a settled routine. However, I still had some health issues. I used to suffer with one ailment or the other, the major ones being Malaria and Scabies which prevented me from attending classes regularly. Besides the Head Master, G. C. Marulusiddiah, I distinctly remember two teachers. M. Nagaraj, my class teacher & one K. Rangappa.

Not many families lived on the Farm. The fenced-campus setting in the front line on the roadside had house for the manager, the office building, and houses for the assistant manager, accountant, stores officer, and the office clerk (my father). Behind the manager's house was a workshop that included carpentry and black smithy. Behind the frontline was the stores building and poultry farm. Behind all these were the sheds for the cattle, and the dairy. Some more living accommodation for the essential staff and labourers were also there. Many workers came from the town and nearby villages. There were instances of witnessing wild tigers in the premises. Once I had seen a cow having been attacked by a tiger and my father had personally nursed the wound by stitches on the hump. Following this incident one tiger was also shot.

The campus had its own water supply. Water from an artesian well was pumped to an overhead tank for distribution. Then there was no electricity on the campus. We used kerosene lamps. Within a year we got power connection.

At that time, the manager of the Farm was Adaikalam, a Christian from Madras. Their children Vimala and Devadas were the first of my friends. My grandmother being very orthodox belonging to older generation was always a bit touchy of other religions. Because of this and more so because of us being vegetarians (not many were so) our social interaction was always restricted. I had a handful of friends who were living on the campus. At the same time, I was the oldest among friends. More so all my father’s colleagues were friendly to me which in a way boosted my self-esteem.

Apart from playing with friends, only entertainment open was going to movies occasionally when touring talkies pitched their tent in the town. Now and then circus companies did the same. Also, drama troops used to visit the town. Movies and plays were related to mythological and religious stories in the local language that is Kannada.

In January 1948 my first sister Sarasa, was born and on the very next day Mahatma Gandhi, the Father of the Nation, was assassinated. Sarasa, after her graduation in English & Education retired as the vice Principal of DM School in Mysore and now settled in Bangalore. She feels pampered by a large student fans of her. One of her noteworthy student is Jaggi Vasudev now popularly known worldwide as Sadguru. Now she lives in Bangalore with Sampath, who retired from the state Government as an engineer. Sampath is a post graduate in civil engineering from IIT Bombay.

First time we were exposed to radio was when the Assistant Manager, Nanjappa bought one. His eldest son P. N. Nagaraj was one of my earliest friends. All India Radio Bangalore program in the state language was mainly popular with limited broadcast in the mornings and evenings. Subsequently, when I started playing some cricket and became its fan, radio became a need to follow live commentary. Apart from this routine, there was nothing much to write home about during the first four years of Farm life. Only disappointment for my mother was my reluctance to take part in class debates. I was shaken by stage fright. Once with great determination I gave my name for
participation but withdrew at the last moment. That incident did not augur well with me for a long

In 1950 my second brother Sheshadri (Babu) was born. Sheshadri also became a Mechanical Engineer and served many industries with Materials Management as his specialization. He is now settled in Madras.

Real test came at the end of four years of the middle school. It was a public (lower secondary) examination at the state level. I had no idea what it all meant. At least I do not remember. I was not aware of my competence to face the same nor did anyone. I was not aware how much my parents were anxious. There must have been some anxiety implied from the turn of events that took place. Hardly a month before the examination I was sent to join a coaching class generously offered by the School Headmaster. We, around 20 students from the school used to live in his house for a month or so like the Gurukul of olden days in the country. When I passed the examination in first class it perhaps was a relief and revelation for most. My passing the school finals in colour was not only the talk of the Farm but also known in Bangalore where my grandfather was proudly circulating the news house to house among his relatives and friends.

Real force behind my capability particularly in mathematics has been my mother and home schooling. Not only was she proud of her school finals record of scoring 100 out of hundred but also of maintaining that unbeaten record in the family when in high school finals I got only 98 out of 100. Nor anyone else matched her record. Apart from this, she was always talking of her maternal uncle and his children who were good students to imbibe them as role models. She always dreamt of higher educational opportunities for her children. It was rather unfortunate that my mother could not realize her full potential. Not having full support of her parents since birth besides prevailing social norms and other constraints she had to settle for a life of a housewife. In that she excelled.

Transition from middle school to high school was a simple affair of moving from one building in the town to another across the street. Besides, Kannada being the medium of instruction my second language was also the same. Even today, my secret sorrow is of not taking Sanskrit as the second language. In high school I was relatively more enthusiastic of having elected science and mathematics as major subjects. I was always looking forward to physics and chemistry classes and made sure to sit in the first row not to miss even a bit of experiments and demonstrations. Among the teachers, I remember very well A. G. Ananthiah, the Head Master besides B. Narasimiah, H. G. Sastry, and M.V. Ramiah.

Along with academic changes, life on the campus had also changed considerably. A major expansion had taken place under Key Village Scheme to introduce artificial insemination to breed jersey cows in the region. This brought more staff on the campus, buildings, equipment, etc. To me it was the exposure and availability of a refrigerator for locally made ice cream. Also, I was happy of a van within the Farm. One Dr. Rama Rao was the veterinary doctor attached to Key-Village Scheme. Two of his sons Viswanath and Chandrashekar were my friends. Their eldest brother Krishnappa was in Bangalore studying.

We also had a new manager Venkata Rao, for the Farm by then. Their last son Janardhan, and daughter Nirmala used to live with them. Their two elder brothers Ramakrishna and Shivaji continued to live in Bangalore for studies. He was very friendly with the campus children. He used to go on
official tours in the area to various places. He took us also in the van on such sojourns. At that time, my father’s driving skills used earlier for a living, came in handy. The manager used to prefer him to the regular driver, Krishnappa, who used to ride the van in the open back. Such tours were both educational and nature loving. I always looked forward to trips to Bhadravathi where a steel, cement and paper plants operated. All these were state enterprises and the credit for them goes again to Visweswaraya, the main force behind industrialization of the state. Apart from engineering talent, he was also known for his clairvoyance. During his visit once to the Ford Motor Factory in America, he foresaw an accident and saved many lives. For this he used to receive royalty from the Company all through his life. Acute sense of sound in him, I believe was responsible to foresee things to come. He is also known to have stopped a moving train in which he was travelling just before it passed over a cracked track by pulling alarm chain. When it came to using facilities, he followed very strict demarcation between state job and personal work to the extent he did not use even ink in the office to sign personal documents.

The Manager also built a small temple (Ram Mandir) with in the campus where prayer meetings were held on Saturday evenings. My father was very fond of classical music. The Store Officer, Appajappa at that time was also a good singer and use to lead Saturday prayers. It was during those years that I developed an ear for classical music and liking to compositions of Purandara Dasa – Father of the Carnatic music.

It was during the summer of my school in 1951 the first real tragedy of my life occurred. I was playing on the premises of Ram Mandir that fateful afternoon. A stranger walked in and trying to convey a message that I did not follow. A local staff member told me that it is my grandfather who had met with an accident. I ran to my father’s office and conveyed the message. He took the bullock cart to the scene of the accident a mile away. That day the traffic on the road was intense because of a fair close by and many carts colourfully decorated were racing in competition with one another. One of them ran over my grandfather on his routine walk to the town. When he was taken down from the cart he could hardly stand. My mother suspected worst as she later expressed. The only doctor in the town had gone out on tour and was expected to return that evening. It so happened that the bus in which he was returning would pass the Farm and it was seen to get him down from the bus. He attended on my grandfather for what he could but later in the night he was pronounced dead. As I write this, the picture is fresh in my mind being the first time that I lost someone so close.

He was the only person I felt close, for only he pampered me the most and I used to go to him for all my wants. He took me on many trips, to movies, to restaurants and all that I missed from then on. As a child I was restless and impulsive and use to pester him beyond his patience. Once I was disturbing his peace while reading my monthly story magazine for sharing. He lost his temper and tore the book. Obviously, he must have felt guilty for he immediately got up and walked all the way to the town to buy another copy. Then temper was his weakness. Either by genetics or acquired, I have some of it. Charity, sharing, and independent spirit was his hallmark. He never depended on any one for even getting his clothes washed even though help was available for asking. I am told while in service general public used to come and meet him in the Registrar’s office. Strangers who came for official work and assistance were directed to his house to take food before leaving the town.

Earlier, he had initiated me into Vishnu Sahasranamam that I used to diligently chant every morning as part of my prayers – a lengthy ritual of more than an hour- before going to school. Even
though I had the luxury of transport to school the cart could not be punctual as it had to cater to other 
children. Being over anxious to be punctual and not to miss any part of the class most of the days I 
used to walk to the school and as waiting was painful, also walked home many a times. For the same 
reason, I did not agree to my mother when she suggested to skip the school one day to celebrate my 
birthday.

Life for my parents was not an economic ease in meeting both ends. At the same time there 
was no effort in being frugal. The practice was to maintain a credit account in one of the local grocery 
stores that allowed us to procure all our needs and at the end of the month my father used to clear 
the debt to the extent he could and invariably debt use to mount. I am aware of the store owner 
Subramanya Shetty, being benevolent, used to write off some of the outstanding balances from time 
to time. Also, my father use to help them with typing etc. I have personally seen assets in the family, 
mostly gold and silver that my mother brought with her at marriage, slowly diminishing. Irony of the 
situation was to meet less needs and more of wants based on addiction like coffee and tobacco 
products. Father used to smoke heavily and grandfather needed snuff regularly. In this process, all 
family members got addicted to coffee and more so traditionally, coffee supply was a must for all 
visitors socially.

Economic short comings usually drives one to look for easy money – lottery, gambling etc. My father also had yielded to such temptations. He was regularly buying entry to one RMDC lottery 
popular then. One of the entry he jointly subscribed with his colleague (Mr, Byatarayappa) was almost 
successful with just one error. Sometimes one error entries got first prize with lot of money. That did 
not happen contrary to expectations. The prize they got was only 130 rupees. Father’s partner did 
not take his share for he thought not to lose potential luck for a small sum!

Around the days after passing away of my grandfather, a surprising incident occurred in my 
life that strengthened my faith in God. My mother was my mentor and I used to faithfully follow her 
instructions even though I used to question her a lot on many things on logic. She taught me a prayer 
on Goddess Lakshmi which if I chant every day would bestow wealth. Shortly within a few days, the 
assistant manager, Nanjappa offered to meet all my expenses on fees, books, etc., and I should 
approach him accordingly. In fact, he had a practice of going regularly to a tailor to get annual 
requirement of clothing for his family and used to include me also in the program diligently. In studies 
my practice was to write more than read particularly science and mathematics. It appears one of such 
worksheets was found by him and that impressed him. I am yet to come across any one, colleagues 
or superiors disliking my father. More so everyone who knew us had empathy in full to him and his 
family. These were the driving forces in what happened. My story of poverty and dependence on 
charity is one instance of the suffering of large population of the time.

Evenings on the Farm was mostly spent playing games among a few children. We used to play 
soccer in the beginning and later turned to cricket. More than the play, cricket stayed the only game 
of interest and pastime throughout my life. Indian team became my favourite. Endless hours were 
wasted in listening to live commentary. It was a day of joy when India won a test against Australia for 
the first time at Kanpur in 1959.

During my high school days one of the regular visitors to the Farm was Dr. Bhashyam, a 
Veterinary Doctor. He was on the Farm for an extended stay but had come alone leaving his family in 
Bangalore because of children’s education. He used to spend most of the evenings in our house. He
was of help to me in my studies apart from being a friendly company. Later, as it turned out that he happened to be related to my wife. Unfortunately, I never met him in person again. His son-in-law happens to be my wife’s first cousin and his grandson Col. Vasant Venugopal serving Indian Army was killed in action in Uri (India-Pakistan border) in 2007.

One of my fascination or passion has always been electricity ever since I was exposed to the subject. Around the same time my father also was toying with the idea of heating the water in the bathroom large copper vessel as an alternative to firewood. Even though he succeeded in the experiment same could not be followed in practice for many reasons. More I learnt on the differences between AC and DC current, how power was generated my curiosity also increased. Because of this I used to carry out ad-hoc experiments at home some very risky and even dangerous. Rats were a menace. Rats trapped in cages I tried to electrocute but did not succeed. Our neighbour was one Anantharam working in Key Village scheme and his brother Viswanath were entrepreneurs by instinct and were well versed in in handling and repair of gramophones, camera etc. Thus, I had a good company to vent my curiosity.

Around that period, in 1952 my second sister Leelu was born. After her graduation, she found employment in office management. After getting married, she became a virtual partner with her husband in pursuing a variety of business following his retirement from banking.

On the first day Raghu was admitted to the school he along with Anjaneya second son of Nanjappa while venturing to walk back to home lost their way. There was some commotion for some time till some who went in search on bikes found them. They had taken to a wrong road.

Later in 1953 I passed the school finals also a state level public examination in first class along with two other classmates, A. Anantharamu and C. Basappa. Anantharamu later completed AMIE and served Indian Railways. People in the school had expected the results of the other two but mine appears to have been a surprise. My preparation for the examination was exemplary. In the house we lived, during periodical maintenance, a black board was etched onto one of the walls of the veranda. This came very handy. One or two friends used to join me for combined study. I still remember my ability to write the geometry text book from beginning to end mentally. My brother Raghu reminds me that when the results came, our father was in Bangalore and he sent us a telegram. Otherwise, news used to reach us a day later through newspaper. That day it became a big news in the Farm. That day I had an injury to my leg and when I took the telegram to share with the Manager, in his excitement while hugging my foot was hurt further.

School finals used to be the turning point for many in the country. Future would become uncertain not because lack of talent or ability but due to limitation of resources to pursue your desires. In my life also it was a brief period of suspense about the future. For continued studies one had to move away to a district headquarters or a big city for opportunities. For me those few months were of a great uncertainty as future path was not clear. Alternative to pursuing higher education was to get into service directly or through competitive examination for lower level entry positions in the Central Government including Railways. These were options. One thing I did by intuition or on advice of others is to seek admission to some of the colleges for higher studies. To my surprise as luck would have it, the National College in Bangalore, a well-known and most sought after institutions in the state, offered me admission to Intermediate Course in Physical Sciences and Mathematics (PCM) with 50
percent tuition waiver even before the last date for receiving the applications. We were not sure of the means to pursue the same.

My mother must have had written about my progress to her uncle. He was at that time the Chief Engineer of the Chambal Valley Hydro Project in Madhya Pradesh and was in Bangalore for summer vacation. It was a fortuitous coincidence for me as he personally went to National College and not only paid fees for six months but also offered to have me in their house for studies. He alone was working in Chambal and his family lived in Bangalore. He also sent an application for a seat in one of the local free boarding hostel, Ramakrishna Students Home, (popularly known as Home) that was run on charity for needy and meritorious students. There was some light at the end of dark tunnel.

The day was thus set for my journey to leave home. I was still short of completing 14 years. My father accompanied me in the day train journey to Bangalore. From the train shortly before reaching the destination one could spot a redeeming tower of a building. Being curious, I asked my father about the same. He told me that it was an Institute for higher education for good students and if I study well, I could also go there. It was popularly known as Tata Institute now named as the Indian Institute of Science. Little did I realize that this was first of such many instances in my life when coming events cast their shadows much earlier. On reaching Bangalore, we took a horse drawn cart to proceed to mama’s house. Even as my mother used to fear her aunt, the only solacing security for me those days was pati. By that time, mama had left Bangalore. Only other helpful person in that household was their first daughter Vasantha, in providing day-to-day guidance. Two of her younger sisters Sarala and Nirmala and two younger brothers Sridhar and Sreekanth were also living. Sridhar had completed Masters in Physics and Sreekanth was in the Engineering College. Only the first daughter was married to her maternal uncle which is a common practice of the land. Sridhar retired as the Director of Defence Physics Research Laboratory in Delhi. Sreekanth retired as Professor of Aeronautics from the Indian Institute Technology, Madras. As I write this, none of them except Nirmala are living. Sreekanth’s wife Saroja mostly lives with her son in US.

I joined the college and started attending the classes. My contact for any needs was pati and she used to cross check with her granddaughter for validation. Within a month or two, I was called for an interview by the Home, for which I had applied for a seat. Next day they had announced the results of the selection. Good news was that I was first in the waiting list. Eventually I secured a place in an institution that shaped my future. All that happened from the day of passing high school examination and entering the hostel was like a dream and will of God. Only other alternative was to look for 14 houses for a meal-a-week that was in vogue those days and a place to stay.

However, the transition from home to Home and school to college was not an easy one. In the college, I had to adopt to English medium of instruction compared to Kannada in high school. Hostel life can never be the same as living in home. I was the youngest among 50 students. All the 50 were from different places and different walks of life studying in as many colleges in the city covering a variety of professional and academic programs from Arts to Science and Engineering to Medicine. The first challenge I faced was to get up early in the morning for mandatory prayer meetings at 5.00AM with which I never became accustomed to during all my six years of stay. A lesser challenge was to get adjusted to cold water bath drawing water from artesian wells. For other chores I got adjusted with not much difficulty. Many of the challenges of then were in disguise became my strength in later life. The honorary secretary of the hostel Gopalamswamy Iyengar happened to be the principal of
National College. Boarders had to share the general upkeep and cleanliness of the premises. This included sweeping the common areas, cleaning the dining room after the meals, toilets etc. by turns. Once when the cook fell ill for a few months we by turn had to prepare our food also. It was like living in total self-dependence. The rooms were small and big. Minimum of two persons in a room to four in one. In the first year of my stay, we were five in a room (was I an extra over the quota?) and slept on the floor with make shift bed.

Being the youngest among all residents, I was literally addressed as ‘child’ in local language. A young boy’s role was given to me in a play enacted by the boarders in an annual function. Life was a great experience and an exposure to a variety as students from different institutions used to discuss their daily experiences. The daily life on those days was that the hostel used to provide two meals and other things were left to the individuals. All of us used to go to nearby restaurants for breakfast and evening tea.

My father was sending some money every month. Besides, mama was kind enough to provide five rupees, and chin mama was sending me five rupees. I use to meet my paternal uncle every month and he use to religiously give me two rupees. Resources were adequate as I kept my needs within means.

As I was new, one of my indulgences in Bangalore was to explore the city. I chose to do this by walk whenever time permitted. I used to walk very long distances often sometimes exploring aimlessly. A memorable walk I undertook was to see the an exhibition on rails that moved from place to place celebrating 100 years of Indian Railways. Apart from this, there were many extracurricular opportunities both in Home and in the College. Mostly indoor games like chess, draughts, I picked up. I used to be adept in draughts.

Home, I should say was an accumulation of cream of the society having two things common – academic intellect and poverty. Only entertainment for most of us was to go to movies now and then. I got introduced to Bollywood a digression from mythology from Ajjampur days. More importantly, in summer months handful of like-minded of us used to regularly attend classical concerts by nationally known musicians, that were open to public during Ramanavami (birthday of Lord Rama) celebrations. This enhanced my knowledge and liking to classical music.

In 1954 Latha my third sister was born. Latha after graduation obtained a degree also in Teaching like her sister Sarasa. All her life she has been a teaching science and mathematics in different capacities. She is now settled in Bombay with her husband Vanamali. Vanamali has retired as a CEO from the Indian operations of a German firm making industrial instruments after a long service in an Indian firm in the in the same field. Both are active Rotarians. Vanamali was also the President of Powai district Rotary in Bombay. Latha will serve in that capacity next year.

I think it was 1954 summer vacation. I was employed as a literate labour in my father’s office on daily wages for the period of the vacation. That was my very first earning in life. The earnings were disbursed by my father along with all other workers.

During the second year of my stay at Home, I was in a room along with two others away from the main building in an isolated building. Warden of the Home, S. Deshikachar, also my chemistry teacher in the college, lived next to our room. He was fond of me and more than helpful. One day I
was suffering from a bad toothache. He personally took me to a dentist for treatment. It took four to
five sittings lasting a month or so. I remember asking him one day why only rich people get more
money. His answer was a question to me where all the rain water ends up?

At that time, it was a two-year intermediate course I was in and the end of which opened up
to professional course, a crossroad for every student. The night previous to second day of the
examination, soon after dinner I had opened English poetry book for revision but had fallen asleep
without my knowledge. When I opened my eyes it was already morning and I had to rush to the
examination hall 5 miles away in the Central College. That was the type of stress I was going through.
A good performance for any student was a must for a good future. But, for me unfortunately it turned
out to be lowest ebb of my academic career. Any hope of pursuing a professional career did not exist.
I passed the examination only in second class. I had to reconcile to continuing for a graduation in pure
science. Home sickness, and change in medium of instruction were my excuses for the below par
performance.

My studies continued in the same College leading to graduation for another two years. Life
was not as strange as it was after my school years. I had accustomed to life both at College and the
hostel. My contact with the family was limited to holidays mostly in summer months. With classes
being handled by more senior teachers, subjects also became more interesting. I loved the lectures in
organic chemistry, astronomy and physics. Particularly, I also liked the practical classes in physics and
chemistry. Coming to think of it, the latter two years in the college is in my memory more than the
earlier two.

Perhaps, the real turning point in my life came in one of the physics lectures. Credit goes more
to the teacher and his excellent teaching ways than to me. The subject was magnetism and hysteresis
was being taught. We were challenged to explain why a solid disc oscillating in a magnetic field
dampened less if the disc had windows cut out. The right answer among the two given by me was
loudly appreciated by the teacher. From then on, I became a different student. The physics teacher
was the famous Dr. Narasimhiah, popularly known as HN, a Gandhian, who later on became the vice-
chancellor of the Bangalore University. He was also an old boarder of the Home.

In 1956 Padma (Paddu), my fourth sister was born. She is also another teacher in the family.
All her life she was a teacher in two schools for a short period in Mandya and mostly in Bangalore.
She is now retired and settled in Bangalore. Bird watching is her hobby. Her husband Ramaswamy
retired from Agricultural University. Besides, he also worked in private industry and presently
consulting. He holds a Master’s degree in Instrumentation from the Indian Institute of Science.

Two years at the College went very fast and state-wide examination was over. After the
studies, I returned to Ajjampur for the summer holidays. In due course of time results of the
examination was out and I had passed in first class. More than that a surprise awaited. I use to spend
the afternoons at the Rama Mandir. That day while reading the local newspaper I noticed on the front
page a highlighted list of names who had topped the state B. Sc. Examination that year. I could not
believe that I was holding 8th rank for the whole state. I ran home to share the joy with my mother
first. That was the talking matter for some time to come around as no one had even remotely dreamt
of such a possibility.
There opened an opportunity to make up for the loss in not pursuing professional course after Intermediate. I did seek admission into many possible openings including mainly at the Indian Institute of Science. I was aware of all this because of my stay at Home some used to study at the Institute also. Institute had many departments. I applied for admission to courses most popularly sought at that time - Electrical Communication and Electrical Technology. Available seats being limited and the admissions were open to the entire country I could not secure admission to any of them.

This was another turning point in my life. Mama’s son-in-law came to Home when I was on a visit and took me to meet the Head of the Chemical Engineering Department at the Institute of Science. At that time Professor Weingartner, a German was the Head. While other branches of Engineering were popular, chemical engineering was not so. Because of that I had not sought that as an option. The meeting was however successful and finally I was admitted into the two years program in Chemical Engineering and Chemical Technology at the end of which I was to get a Diploma of the Institute considered equivalent to a bachelor’s degree in Engineering. This reminded me of the conversation with my father on the train while coming to Bangalore four years earlier to continue my studies. This was the first instance a coming event gave a signal early in my life.

Not only I found an opening to continue my studies, I could also continue my stay at Home for the course. My routine had changed completely. While the previous college was only a five minutes walking distance, now I had to travel nearly ten miles. At the beginning I tried to depend on local bus for transport but was inconvenient and time consuming. I finally decided to use a borrowed bicycle for the purpose. It was Srekanth’s (mama’s son) cycle. I used to leave the Home 6:30 in the morning and return in the night at 9:30 after studying in the Institute library following the classes. I had a company in Somasundar, who was one year senior in the same Department and I became close to him. This schedule interrupted my doing the housekeeping chores at the Home. I had therefore negotiated to clean the dining hall every night in exchange of other options. One night I slipped in this duty as I stayed back at my uncle’s place for a festival dinner and I had to pay a fine for the lapse.

In late 1957 Shyla, my last sister was born. She completed her graduation at the Regional Institute of Education at Mysore. After a year or so working for the Indian Space Organization she went abroad for higher studies and obtained Master Degree in Electrical Engineering and now settled in US. Her husband, Sanjay whom Shyla met in the University also works in IT field.

The course at the Institute was 24 months long and very intensive. Three months of factory training and two week’s industrial tour were mandatory. Besides, there use to be periodical trips to plants in and around Bangalore. Factory training was scheduled during summer months during the middle of the course. Students had the options to choose among a list of industrial establishments willing to provide training distributed all over the country. Cost of travel and living was to be borne by the trainee. For some, like me, this was the limiting factor in availing best training opportunity. I was compelled to choose the nearest establishment and the only one available in the state. It was a fertilizer plant five miles from KRS also happened to be the first and only one in the country prior to independence during the British Rule.

I did not know where I would be staying during the training. I had come to Ajjampur for a week during the break after the first year of classes and before the commencement of the training. The day I was to leave for the training, my father got an idea. He gave a letter to the Doctor in-charge of the veterinary hospital he used to work long back in Mysore. I took a bus that morning and arrived at
Mysore in the afternoon the same day and walked to the hospital with the letter. Doctor Khudus, opened up a room attached to a kennel and was kind enough to allow me to use it for my stay. The room was roughly 10 feet by 5 feet with an in-built cement concrete bench. The bench was meant as the operating table for the hospitalized dogs that I was using to sleep. The door on the other side opened to a dozen or so kennel rooms on either side with a water tap in the open space where I was taking bath every day. After settling into the room, I walked across a wide open play ground to the Railway Station to buy a season ticket for travel to and back from the factory at Belagola that was 10 miles away.

Daily routine during the training was like this. Walk to the station in the morning catch the morning train at 7.00AM after breakfast, have lunch at the factory canteen and return to the city in the evening. For dinner, I had hit upon a cheapest idea. Eat five or six mini bananas and a large glass of milk. That was my three months of saintly existence. In spite of the apparent hardships, I thoroughly enjoyed my stay as it was nostalgic Mysore, reminiscent of my first days of life that I remember. Any day I would like to live in Mysore.

During the second year of the course, I was awarded a scholarship of Rs. 50 per month by the Institute. The local rotary club also gave me a onetime stipend of Rs. 50. That winter, during X-mas time was the industrial tour. That year the plan included major industries of Southern India. The tour was to start at Bhadravathi on a Monday. That allowed me to spend the previous weekend at home on way to join the group in time. By then, I had been to the factories at Bhadravathi at least four times – courtesy the Manager of the Ajjampur Farm. I joined my classmates in the midst of their visit to the steel plant. Next day we were to visit cement plant and paper factory. By the time, we completed the tour travelling through the states of Tamil Nadu and Kerala, the year 1959 had dawned. That year June my course was complete. Thus, I became an Engineer four years after Intermediate like others and ready to step into the professional world neutralizing the setback of earlier two years.

As my student life in Bangalore came to an end and it was time to leave, I was carrying friendship of four persons during the six years stay and one from the past two years. They were Vijay Kumar, Vedavyasa Muthy, Najundswamy and Somasundar. We have been in continuous contact all through my life particularly with Vijay Kumar and Somasundar. Vijay Kumar, suffering from Parkinson’s passed away a few years ago.

Job search extended my summer months by nearly six months. Like most, I did not have a real goal in life except to get a secure job to lead a comfortable life and more so to be of some monetary support to my family seen in the context of the circumstances and in line with the apparent peer pressure. Perhaps, there was a slight inclination towards a non-routine job like research in contrast to routine work. Applying for jobs and preparing for interviews were the main avocation. Among other things, I became adept in rules and regulations for travel by Indian Railways.

In all, I had four job interviews that included a scientist position in Atomic Energy Commission, trainee at a Fertilizer Plant, chemist at a chemical factory in Baroda and of a research assistant at Regional Research Laboratory, later renamed as Indian Institute of Chemical Technology in Hyderabad. The first offer I got was from a Fertilizer Factory, but the stipulation to serve the company for two years at the end of two years training was hard for me to accept. I was mentally opposed to binding myself and thus gave it up. The National Laboratory thought that I was too young for the post and offered a two years research fellowship. That time, Dr. Naidu, my father’s boss in Mysore, had taken
up an assignment of leading the Animal Husbandry Department in the state of Andra Pradesh. He was a source of guidance. By the time I got that offer it was more than six months of uncertainty that made me accept the offer more than any other compulsion. It was in January 1960 that I made preparation for the journey to Hyderabad.

Each of the interviews gave me an opportunity to see India. Longest journey I undertook was to Sindri in Bihar. Major part of the journey was from Madras to Calcutta lasting 40 hours with two night’s travel that was arduous. On return, we were held up at Calcutta for nearly eight days because of heavy monsoon rains with all traffic and travel coming to a halt. We in a group from the class stayed with our senior and Home mate Somasundar. To make up for all this, the journey from Calcutta to Madras was a wonderful experience as the Indian Railways had for the first time introduced sleeper coaches within the reach of common man.

In this period of my job hunting a major change occurred in our family. It was the day of my return from Hyderabad after the interview. At Hyderabad, I stayed with a family, courtesy of the Post Master, another Deshikachar, a family friend at Ajjampur. On the way from the Railway Station to the Farm, I stopped by at the Post Master’s residence to thank him for the reference. At that time, I was told that there was no need of my going home since all my family members had vacated the house and left in a truck the previous night on transfer and relocation to Kunigal, another Farm of the same Department 50 miles from Bangalore where horses were bred. It was high time that my father got transferred at the end of 13 years from a place with free accommodation but lucky to get another position with similar facilities. This was almost coterminous with my education. For all I know by then he had a record of stay at one place. Being a Brahmin in a state job has been an envy of all his contemporaries. More than this, it was fortuitous for him for yet another reason. He was in the midst of a civil legal case filed by a local merchant of Tumkur for not making good of debt held by my grandfather. This was a legal case of at least 20 years, moving from one jurisdiction of a state to another that my father had moved and finally had landed in a court 14 miles from Ajjampur. Had they not moved that night, it would have been an embarrassment the next morning for the court officials by order would have collected any assets found in the house to make good of the pending debt. The irony was that the case originated from Tumkur and moved all through the state and when it was about to be settled my father was moving to Kunigal in Tumkur district. My father later told me that he cleared the debt on payment of some agreed amount outside the court. Next morning, I took the train back to Bangalore to get down at a station close to Kunigal to travel by bus. That was the end of history at Ajjampur and my continued education. Finally, after a brief stay at Kunigal, I left for Hyderabad.
View of Cattle Breeding Station, Ajjampur, India

Indian Institute of Science, Bangalore, India
B: LIFE EXPERIENCE & CONTINUED EDUCATION

(1960 – 1965)

It was early in the month of January 1960 I travelled to Hyderabad to take up my first earning position as a research fellow at the then RRL Hyderabad. It is now renamed as Indian Institute of Chemical Technology (IICT). It was one of the constituent laboratories of the Council of Scientific & Industrial Research (CSIR) an autonomous body and a registered society fully funded by the Government of India. The director of the laboratory was one Dr. Hussain Zaheer an organic chemist educated in Heidelberg University, West Germany. He was also a family friend of Jawaharlal Nehru, the first Prime Minister of Independent India. Nehru use to address Dr. Zaheer as munne.

By then, I had made contact with one Ritapal (Ramji), a year senior at the Institute in chemical engineering, who also happened to be working at the same laboratory. As he was staying in a rented apartment alone and also needed a place to stay it made an economic sense to share accommodation with him. He had chosen the location for a good reason to be close to his cousin MS. Alamelu Sitaraman. They lived very close by and came in handy for him to spend time outside work hours. I also happened to accompany him for visit their house. Later on, I came to know that it was Mr. Sitaraman who gave the idea of sharing accommodation with me, apparently for economic reason.

My routine at Hyderabad – walk or preferably take a cycle rickshaw for a kilometre to take a crowded city bus for a hanging seat to travel to the Laboratory and retrace the path in the evening. Return was more comfortable for we were assured of a seat as the bus originated at the Laboratory.

I was to join the Chemical Engineering Section and the Head, Dr. K. S. Chari, Assistant Director was away in France on deputation and was expected to return only after three months. To begin with I was under the care of the acting section head Dr. Chenna Reddy. I was a novice to research but with full of enthusiasm. I started working right earnest on a project assigned to me. I had made a survey report on the past work reported in the literature on the subject allotted to me as a basis for what I wished to pursue. It was, I suppose, circulated among the sectional heads concerned. One of them, Dr. M. G. Krishna, Head of Coal Section, made painstaking observations on the report to help me. I admire how some take special efforts than others in day-to-day working. In the meantime, my regular boss, Dr. Chari, returned and that changed my outlook and sense of direction. I owe a great deal to him for the manner in which my life was subsequently shaped. He was an outstanding person himself. You do not come across many, who after a degree in science from India went abroad and directly acquired a doctorate degree in chemical engineering. If England had non-traditional education system, he had an acumen to make full use of it.

From then on there was a greater sense of direction in my day-to-day work, and clarity in what I was doing. My scientific temper got refined. During the course with in a year my work got published twice in an International journal. Nothing earth shattering, but, nevertheless a mark of quality and some satisfaction. Not many publications came out from the Laboratory at that time and this was of some personal achievement.

My job being not a permanent one, I had the freedom to seek employment elsewhere or explore other possibilities for professional improvements. Thus, I was on the lookout for any opportunity. That also gave me an opportunity to explore the country while attending interviews. One trip I remember was to Heavy Engineering Corporation at Ranchi when I also happened to meet
Professor B. S. Murthy at Bihar Institute of Technology. Professor Murthy was related to Mr. Sitaraman. The interview was not successful and I do not even know why I went since the organization was not even remotely connected to chemical engineering and my experience.

Socially, even though I was alone at Hyderabad away from my family, because of living with my colleague I also got close to Ritapal’s relatives. Sitaraman was a French teacher in St. George’s Grammar School. They had six daughters and a son, Sheela, Vatsala, Meera, Geetha, Latha, Nalini and Rajendar (Babu). Soon after Geetha was born the whole family had to shift to Bangalore for safety and security as communal riots broke out in Hyderabad soon after independence. When conditions were normalized in Hyderabad the family returned while Sheela & Geetha stayed back. After some time Sheela returned feeling homesick and as missing her father much while Geetha stayed back. Such a practice is in vogue with many families.

Their family life was a great contrast to that of mine. When our father was at home, we were to maintain strict silence and not even talk loudly. My father was to get upset even to hear our footsteps. Interaction between children and their father particularly was so friendly and joyful that many a times made me realize what I had missed. The house, when all were present mostly in evenings was always noisy, enthusiastic with intense interaction with jokes and what went on during the day. All of them particularly girls, were born with histrionic and linguistic talents. Amongst all, what touched me deeply is their talent in classical music. Mother was a radio artist. Father was a connoisseur of music and had the ability to whistle. Sheela was a student of Carnatic music. Vatsala was learning Hindusthani classical. They had won some recognition in local talent competitions even in their tender age. Moreover, they had practiced singing together in their proficiencies to give a full concert. Even though I had no singing ability (none in our family could sing for that matter), I had developed an ear for classical music from Ram Mandir days in Ajjampur and more so from Home days while attending Ramanavami concerts in the city. This craving created an opportunity and excuse to go to their house often. Thus, Sheela and I became close friends.

The flip side of all this was that a conducive atmosphere for academics in the house was limited. Earlier, their father had a setback in heath with a heart attack. Sheela could not continue education to complete her graduation and with an economic situation comparable to ours and she had to work to support the family along with her father. She also felt that I was a distraction. She found a job in a new aristocratic school opened by the wife of a local philanthropist and a politician. Fringe benefit that followed was that her youngest sister, Nalini got a free opening in best-to-be a school. Vatsala, Pursued an architecture course after school finals. One of Sheela’s colleague was Saroja Gopalan later on married mama’s son Sreekanth. Meera & Latha after graduation found employment in Bank. Babu completed diploma in engineering an after working in private industry for a while started his own business.

First opportunity I got was to go to Paris for training at the Institute of Petroleum as a stepping stone for a permanent job in the newly started Institute Petroleum at Dehra Dun a sister Laboratory of CSIR. That was the high watermark of my life till then. Naturally, I was ecstatic for it was a trip abroad combined with a permanent job back home to quell the economic insecurity. My current job being a fellowship was not adequately paying to be of any comfort. From then on my focus was on preparation to proceed to Paris. I owe this opportunity to the good opinion which my Section Head and the Director had about me and their recommendations.
As always, my peace gets disturbed for reasons good or bad. In the meantime, even before the interview took place for the Petroleum Institute, I had made an application for a scholarship in United Kingdom for higher studies instituted by Burmah Shell - A Petroleum Company and managed by CSIR. I was called for an interview at Delhi again. I had gone with some reluctance. Immediately following the interview, eight persons including me were given award letters. By then I had committed to Petroleum Institute's offer. My weakness is that I cannot sleep with problems. The same evening, I went and met with co-brother of my mama, Chandrakant and his son Sridhar for opinion and advice. I had mentally made up to stick to Petroleum Institute because of the lure of job security. They did not see it as a great idea. Anyway, even before I left Delhi, I mailed a hand written letter to CSIR to forego the offer. That action in such a haste was neither necessary nor called for.

On return to Hyderabad, my boss gave me a dress-down that my decision was not a good one as higher study abroad would give added qualification which is a must for a research career and as such none appreciated my job insecurity. I had to amend my decision. I made a trunk call immediately to the concerned at CSIR in Delhi in withdrawing my letter of rejection followed it with a letter of acceptance. Rarely did any junior employee of the Laboratory had one chance of going abroad. There was some murmur among the staff that I had connections higher up in the organization to favour me. I was a quiet and fully devoted worker and that had a value.

My brother Raghu at this time was studying for a degree at the National College in Bangalore. As he was completing his first year, he got selected in an Engineering College at Davangere, 50 miles from Ajjampur. It was with difficulty, he had to shift foregoing one year of his college. There were uncertainty about him going ahead with the makeover. As I happened to be in Bangalore at that time I met Deshikachar warden of the Home. He came to our help and immediately offered two hundred rupees to meet admission fees at the engineering college. It was really very magnanimous on his part to do so. Later also Raghu was receiving monthly contributions to meet expenses.

By then I had completed more than a year at Hyderabad. In the summer of 1961 Sheela and I visited my family at Kunigal. Around the same time, Ramji found an employment opportunity in Germany. A former Member of Parliament, Dr. Suresh Chandra, who also had lived in Germany for some time and a close family friend, was helpful in pursuing his German venture. Finally, it was in the month of July or so he left for Germany. As a result, I shifted to a nearby hotel for the remaining few months before leaving for UK.

Alongside, I started applying for admission to various Universities in UK for further studies. First placement I found was at the University of Sheffield that I accepted immediately. Subsequently, I also got an opportunity to get into the University of Cambridge. My boss at the Laboratory dissuaded me from changing my original plan and I had no choice. As I am writing this, my niece Kavana (Paddu’s daughter) who a few years ago got a Master’s degree from Cambridge is now working for her Ph. D. in Law. I was scheduled to sail to England at the end of October. Thomas Cook was the agent assigned to take care of my travel. In those days travel abroad was not very smooth sailing in terms of getting passport, exchange visa, etc. A senior scientist Dr. Achayya, in the Laboratory was very helpful both to me and Ramji in this task particularly for standing surety wherever that was needed. Thomas Cook found an all first class Scottish ship to sail from Bombay to Liverpool in K. Scheduled voyage was to last 21 days. Long duration was mainly due to the ship being small and it was making halts on way including Aden in Africa.
Just before leaving the country, I visited once again my parents. My parents took this opportunity to perform my sacred thread ceremony, a tradition in our clan but strictly to have been done before 11 years of age. I had arranged to leave from Hyderabad so that I could work till the last day. At the same time, leaving Hyderabad had created mixed emotions in me. I only had sufficient money to get exchange of 5 pounds freely allowed without permit. I took a train to Bombay and stayed with Somasundar who by then had moved from Calcutta to Bombay to work for the Atomic Energy. While at Bombay, I visited the brother of my pati, Chakravarthy, (a cousin of Rajaji) to collect 200 rupees given by mama. I could not have easily taken this money with me for want of exchange permit. I had to leave this money in a bank with application for permit to be transferred later to UK. I was minimally equipped for stay in UK. I was yet to buy warm clothing for the European winter and I needed this money.

Leaving the shores of homeland for the first-time is an indelible goose pimple experience fresh in mind. The ship RMS-Cilicia was set to sail at 12:00 noon. Compared to other travellers, my baggage was minimal with a small wooden case for the hold and two suitcases for the cabin. I was to share a cabin with another scholar like me on the same program. Arrived at the port at 9:00AM and after routine formalities got into the ship. The cabin we were allotted was a decent one close to the top deck. Being a British ship, we were introduced to their culture of formal dining etc. We had option of one of the two sittings for breakfast, lunch and dinner. Early batches at 7:00AM, 12:00Noon & 7:00PM or the second batch an hour later. We selected the second batch so that we could sleep longer. Shoes could be left outside the cabin every night to have it polished by the morning. As we were warned of sea sickness, I was conscious of the same. As the ship was leaving the shore for the first two hours, I felt discomfort. Apart from formal eating there were plenty to eat and drink all day – drinks, ice cream, snacks etc. Spending time was not difficult with library, games and sports. In the evenings, except on shore days, there was some entertainment or other including movies. Routine invariably included morning walk on the deck – first time for me in my life.

First halt was Karachi in Pakistan. We went out for a few hours. It was crowded like Bombay. The next halt was at Aden after four days. Everyone looked forward for this opportunity as it was a free port and without excise duty and tax everything was cheaper than elsewhere – particularly watches and electronics. All I bought was a watch that too with money borrowed from a fellow traveller. The next halt was Cairo. I went out to see the city for a few hours. Passage through Suez Canal was a memorable one. Shores on either side was so close you felt it can be touched. The ship halted next at the Rock of Gibraltar. Then we were to cross the English Channel. Two days of that was a harrowing experience. Sea was very rough. Dining rooms were empty. All the furniture in the lounges were secured with ropes to pillars. The ship swung 70° at the metacentre. Most of the people were sick with headache and were throwing up. The ship went around the southern shore of England and arrived at Liverpool in the morning after 21 days of voyage.

I had arranged to travel to London first to meet the officers at the Indian High Commission who had the legal responsibility for my stay in UK. Trains to London were available at the Port itself. The sight of porters and helpers at the Port and Railway Station dressed in neckties and jackets was strange as being different from India. When the train arrived at London someone from the High Commission was there to receive and take us to a hotel. After formalities and two days later I travelled to Sheffield by train. The journey took three hours for the 150 miles and around 2:00PM arrived at the destination.
I was so eager and anxious about the purpose of the trip, leaving the baggage at the Railway Station I went directly to the University Department of Chemical Engineering to meet the Professor. Professor M. W. Thring, well known for his book on Pilot Plant Scale-up and Models, was the head of the Department of Fuel Technology and Chemical Engineering. Perhaps, I would have started my research work the same day if they had allowed me to do so. After courtesy, they directed me to an office that helped students to find accommodation for stay. I followed that and selected an English family willing to take an International student. Then I went to railway station to collect my baggage and moved to the house that was to be my place of stay. It was already cold with signs of snow. I was not fully equipped with warm clothing necessary for the winter. I was waiting for the transfer of funds from Indian bank where I had left Rupees 200 for the purpose. In the meantime, the Indian High Commission had paid my first month’s stipend that was handy for my sustenance.

Slowly I fell into the routine. I was to work with Dr. Peter Foster as my Supervisor. I got acquainted with some students from India within my department and outside. Students' Union was well equipped to meet most of students’ daily needs including food, shower, games etc. All one needed was a place to sleep. The routine was to get up and go to the department after breakfast by bus. Take lunch at the department canteen. In the evening go to students’ union for shower, dinner and watch some TV and or games and return to place of stay to sleep. Besides research, I picked up snooker and bridge as indoor games for pastime along with draughts that I was adept from Home days. More than anything else, I concentrated on learning to drive, my life time ambition. This I had to accommodate within the frugal scholarship that was lowest among all students from India on different schemes. I also registered as an international member of British Council that paved way for some social activities like lectures, field trips. Through the meetings I got to become a guest friend of an English family, Harry and Dorene Drabble, by whom I used to get invited periodically including X-mas. All international students were invited by our professor to his house for lunch on Xmas day.

Western practice is to address fellow beings by first name – that is given name. My given name being so long and particularly not easy my fellow workers nick named me Nat that stayed for the rest of my stay in UK.

There were two surprises for me on political front during the early days. Churchill was heralded as the hero of World War II an opinion not felt in India. There was overwhelming support for Pakistan on Kashmir issue and against India. In my department there were four other Indian students – K. S. Mani (Senior Fellow), Ganapathi Raman, Bomi Kavarana, and Prabhu. Prabhu after completion returned to India and was working in the Indian Institute of Science. Later on he passed away - he had congenital defect.

Within a matter of week to ten days I was seriously into my research work with a project assigned. Project related to carbon formation in industrial flames addressed to boiler efficiency. I was allowed to register for Ph. D. directly. When I made this known to the High Commission, my guardian in UK they objected and suggested to work for a master’s degree as the scholarship is only for two years. I walked into my professor’s office and posed my predicament and asked whether he had anything to say. He was kind enough to write to the high commission that if at the end of two years either he will find some funds for me to continue or accept my work for a master’s degree. High commission was also kind enough to respond with a grant for additional six months.
By the grace of God, I could complete my work including writing up thesis within two years six months. Ambience for research in western universities are excellent. Unlimited freedom, easy access to facilities besides having a greater purpose in subjects actively pursued. Above all the professors are inspirational.

Prior to completion, every student was to give a Departmental Colloquium on the work being carried out. For me it did go very well. For the first time (and perhaps the only time), I spoke extempore continuously for three hours with no audio-visual aids but only a black board. That night I was reminded of my reluctance to participate in debates while in middle school. None of my subsequent stage talks in my professional career came close to it. Professor has been the inspiration for me. Perhaps, I was mimicking his style. Practically, I used to work on most of the Saturdays and some Sundays including extended hours on weekdays. Within six months I changed my boarding to another family where two more Indians – Ramaswamy and Subramanyam - from metallurgy department were staying. Among us we shared a kitchen and cooked lunch on Sundays and used to play bridge by inviting other friends. Raghavan & Chaturvedi graduate students in the Metallurgy Department use to be our guests. Evenings, invariably we went to movies. When the others moved out of the boarding, I also took up an independent apartment. Raghavan who got the doctorate along with me retired as a Professor from IIT Delhi. Ramaswamy retired as the Managing Director of Salem Steel Plant. Subramanyam retired as a Professor and has settled in Canada.

During my course work I did use the university computer. Computers those days used punch tapes and occupied a six storey building. Most of equivalent capabilities are available in a lap-top today.

As I was preparing my thesis an interesting episode occurred that is worth recollecting. I wanted to convey about what is known is so insignificant compared to unknown. I remembered the following saying of Sir Isaac Newton, which I introduced as one of the first pages in my thesis:

“I do not know what I may appear to the world but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me.”

When a colleague of mine was going through the draft, he made a remark that it may sound to others that I think too much of myself. Thus, I blanked out a few of the first words to avoid any such misgivings. Incidentally, I read an identical saying from Yudishtira in Mahabharat ages ago. Another example of such – everyone knows William Shakespeare quote that world is a stage, we are all actors ... Much earlier, well known Annamacharya had composed a song on this thought. It is possible either latter person was aware of the earlier work or that it was an independent thinking and coincidence.

Other than academics notable watermarks during the 30 months were: (a) an industrial trip to France for a week (b) a four weeks European sightseeing on my own during one summer that took me to Holland, Denmark, Sweden, Germany including Berlin from where I flew back to London (maiden flight) on way to Sheffield. I travelled by train and stayed in student hostels and YMCA. While in Germany on way from Hamburg to Berlin, I visited Ramji, twice at Munster working for his Ph.D. At Berlin, I walked into East Berlin and spent half a day. (c) During a subsequent summer I got an opportunity to return to Holland as a guest worker for five weeks where a collaborative research project on Flame Research was underway that fell within the realm of my research work. By then I had my Driver’s license and on weekends use to hire a car and traversed every nook & corner of
Holland. During that period, I also took the time during a weekend to revisit Ramji at Munster and we drove around Muster. He also made a visit to Amsterdam where I was. (d) We also had a camp tour for four days to see around Cornwall, Wales and London moving around in a rented car me being the lone driver and Lake District separately. (e) I also visited London during X-mas one year.

Another small venture – To be a Roman in Rome – My co-worker, Prabhu, and I one day wanted to hitch hike like other westerners and planned to visit London. Morning around eight we got ready took a city bus to the outskirts of Sheffield and began looking for a ride southwards. You never get a ride full stretch to your destination. After half hour trial we got one for a small distance. In bits & pieces we moved 30 to 40 miles by noon. We lost our patience and took a public transport. That is the end our project.

With the completion of research work I wanted to spend a minimum of three years of stay in England to enjoy liberal custom rules to import some things I bought before my return. On the recommendation of my professor, I got a temporary placement in the Research Department of an Electricity Generating board at Southampton. While at Southampton, I had to return to Sheffield to face a viva for completion of my Ph. D. On the day of travel to Sheffield the news of passing away of Nehru the first prime minister of India was received. My oral examination began with condolences and discussion on the challenge the country faced for finding a successor. Again, returned to Sheffield in July or so for the convocation. That was a colourful and a memorable event.

During the entire three years away from the country, the only contact with my family and friends was through letters by mail. Phone calls besides being not easy were very expensive. During the course, I had acquired a second hand four track tape recorder and also a camera. Sheela from Hyderabad and her family had sent one three hours long recorded tape with mostly classical music sung and some chitchat by family members. I did spend many hours listening to the tape a number of times. During the course of correspondence, I had indicated that my sister Sarasa and brother Babu who both completed school finals the same year were to pursue further studies and my parents were facing an issue. At that time Sheela’s father made a visit to Kunigal and had offered to take both of them to Hyderabad for further studies. It is not easy to describe the condition in their house and his courage to make such an offer. However, they did complete one year of pre-university course in Hyderabad. On return my brother got a seat in an Engineering College at Mysore.

Another highlight of my stay in UK was that I got an opportunity to present a paper in an International Combustion Symposium at Cambridge University. Some of my friends were astonished that I was returning to India instead of seeking better opportunities in UK itself. Before I accepted the scholarship for higher studies, I had to give an undertaking that I will return to India on tenure completion and I stuck to that even though it was not a legally binding document.

By the time I was ready to return, the CSIR had instituted a scheme of Pool Officer in which highly qualified scientists can be placed in a research organization of choice to independently work and at the same time try for permanent employment. I had selected the same Laboratory at Hyderabad for obvious reasons. That ensured some livelihood on return. Finally, I returned in November of 1964 by ship, this time a larger one by a shorter route, SS Chusan operated by P & O that took only twelve days of sailing. On the early hours of the morning as the ship approached Bombay harbour, I realized that I was more country sick than home-sick as I again felt goose-pimples.
Disembarkation from the ship was set at 6:00AM in the morning. I had made arrangements to take a train to Hyderabad leaving Bombay at 1:30PM. I was anxious not to miss the train. By the time I was cleared of customs & other formalities it was 10:30AM. There was sufficient time as I took a taxi to reach Victoria Terminus. Took the train and arrived at Hyderabad at 6:30AM the next morning. Sheela was at the station to receive me.

During my absence a few major developments had taken place in their family. One of the family acquaintances got interested in Sheela’s sister Vatsala and was eager to get married. The family was holding him back being not in tradition as the eldest was yet to be married. Sunder’s calculation – even though I had not met him in person nor had any communication – was that on arrival I would marry Sheela and the next week he could go ahead with his plans. Compulsions of my insecurity was that I should first get a permanent job before anything else. For all I know he must have been disappointed but the urge did not allow him to wait and went ahead as the family was helpless. Their wedding took place on 22nd January 1965. Sunder had started his career in the National Textile Corporation at the lowest rung and retired as the General Manager in the same organization. He was also a self-made man like me but under a totally different circumstances. He was one of the four sons and a daughter of a chief engineer any support he needed was freely available but he derived pleasure in building life on his own. Same spirit prevailed with both his daughter Sunita & son Ashwin.

Within days of my arrival, I reported to the Laboratory on my temporary offer and was actively on the lookout for a job. In the meantime, I along with Sheela visited my parents at Kunigal. On way at Bangalore met her grandparents along with her sister Geetha and their aunts Shanta, Leela and Raji. Leela was on the staff of Mount Carmel College and Director of NCC.

In the interim, many major changes had taken place in the Laboratory. The Director of the Laboratory, Dr. Hussain Zaheer, had become the Director General of CSIR and sequentially five of the Division heads (including the one I was working with) had left the Laboratory on promotion as directors or equivalent positions to different places within CSIR. One of them, Mr. Chowdhury, was starting a new Regional Research Laboratory at the capital of Orissa state. One of the days he happened to visit the Hyderabad Laboratory and I had expressed my interest in job openings. In this process I had secured a job at a new Laboratory sooner than I had expected. It was quite a senior Government position and at that time I recollected the words of Mr. Kodanda Ram, a colleague of my father at Ajjampur long back soon after I had passed out of High School which came true. Also, one of my day dreaming moment back in England was wishing for a job in a newly coming up institution imagining a point in the map of India close to Calcutta. I did not even know of a place called Bhubaneswar as the capital of Orissa existed. This is the second instance of coming event casting an early shadow.

I planned to take up my new assignment at Bhubaneswar in Orissa on 25th March and consequentially fixed the date for my wedding on 7th March. Even till today Sheela’s grouse has been that I did not formally propose to her. For those few months, I had rented a house with in the same enclave. All the houses in the enclave were owned by a single person and the procedure to rent it is bureaucratic and therefore cumbersome. I had to make use of Suresh Chandra’s influence for the purpose in obtaining rent controller office clearance.

The wedding was a simple affair and the function took place in a tent erected in front of house. My parents and all my sisters and brothers had come to witness the ceremony. Evening a handful of
my colleagues had assembled for dinner. Thinking of weddings, right from my school days I was averse to the system of arranged marriages and the associated dowry system that was a pain in poor Brahmin families particularly for parents of the girls. The predicament of my parents with five daughters was always in my mind.

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According to Indian tradition, the life of a person is classified into four sections. The first, \textit{Balya} – Childhood during which you are given education and prepared to be independent and start family life. The second, \textit{Grihasta} – Family life. By now I had all the education one can have, best job with limitless opportunities and all challenges one can aspire, and married to a lovely women who had all the courage to face the life. This was the foundation on which my second phase of life began with two weeks of joining and preparation time. I did not give up my temporary assignment till the day before departure because of tight financial situation. When I left Hyderabad, I only had Rs. 300 cash. For security during travel, I had carried it in the form of Bank draft! I am writing these in detail as I laugh at myself. One person who might have been most affected with Sheela leaving Hyderabad as I could feel was \textit{Nalini}. Sheela was like a godmother to her and she must have missed her a lot. To begin with she had to come out of a good school.

On arrival at Bhubaneswar in the wee hours of early morning, we were taken to the State Guest House. Laboratory staff did not have any official accommodation as yet. For senior staff, the state had lent a few staff quarters. For the next two are three weeks, we shared one room each in two houses allotted to two of my colleagues before I got my own. The new laboratory building was coming up on 300 acres of land, adjacent to the University campus along with houses for the staff. The land allotted was on the edge of \textit{Chandaka Forest}. Only 12 kilo meters away was a zoological park in the natural settings. There was an instance of two white tigers having fallen into the zoo campus. Our laboratory had developed a medicinal plant garden for research purpose. One night, a herd of wild elephants had visited the farm and had made a visible impact.

Meanwhile, we were functioning administratively planning for the future in a temporary state government building. We moved to the campus when minimum space was available. To me it was a new experience of being a part of building an institution from scratch. Being the youngest at my level I was in an enviable position. Looking back, I remember the difficulties in adjusting. The only strength as I realize now is that being a quiet person there used to be no reaction to adverse situations. More so of the whole organization (CSIR) was being looked at of a group of persons being apparently favoured. Within six months was my first official visit was for a conference at a sister Laboratory in \textit{Dhanbad} dedicated for research on coal. Even if coming events cast their shadow it will not always be apparent. As it happened this was the third instance.

Early in 1966 my parents got transferred to \textit{Kudige}, a small town 50 km from Mysore. Around this time, my brother started working in \textit{Manipal} Engineering College near Mangalore. By then \textit{Babu} had secured a seat in Mysore Engineering College, but \textit{Sarasa’s} future was not clear because of opportunities around Kudige was limited. They were toying with the teacher’s training program and like. That summer, Sarasa came to visit us. When the colleges reopened after summer, she got an opportunity to continue her studies in the state women’s College for graduation and she completed the first year before returning to \textit{Kudige}. This was a closely guarded secret from other family members and became a pleasant surprise at the end. At that time a way opened up for her to continue education at the Mysore Regional College of Education to pursue a combined B.A. Ed. Program. That settled her career for life.
I was eagerly awaiting to complete one year so that I could visit my parents at home town Kudige. Soon after that we went on a month’s vacation southward. By then we were expecting our first child. On way, we spent a few days at Madras visiting chin mamma, A.V. Char, going to concerts etc. Music being our common interest and Madras being the centre for the same, we talked of a wish to settle there after retirement. This was the fourth instance of wishes becoming true at least partly. Even though, we did buy a flat in a decent locality that took care for itself it is sad that we could not spend any quality time in Madras. Sheela somehow managed to be in Madras for one music season. Continuing the journey, spent a couple of days at Bangalore visiting relatives. Before catching a bus to Kudige at Mysore I was longing to visit my birth place at KRS where we spent two days.

Due date for the arrival of our child was November 14th, but Kavita was born on 19th November, coinciding with DOB of Indira Gandhi instead of her father Nehru on 14th November. Sheela’s mother was with us for help. It so happened her birth coincided with her cousin Sunita born exactly one year ago (according to Indian calendar) to Vatsala married in January of the previous year. By many accounts it was memorable. A daughter in Indian household is considered virtually Lakshmi – Goddess of Wealth. My mother had acknowledged for she had felt some betterment.

In India those days Government jobs were not adequately paying and as such, employees at even higher levels had to be frugal for meeting ends particularly in market place comparable to similarly qualified persons. At the same time tax system in the country was one to encourage savings. Therefore, most employees saved maximum to reduce tax burden and thus take-home pay got limited. However, the office used to be liberal in providing loan from employee provident fund account. After two years that is how we could buy a refrigerator.

Slowly, the Laboratory expanded with a large building, more houses and new staff. Politically CSIR was under a lot of criticism focused on human resource management that culminated in a high level inquiry commission. As a result, there were changes in top management. My Director also resigned and went to set up a small-scale industry in Hyderabad. Later on, I came to know that the industry was based on one of the research projects I was associated with relating to purification of graphite.

In March 1967 my father opted for a transfer to Mysore. This he did keeping in mind education of my last four sisters. Mysore being a bigger city there were more opportunities for college education. This movement incidentally ended about twenty years of free accommodation. Within a year of moving to Mysore my grandmother passed away after long illness. This was the last phase of my father’s government service as he was to retire on attaining superannuation in 1969. Thus it was a full circle for him as his association with the state government which started in Mysore ended in the same place.

In November 1971 we had our second daughter Anita. A few months earlier, I was promoted to the level of an Assistant Director. Good things happen sequentially. The same year, Sheela’s sister Geetha got married. Raman an engineer from Bangalore after further studies had settled in United States. Raman was also mostly brought up in his grandparent’s house like Geetha. Raman was again a self-made man like Sunder or me. He was also a son of a chief Engineer in a paper plant in Andra Pradesh. We could not even attend their wedding as Sheela was advised against travel. Raman is now retired after a long corporate service in the area of energy. In the beginning he had managed many projects in power industry. Subsequently working in Gas industry he was in charge of a project to set
up gas distribution along the Virginia coast. Geetha who had acquired home science degree earlier went on to get a Master’s degree in US and served as a dietician in different establishments before retirement. She also teaches yoga for hobby.

Between Kavita and Anita we had lost a son within 24 hours of birth.

Bhubaneswar, even though was the state Capital, those days had a thinly spread out township. Apart from persons serving in the Secretariat and other Government offices and two local universities being served by a small business community, there was nothing much. Socially, we were limited to our campus families. However, we were very close to three families in the town. Srilakshmi and Srinivasa Murthy, working in the State Public Works department, Revathi and Srinivasan, working in the Accountant General office and Kameswari and D. V. Narasimham, Chief Engineer in the State Electricity board. Muthys had three daughters – Vasumathi, Jyothi and Arathi. Arathi and Kavita were like cradle friends. Even today we are connected. Kameswari is a famous Telugu writer. Some of her stories are made into movies. She has been over poured with awards. Some of her stories were translated by Sheela and got published in Kannada magazines. My division colleagues and their families were close to us. Particularly, Sastry, Bhima Rao, Raviprasad, MK Rao & KK Rao from the laboratory. We are indebted to Rajagopala Rao & their family for putting up Anita with them. MK Rao went away to Nigeria and ended up in US. Bhima Rao was the only person who worked for his Ph. D. from the Indian School of Mines, Dhanbad with Professor TC Rao and myself as his supervisors. A research paper on his work got a gold medal from the Institution of Engineers in 1995.

As I write now, all of them have left Bhubaneswar and settled in their home towns. However there were two tragedies. The first of Srinivasan - While in service at Raigada in Koraput District accidentally fell down on road side and eventually died in the hospital at Vizag. At that time he was alone with family living in Madras for children sake. Even before that their second daughter Sunita also died in fire accident at home – she was preparing for examination under candle light due to no power and fell asleep on to the burning candle. Their first daughter Srilatha, is settled in Madras. Narasimham, after retirement settled in Hyderabad. Last time I met him was in Hyderabad during the marriage of my niece Manasa (Raghu’s daughter). Within a week he died a natural death suddenly – After lunch on the chair with a newspaper in hand.

Another close company we had during our stay in Orissa was when Somasudar was on transfer to Heavy Water Plant in Talcher Thermal Plant for a few years. We use to visit them at Talcher and every time they were in Bhubaneswar they were with us. Their children Vidya and Vinay are settled in America. Somasundars went back to Bombay and after retirement are settled in Mysore. We continue to be in contact with each other.

Around the time when I joined the Laboratory, I became aware of a scheme the United States had launched during the presidency of JFK for exceptionally qualified persons to get directly a permanent visa, popularly known as Green Card. One of those days, I initiated my interest in the same. It nearly took two years before a new Director was appointed. There always will be limitations for the acting person to take initiative and the situation in the laboratory was a bit disturbed. Some of us were concentrating on publishing research papers. Professor Jena from Banaras Hindu University, a metallurgist joined as the Director.
Keeping with our life, the city was also developing at a snail’s pace. When local manual telephone exchange expanded in 1974 it was easy to get a phone that kept us connected with outside world. Within a fortnight or so, through the same phone we got the second tragic news in my life – passing away of my father-in-law. That it was a much greater shock for Sheela (and all her sisters) would be a gross understatement. He was a devoted father, admiring his creation and dreaming their future. It is difficult for me to comprehend how they even today become emotional of his living memory. This applies also to my sister and brother who spent a year with the family in Hyderabad. All this speaks a volume to the noble soul that he was. He is the second generous person I have come across in my life after my grandfather. He had spent many brief periods with us at Bhubaneswar. When both of them came for the first time with Nalini, all of us had gone on a holiday to Darjeeling in 1967-68 to spend a fortnight with his nephew. A fortnight before passing away, I believe he was planning another trip to Bhubaneswar. Without the only guidance, life for the family became very difficult. Two of the daughters, Meera and Latha, after completing their graduation were working in a local bank. Nalini was studying at DMS Mysore. Only son, Rajendar was working in an Engineering firm at Coimbatore.

Children started schooling in a local convent but we were on the lookout for a change to a broad-based traditional system. Fortunately for us there was a Demonstration multipurpose School (DMS) close by. This school was a part of Regional Colleges of Education (REC) established by the Central Government in many parts of the country. Not only my children but many in our families have taken the advantage of this effective organization in the country. Sarasa not only passed out of the college as a combined graduate and trained teacher’s degree and later on Masters, joined the organization and retired as the Vice – Principal of the DMS at Mysore. Besides, Nalini my last sister-in-law and a cousin of mine Vasumathi (Vasu) also had passed out of DMS at Mysore. Vasu is daughter of Kamala my mother’s elder sister and Srinivasachar. Their other children are Malathi, Gopinath, Dwaraki and Srinath. They hail from Anekal a town near Bangalore. I remember many summer holidays being spent in their house. At that time, my pati also was living with them along with Shanta and Rajagopal (Kuttinna), children of chin mama who was away working in Orissa.

My sister Latha, stayed with us at Bhubaneswar for an academic year to complete her Master’s in Education at REC during 1973-74. In June 1975 she got married to Vanamali. At that time he an Engineer was teaching in a college in North India. It was a coincidence that when I visited Sindri in 1959 I had visited Vanamali’s parents through an acquaintance of them, Deshikachar at Ajjampur. During the year Latha was with us, Vanamali had visited us. Vanamali’s mother Sharadamma was a Congress party worker and a close family friend at Mysore. Vanamali retired as the CEO of a German Company in India manufacturing industrial instruments.

Later the same year Sarasa got married. Sampath, an Engineer in the State Government, had actually come to the house following an alliance we had sought for his brother but eventually impressed by her horoscope ended up in the family. Three years later, my other sister Leelu also got married. Narasimhan, my namesake, was a Manager in Syndicate Bank. Leelu was an office management person before marriage. Narasimhan resigned from the bank and managed many business ventures. Main one is to build residential and commercial buildings. Leelu is also involved in them. He is still very active in this business.
Babu, my second brother after his engineering worked as a trainee in TI Cycles at Chennai. In 1977 he got married to Saraswathi (Sarasi). Sarasi was a junior college mate of Sarasa at Mysore. They met later when Babu was a tenant in her father’s house while working for TI cycles. Babu has served many industries in material management including cement, auto mobile ancillary etc. all over India.

Classical music became the most important part of our life since Hyderabad days. I got more involved in classical music and got to know more about musicians. Dr. Balamuralikrishna, was an up and coming artist then. I became a greatest fan of him and never missed his radio or TV programs. In the Ceylon radio program he was to answer fan mail sponsored by a firm making incense sticks. Around that time, he had composed a few Tillanas in Ragamalika that were becoming very popular to the extent he was becoming known as Thillana Balamuralikrishna. Taking cue from the effectiveness of such, we had written to him on the possibility of composing songs mixing up talas (different rhythms). It was a surprise that within a few months, on the radio national program he did present a unique Thillana with variations in raga and tala – Pancha Gathi Priya Ragamalika - based on Karaharapriya.

It was in 1977 Shyla graduated from the University of Mysore. With that each one of us had a mark of graduation from the same University. Children passing out from the same University following their parents is generally common but, for eight of them to do so could be unique. That must have been a matter of great satisfaction vindicating his unflinching faith in Sai baba and for my mother for having realized her dreams for her children.

Shyla then worked for Indian Space Organization for a short while before proceeding to join Louisiana University at Baton Rouge for further studies.

Raghu after a stint at Manipal moved to Kanpur for higher studies and after getting Ph. D taught at Allahabad for a while and moved on to Hyderabad to join corporate R & D of Bharat Heavy Electricals. In 1980 he got married to Kumuda, a medical doctor, the first in our family. After his research career he was back into teaching before joining a consulting firm specializing in structures where he is still employed.

An important development in 1979 was that Sarasa and Sampath became proud owners of their house in Mysore. They named the house Chaitra, the name of first month in Hindu calendar. Incidentally that was the first ever own house in our family. From then on my parents started living with them. All of us owe a lot to Sampath. By now each one of our (Sheela & myself) siblings are in owning houses. We are keeping up the traditions of our parents in stay put with our children.

Four years later in 1982 Paddu got married. Ramaswamy was a Mechanical Engineer from the Mysore University and a Master’s in Instrumentation from the Indian Institute of Science worked in the State Agricultural University. After retirement worked for some time in private for IT companies and at present consulting.

While starting my career at Bhubaneswar was challenging that kept me busy, for Sheela it posed a different challenge for her outgoing personality and with all the histrionic talent. Having been always in a metropolitan place life in Bhubaneswar was a difficult one. It is to her credit to have continued her education to complete a Master’s course in Carnatic music at the Orissa Academy of
Music and Arts. She also worked as a teacher in a local school for a while and at the DMS besides teaching music to children in our campus.

In 1977, I got an opportunity to visit the United States for five weeks under CSIR National Science Foundation exchange program. Thus, I was able to travel far and wide in the United States visiting many Government and private research institutions and University Departments. That also gave me a chance to assess my field as in the back of my mind was my pending application for a permanent visa to US. Apart from the official schedule, invariably every evening I used to end up in the house of an Indian acquaintance for dinner. During such visit I always got an impression of unsettled feeling in most of them with a distant thought of returning to India. In fact, none of them have returned. At the end of my official visit, I stayed back for two weeks to enjoy the hospitality of Geetha and Raman.

During the same period, there were two weddings back to back of Sheela’s sisters, Meera and Latha that I missed. The year 1977 thus continued to be an eventful year. My mother-in-law left for US to be with Geetha. Meera’s husband Prakash was working for an iron ore exporting company near Mangalore. Subsequently had his own business in Civil Engineering in the areas of pre-stressed concrete and industrial flooring. Meera got transferred to Chennai. Latha’s husband Balakrishnan (Batchan), was working in a factory at Hyderabad producing laminated sheets (HYLAM). He is related to Sunder.

Once in two years home travel concession was extended to other places within India also. I took this opening to travel with family to different places, like Ooty, Andaman and Nicobar Islands and Leh (Ladakh). On many of such trips Sunitha (Kavita’s cousin) also accompanied us.

Kavita is very fond of dogs. She had reared a street dog that lived only for a few months. When the pup was living, she used to sleep with the dog on the floor. At 13 she had been to Chennai to spend a summer vacation with her aunt Meera. On return, she stealthily brought a newly born pup (Alsatian cross) in a basket in train travelling for 20 hours. Mikky, was such a sweet dog and all of us were very fond of her.

During one of my official tour down south I was in Chennai. By then Meera, my sister-in-law had changed her residence to a flat and was staying at Nandanam. That was a cute flat built by Tamil Nadu Housing Board. Casually I remarked my wish to have owned the house and rented it to her. The Housing Board office was just behind her house and she suggested why not enquire what was available. Just then they were seeking applications for high income group (HIG) flats at Kotturpuram not far from that place. Having known I made an application. After a year or so when I came to know from the newspaper all applicants for Kotturpuram flats were allotted. I had never heard of any one getting a housing board house without competition. There was a history behind Kotturpuram area. A few years before, some residences in the same area were inundated due to floods and people were sceptical. Anyway, normal formalities of securing a loan I had to follow and wait for the houses to be built. I had not seen the house till the date of its possession. The whole process was dream-like for we had not dreamt of owning a house. That reminded me of our wish to settle in Chennai after retirement during our first visit after marriage. We held on to it for nearly 25 years but never lived there. Finally, we had to dispose it for managing the property became very difficult.

In 1979, Sheela’s brother Babu got married to Revathi. Babu had his own business related to Civil Engineering. Later in 1982, Nalini got married. Prem Kumar had settled in the United States. In
one of their visits to India they had come to Bhubaneswar also and we had a good time. Prem and Nalini both are in IT fields. Prem recently retired. Prem again is self-made person more than anyone else.

Around that time, an opening in the Mineral Development Board of Steel Ministry in New Delhi came up and I was successful in getting the position of Metallurgical Advisor. I accepted the two years assignment on deputation from CSIR. At that time Kavita had finished her pre-university education and on the lookout for further studies. We were always thinking of some professional course for our daughters so that they would be able to stand on their own for life support. Kavita got selected for admission in the Speech and Hearing Institute at Mysore from the seats earmarked for eastern region. Nearly 20 years stay at Bhubaneswar suddenly came to an end and there was a considerable disruption at home. One who got most affected was Anita. She had to stay for one year in our colleague’s house Rajagopala Rao at RRL Campus. All of us did not go at once to Delhi. In the beginning I alone went and later after the academic year, Sheela joined. Still Anita stayed back for her studies.

While at Delhi, I got my first car. It was a Government venture with a Japanese Auto maker – Suzuki sold under the brand name Maruti, the cheapest car available at that time. Allotment was on lottery and I was lucky to get it early in the process. The following summer, we took a venture to have an all India tour in our car. At that time Sheela and I alone were at Delhi with Miki.

Even before the venture an untoward thing happened. I was excited in Sheela to learn driving which she did. In one of the drives around Delhi we had a major accident. The car hit the barrier separating the road while passing a bus and our car landed on its roof. Both of us got out without a scratch. Sheela had a small cut on the chin. She went to All India Medical on a scooter with a stranger for attention while I was attending to the car. That was a providential escape as million worse things could have happened.

The plan was to touch Kanya Kumari the southern tip and return via Tirupati and Puri (to be in Puri in time for our 20th wedding anniversary on 7th March 1985 before returning to Delhi. On route to Hyderabad, we visited Khajuraho and Jabalpur. It was planned that Anita would join us at Hyderabad and proceed to Bangalore, Mysore, Guruvayur, Kanya Kumari, Srirangam, Chennai, Tirupati, and Puri. We had to cut short the trip short of Kanya Kumari at Munar hills to make it in time to Puri. Kavita joined us at Chennai and after visit at Puri she went back to Mysore. Anita stayed back at Bhubaneswar. On our return to Delhi we made a surprise halt at Bhopal to visit our friends Srilakshmi and Murthy’s daughter Vasumathi. That was a memorable trip.

While in Hyderabad Raghu made a remark that he did not think that I had taken a second opinion on the venture. On return to Delhi, I had taken special efforts to visit the Maruti Factory to have the vehicle checked up. Some of them said that we had taken some risk in the venture for the vehicle is not designed for cross country travel.

Then I had only a few months remaining of my deputation terms before returning to Bhubaneswar. My mother-in-law had come for a visit. She was to return to USA and a visa extension was required. In this context I had to visit the US Consulate at Delhi. By then Nalini’s husband Prem had sufficiently brainwashed me about the blunder I had committed in giving up the green card opportunity and how much it would have helped our daughters to pursue higher studies etc. This was
working in my mind. More importantly, Kavita was about to complete her course the year following the next and it was ideal for her to continue graduate school in US, chance permitting. Thus, while at US consulate I briefed my earlier application for visa. To encourage my ambitions, I was told that the papers were still alive (by the Gate Keeper at the US consulate) in case I wish to follow up. Accordingly, I moved the papers. By the end of 1985 we returned to Bhubaneswar.

The day before I was leaving Delhi, I came to know of a music concert by my favourite singer Dr. Balamuralikrishna. At that time I was alone in CSIR guest house as Sheela and Mikki had returned to Bhubaneswar and all belongings including the car on way by rail. By the time I thought of it, all seated tickets were sold. Some like me were all accommodated on the stage. He even sang one of my request. I could not have dreamt of a better send off from Delhi.

In 1985 Shyla my last sister got married. Sanjay was studying in the same University at Baton Rouge. Later on they moved to Springfield in Massachusetts. None of the family members could attend the wedding. She is on self-made person among the girls without any help from anyone.

In 1986, I got an invitation to present a paper in an International Conference during spring of 1987. In preparation for participation, I followed up getting an appointment with the consulate to obtain migration visa for myself and Kavita. 21st of November 1986 was the date. While I was successful in getting the visa, she was disqualified by two days after turning 20 years. I was advised to apply for a 2nd preference visa for her on reaching US. That was the anti-climax of the entire project. Time heals disappointments and normal course follows.

1987 was my revisit to the US with 1977 memories still lingering. Apart from the presentation and becoming eligible for permanent status in US I had the opportunity to visit Nalini and Shyla for the first time besides revisiting Geetha and Raman. Utsav was just then born to Shyla and Sanjay. By then my parents had visited US to be with Shyla for a while.

In the following year, Kavita continued her Masters course in the same Institute. Anita could not get admission to continue pre-university course at Bhubaneswar REC. She moved to Mysore to stay with Sarasa and joined the College there. While at REC she won the first prize in all India music competition among the RECs held at Bhopal.

1988 I got an opportunity to visit UK under British Council exchange program. This gave me an opportunity to revisit my Department at the Sheffield University. On the day I stepped into the Department, it was exactly 27 years since I joined there first time. On completion of the visit in UK went across to US for a short visit before return. By then Kavita became eligible to migrate to US. In the meantime, after completion of her Masters in Speech Pathology and Audiology, she had taken up a job at Hyderabad. In June of 1989 she moved to United States. Around the same period, I got an opportunity to spend six months sabbatical in a Mineral Processing Institute in Sweden. Along with me Sheela and Anita travelled up to UK to proceed to US on the strength of their migration visa. The sale of our car provided air tickets for them to travel to the US. As all my family members had their feet in US it was natural course of action for me to join them and thus took a voluntary retirement from my service at CSIR on return from Sweden. Weeks before I was leaving Sweden, Sheela joined me to accompany to India.
During preparation to leave the country, the month of March being our 25th wedding anniversary, we had again been to Puri Temple. While at Puri, a wish occurred, God willing to possibly return to Puri on 50th Anniversary.

Being at the end of the chapter at Bhubaneswar I have to record another aspect of our life. Independent India in its formation stages followed socialistic pattern of governance and most of the major industries were state owned in addition to teaching and research institutions. Proper residential accommodation in general were acute in the country. As a result from the management point of view invariably all public sector organisations and Government establishments built minimal campus based accommodation for the staff as an incentive to attract talent to compensate restricted emoluments being given. All such accommodation for higher level management personnel included servant’s quarters – legacy of British rule. We also had such a facility in our residence. Like others we also used such a facility for some in the town to live and in return got some household help from those who used the facility. Sheela is very adept in such management. We found a tribal family with an old widowed mother Mami, her son, Jaleswar, pulling rickshaw for lively hood with his wife Paguni, a seven year old daughter, Adeswar (Ade). Incidentally, old woman’s face is all tattooed a practice in vogue in tribal village families to protect their chastity. Paguni was a help in household chores. In her spare time, Sheela was educating Ade. As time passed by slowly Ade grew up almost like a family member, a company in same age group for Kavita and Anita. Among them they use to struggle to get hold of story and comic books etc. Ade stayed with us for almost 10 years. By instinct of nature, on fine morning Ade ran away with a person in whom she had found her soulmate. That was as much a shock as it would have been if one of our daughters had done the same. In spite of the passage of time we had not totally forgotten the incident. When we had an opportunity to return to Bhubaneswar in 2015 to visit Puri for our 50th wedding anniversary, Sheela made it a point to somehow get to find out how she was. May be she also had regretted of what had happened. We came to know she even had gone to Madras in search of our address. She was equally happy to get in touch with us. By then Ade’s son-in-law had become an established building contractor in Bangalore. Ade’s husband was a driver in the State Government. She even offered to build a house for us if we had a land. Her daughter, Popnam had become a graduate and working in a school in Bangalore. Subsequently, when Kavita with her family visited Bhubaneswar there were interaction with the family. We were happy to note how Ade had moved up in the ladder of living standards. This was one small story how one under previlaged girl getting minimal education and exposure to a decent life can have a significant life improvement.

Just around two years ago Prof. Jena, the Director had left the laboratory Prof. H. S. Ray from IIT, Kharagpur had taken charge.

That was May 1990. At Bhubaneswar, we had a memorable farewell party by my division consisting 20 families. Just then, officially my half-life period had hardly elapsed and as one chapter ended, another was to begin. We took a train to Chennai in the wee hours of the morning almost the same time we had landed in 1965. Thus our 25 years of honeymoon at Bhubaneswar ended. While on the train to Chennai I got the sad news of sudden passing away of Dr. P.R. Roy of Atomic Energy, who was the chairman of Research Council of RRL.
Indian Institute of Minerals & Material Technology (Formerly Regional Research Laboratory),
Bhubaneswar
While at Chennai, we stayed with my mother’s cousin Shanta, (Daughter of chin mama). We also had our belongings stored in their house. In our flat in Chennai Sunita and her family were staying. Before we left Chennai, we moved all our belongings stored in Chennai to Bangalore and got them distributed or disposed. By then, Kavita had secured an employment and Anita had enrolled in Pharmacy school at Virginia Commonwealth University, Richmond. They were staying in an apartment close by where Nalini and Prem lived. My mother-in-law was also staying with them at that time. As much as they were inspiring us for resettlement, they were also very helpful in them getting a foothold in a totally new place.

Ironically, that was not an ideal time in America for someone to get a gainful employment at least for one like me. My field of experience was on the decline. More importantly, healthcare was a pressing need as parents are not eligible to get health insurance from their offspring’s employers. Sheela found a few students to teach music apart from babysitting Nalini’s child. My sister Shyla and Sanjay had driven down to Richmond to visit us on their way to India on holidays and I had taken them to New York Airport and kept their car to receive them on their return. I travelled with them to Springfield to spend few days. My other sister Padma also was there with us at that time. Around the same time, Sunder my brother-in-law with Vatsala came to Canada to visit his sister. We drove to Canada and brought them to Richmond to spend some time before they returned.

My quest for finding any employment did not meet with success. I earned some money by working as enumerator during 1990 census. Almost a year had passed like this. I had also toyed with the idea of distributing newspapers. One other thing I was contemplating was to get some research grants from the Government under Small Business Industrial Research (SBIR) Program. In this context, while in Springfield with Shyla, I met some such entrepreneurs to get ideas. This also took me to an SBIR conference at Atlanta.

While in Atlanta, I got a phone call from Shanta at Chennai, that someone from CSIR’s office in Delhi was in search of me and that I should contact them. On further follow up, I came to know that whether I would be interested in taking up the position of the Director of the Central Fuel Research Institute at Dhanbad in Bihar. To the best of my knowledge, I am yet to come across a precedence of any one who retired from a government position in India being called back. I recollected that my first official visit with in months of joining Bhubaneswar in 1965 was to CFRI. I was humbled. Considering the predicament that I was in, I could not refuse the offer. It meant for me to be ten thousand miles away from my family for six years leaving my wife and two daughters alone to fend themselves notwithstanding friends and relatives around. I recollected a conversation at this time my father-in-law, mentioning to his landlord long time back in 1964 during negotiation to rent another of his house that one day he will be a Director of a Laboratory. Another incidence of inkling of coming events. By then, Kavita had done well to buy a townhouse and we had all moved into from the rental apartment. In November 1991 I left the country back to India for the new assignment. At that time Vatsala was in US with Nalini. She later told me that Sheela did not talk with any one for three days.
From the US I took the journey westwards via Los Angeles, Tokyo, Bangkok, to Calcutta and train to Dhanbad. Being alone, I had planned to stay in the Guest House of the Institute. CFRI was the first National Laboratory of the Council of Scientific CSIR with a total staff exceeding 1,000 and five regional stations in different parts of the country. Housing being generally a problem in the country, most Government establishments provide quarters for their employees to stay within the campus. The Institute had a campus to accommodate nearly 600 with its own water supply. Being the Director of such an institution is like a Mayor of a small township. The institute was set up for R & D in the area of fuels particularly coal. Thus, it was situated in the state of Bihar rich not only in coal but other minerals. During the past 50 years after independence, CFRI had established itself as a premier research institution supporting industrial development. Particularly noteworthy was its support to the development of iron & steel industry in using limited but inferior coking coals found in the country. Thus, coal cleaning and associated characterization was the main research area. Mineral processing being my main area of experience, I was feeling at home. At that same time, being an old institution, there were associated problems of age. Politically, Government also faced the difficulties in funding their institutions as in the past. Industrial research being the emphasis pressure was on obtaining funds sponsored. Fashion those days was to get funds from the outside Government kitty.

One Dr. J. W. Whitekar, a mining engineer from Scotland started the Institute during the British rule. Dr. A Lahiri, was the first Indian to succeed him. Dr. Krishna, who was at RRL Bhubaneswar and later became the Director of Indian Institute of Petroleum at Dehra Dun was also one of the Directors.

I thoroughly enjoyed my six years contract. I had to report, besides the Director General of CSIR also to the Research Advisory committee of the Institute. Dr. SK Gupta, with year of experience in Steel Industry, previously Managing Director of MECON was the Chairman of Research Advisory Council. In the last phase, Dr. Natarajan, Director, Indian Institute of Technology, Madras, was the chairman. I had full support of the central office, the advisory committee and cooperation of most of my colleagues. By the time I completed my tenure, we were getting 30 percent of our expenditure from external sources. The institute was the first of CSIR laboratory to acquire ISO certification inspired by Dr. SK Gupta. Being the first laboratory of CSIR we also celebrated its Golden Jubilee. There were yearlong activities of seminars, publications etc. I also had an opportunity to visit Thailand, Mongolia, China, South Africa, Botswana and United States during my tenure on collaborations, conferences etc. Another personal landmark was the recognition of my contribution in the area of energy through a national award – Hari Om Bhasin Award for Energy for the year 1998 that was officially given in 1999. That was an ideal parting gift for my life long service.

A cursory look at a long list of the awardees who have rendered an yeoman service in the development of Science & Technology in the field of Energy – to mention a few, Late President Abdul Kalam, Late Satish Dhawan, Raja Ramanna – I feel humbled and there should be no excuse for any complaint concerning my life. That was God’s will. Only Sheela was present when the award was made.

In my absence my family took care of themselves with the main burden being on Kavita. Sheela had her music school expanded. She also found an outlet in summer to participate in a dance camp organized by an ashram at Yoga Ville, 60 miles from Richmond teaching music and taking care...
of participating students. Yoga Ville was initiated and run by Swamy Satchidananda. I am sure we have enjoyed his blessings too.

A major milestone during this period was Kavita’s wedding. Adam Kaul, an American and a student of psychiatry got interested when he met the family through a common friend with whom he was sharing an apartment. Being an interracial relation Sheela went through intense anxiety during the period all alone. It was particularly so since many proposals prior to this passed by and his was the first proposal to fusion. Being far away and immersed in my own work there was not much I could do except the pleasant duty of giving away the bride in 1995 on 3rd July. Just as my birth day happens the day after the Independence Day of India, Kavita got married one day prior to American Independence Day.

One of my major failing in life particularly as an Indian parent was not to put in special efforts in getting my two daughters married. I was averse from the core of my heart to arrange marriages in Indian social system. My daughters were left to fend for themselves. In this context, it was a God given gift for us in Adam finding a way to our home. In a way it was a repeat feat in our family. If my parents were fortunate to get a son-in-law like Sampath, that fortune has only got magnified in our case. More of this in subsequent narration. One does not find many parallels to my life. Kaul’s family ae original from Germany and with genealogy connected to Wright Brothers.

Jay, our first grandson was born in 1997. They retained my name as his middle name. Another milestone was that Anita became a pharmacist, and was on her own. I visited US twice during my tenure at CFRI. Sheela also visited me thrice at Dhanbad for brief periods. By her second visit, I had moved to the new house that was built for the residence of the Director. Her final visit was at the end of my contract period. We again had an equally memorable send off.

It was during a routine medical check-up she was diagnosed of a birth defect in heart – ASD. Follow-up checks were done at the All India Medical Institute. Only remedy was an open-heart surgery but as we were about to wind up in India, we did not take any immediate action. After Kavita got married Adam moved to her apartment. After some time, Kavita and Adam bought another house. For a brief period, Adam’s sister Caroline was staying along with Anita in the townhouse. By the time I returned, Caroline had got married and left.

I returned to United State at the end of 1997. That was the end of my professional association with CSIR. Having been with a new institution from the scratch for most of the time from the beginning and the last six years with the oldest laboratory I had the privilege of being in close association with leading personalities. Indira Gandhi the then Prime minister visited RRL Bhubaneswar twice. I cherish having been in contact with all the Directors General of CSIR except the first one. They are Late Dr. Atma Ram, Late Dr. Y. Nayudamma (a victim of Air India Crash on Ireland), Dr. S. Varadarajan, Late Dr. G. S. Siddhu, Dr. A. P. Mitra, Dr. S. K. Joshi and Dr. R. A. Mashelkar. I was reporting from Dhanbad first to Dr. Joshi & then to Dr. Mashelkar. I was also fortunate to have been close contact with Late Dr. Abdul Kalam during his tenure as the Advisor to the Prime Minister before he became the President of India.

Before, I end my history at CFRI I thought it is fit to record some small deeds but of great significance particularly as I plan to place this biography of mine as a part of the site with title legacy for posterity. For any person, institution, state or a nation proper remembrance of the past is a matter
of strength in future. I feel happy to have had an opportunity to name the conference hall at CFRI and the library to honour the memories of Dr. Lahiri and Dr. Krishna respectively. Also, we named a newly constructed entrance gate to the Institute as Nalanda Gate to mark Nalanda University the oldest learning institution that existed in the state & the country. Even though, CFRI was the first organization of CSIR there was no auditorium during the past nearly fifty years whereas many of the newly established institutions were better equipped. In the years before I joined efforts were being made to get some grant to cover the open area in the centre of the main building. We made use the funds available to a decent semi closed facility and inaugurated the Ciborium on one of the Engineers Day to honour Sir. M. Viswesvarayya the greatest Engineer the country has produced.
During my previous visit to US for a conference in Tampa to present a paper I had established a contact with a firm developing a coal mill. On return, I found an assignment with them for gainful occupation. Still health care was the problem. The Company for which I was working being a family business and being still in infancy could not afford full employment. In the meantime, Sheela took up a job in Rainbow Station, a top class child care facility, behind our house that afforded healthcare for both of us and also free day care for Jay. Ms. Susan Bishop the Director of the facility was highly appreciative of Sheela’s dedication to work. Many such units are in operation under franchise including in China.

In 1999 as I turned 60, according to tradition we had a family celebration at the Pittsburgh Temple considered a replica of Tirupati arranged by Kavita & Adam. Besides families of Geetha and Nalini, Shyla and Sanjay who by now had moved to California from Springfield in Massachusetts had joined us. November the same year Anita got married to a person of Indian origin who had completed Masters in US and working. On January 7th of 2000, our second grandson Dave was born coinciding with Jay’s birth date. His parents chose my father’s-in-law name as his middle name.

In the meantime, our family doctor had reconfirmed Sheela’s ASD and that summer we decided to have the surgery done. She had worked to pay for her surgery. By God’s grace she came through the procedure. She had worked to pay for her surgery.

For nearly a year, Kavita would leave both her sons in the town house. Sheela would take Jay with her to the day care. For six months when Dave was born, Sheela’s sister-in-law, Revathi (Babu’s wife) was with us for help. After Revathi left, I was taking care of Dave. The plan was that when I secure full time employment, I could take on the mortgage for the town house. Nothing was on the horizon. Because of such uncertainty, Kavita and Adam decided that they would move to a bigger house selling both the townhouse and their own so that all of us can stay together. For months, they could not get a suitable house. Finally, they decided to buy a house with adequate land and build an extension for us to stay. It was in July 2001 a relator put up the town house on sale. Within three days it was sold. The town house was to be vacated. In the mean time they also found another house. Within a week of our shifting to their old house I got a job in the State Government. If this had taken place a week earlier, all other changes would have been unnecessary. After staying for a week in their old house, all of us shifted to their new house. Within two years an extension was built and all of us were comfortably housed.

This was in a way a novel arrangement and a rare one in this country. Adam’s parents Edwin and Patricia Kaul were working as Managers in Retirement Communities. When their assignment came to an end they came back and in the interim before they had their own home were also here with all of us. They were living in one end of the house—the West Wing and we in the East Wing. We get on well with our Sambandhis (Indian languages are as versatile as Sanskrit that has a separate word to describe each and every relation). For some time they had their own home overlooking a lake. Now, just like us they are also living in an extended part of their daughter’s house. We have gone on many trips and cruises together. Meet almost every week as the also live close by.
Jay and Dave are growing well with accomplishments both in academics and in extra-curricular activities with the active involvement of both the parents and support from grandparents from both sides. Adam was fully involved in their scout activities. Kavita, along with them picked up Martial Arts to become advanced black belts. In music they also became students in Sheela’s school and were adept in rendering vocal in South Indian style of music. Sheela had initiated both Jay and Dave in chanting Vishnu Sahasranamam. This ability came in handy when their thread ceremonies was performed. They could also join others in chanting. They also picked up piano. For Adam’s family, belonging to a separate religion, shows their broad mind in willingness to accept such alien traditions that may look exotic.

In the month of June 2003 my mother-in-law passed away. It was as sudden as that of my father-in-law. She felt some discomfort and within minutes collapsed in the bathroom. Meera was attending on her. She became aware of her death a few moments earlier as she expressed the same to Meera. Another such instance I have come across is that of my chin mama. He became aware of his end a day or so before. Traditionally, in our culture every day after taking bath and before prayers we put on a redline mark on our forehead out of thin paste made out of water and specific red powder using a thin silver wire. That morning he had difficulty in following this practice as one has to look at the root of his nose. I believe he told his family members that his end is approaching.

Three great souls in my life whom I hold in great esteem for their dedication, management abilities and selfless service are my pati, my mother-law and my mother. My pati was like Mother Teresa in her service to the family. Given an opportunity each one of them could have handled any responsibility. The way in which my mother has brought up five daughters is commendable. I have not come across a parallel example.

On 31 March 2005, my father passed away. He was ailing and bedridden for nearly four years after a fall in the backyard resulting in hip fracture. All his service years as an accountant he was keeping the account of the Government transactions. 31stMarch also happens to be financial year closing for all government offices. As much as he was devoted to his job, he chose to close his account also on the same day. After his retirement, he chose to stay with Sarasa all the time even though he had seven more options. We are following the family tradition. More than his daughter, Sampath and he got on very well. Sampath was more to him than anyone else. We recollect the past land marks, as he turned 60, 70, 80 & 85. Most memorable was when his 60th wedding anniversary was celebrated. Rarely many celebrate 60 years of successful marriage. One thing I admired of him is his ability to get along with everyone during his service period.

Those few months after my permanent job, Anita’s marriage and their shifting to Kansas City were the best period of my life. However, that bliss was only short lived. Soon we suspected everything was not alright. Within two years, they shifted back to Virginia and established in DC area. Also, they bought a house. There was some consolation of them being close to us within 100 miles. We slowly came to know of long standing domestic abuse. Despite prolonged patience and family interference and advice finally at the end of six years, in 2006 Anita took a bold decision to come out of the wedlock. They sold their beautiful house and she bought a town house also in Northern Virginia. For three more years we all tried with our best of efforts to find a match for Anita to get married again. Nothing clicked. As a way out the situation and make a meaningful living, Anita took a bold step to have a child as a single mother. Coming to think of her even when she was in late teens any day, she
would have preferred a family to a profession. She was fond of children. First thought was to adopt a child. All alternatives were explored and finally took a bold step to have a child in-vitro. We stood by her in this venture. On March 21, 2011 she delivered a beautiful baby girl – Riya.

On 23rd June the same year my mother passed away. Her end was so sudden following less than eight hours of hospitalization unlike my father who suffered prolonged years. Due to some discomfort, she was taken to hospital late that night and early morning she was pronounce dead. I believe the cause was aneurism (this was known at the time of her by-pass surgery a few years earlier) – for the same reason Einstein’s life came to an end. This episode can never be forgotten since all of us had planned to celebrate her completion of 90 years within the next nine months.

Riya has been a source of bountiful happiness for us all these years and has more than balanced all our troubles, anxiety, shortfall etc. Sheela relocated to be with Anita at Manassas. I was lucky enough to tele-work two days at Manassas to be of help to them. When she was three Riya started going to preschool at Manassas. Within a year, Anita as Pharmacist at COSTCO became a manager and was posted in another location far away. After a year or so commuting long distance she decided to move closer to her work place. It took close to a year to find a house after going through nearly 60 options. Finally, she moved to Lorton within five miles of her workplace.

Apart from these ups and downs away-normal happenings, other high watermark in our life has been travel for pleasure. Since 2001, at least once a year, we have had a long vacation that took us to different parts the world. Sojourn covered Canada, Europe, New Zealand & Australia, Hawaii, and cruises to Alaska, Baltic Countries, and Greek Islands besides many trips to India.

Music has played an important role in our life. Moving from India to US has been of more an opportunity to Sheela to nurture her talent. She has all along been teaching music in India but to a handful of children. Driven by passion & need, she set up a school –‘SHRUTHI LAYA’. One of her students Abhinav made full use to render his first concert – ARANGETRAM. More than this community was appreciative of her passion and dedication in teaching music. For some years ‘Richmond Rasika’s – A music association was alive in the city propagating Indian classical music. They arrange performances of leading artists in the city. Also, celebrated annually Tyagaraja Aradhana giving opportunity to children to sing. Many children of SHRUTHI LAYA including our grandchildren Jay & Dave were regular participants. To our surprise, in April 2009 Richmond Rasikas honoured Sheela recognizing her service to Carnatic Music.

Because of her music school we came in close contact with Vuyyuru family – Lokesh & Sujata. Both are doctors. Their daughter, Swetha also became a doctor.

Same year in August when I turned 70, Kavita & Adam had again taken initiative for a memorable get together. This time it was a visit to a Natural Tunnel, little known tourist attraction in southern tip of Virginia that I was always keen to see. Many more of extend family members joined the get-together. That was an enjoyable weekend.

Within the month of my turning 60, Sheela underwent a major open-heart surgery. Soon after return from the get-together at the Natural Tunnel, in September 2009 she was diagnosed of ovarian cancer at advanced stage and had to undergo another major surgery immediately. All this happened following a routine visit to the family doctor due to some discomfort in stomach on an evening and
tests in the night after outpatient hospitalization. The next morning nothing had changed in the world but for us nothing was the same.

She came out of the surgery successfully followed by therapy for a year. Again, after short of five years there was successive relapse three times and currently, chemotherapy has become part of her life. More than the suffering, this was an end to SHRUTHI LAYA, her most satisfying and passionate venture.

Almost the same time in 2009, Vani & Pavani Ram our family friend faced a worst tragedy. Their daughter, Priyanka, around 11 years of age in School was diagnosed with leukaemia but within months she passed away. That was a sad happening for the whole community.

In 2013 another untimely tragedy occurred in the family for the first time. Sunder along with Vatsala had come to Canada to visit their daughter. Sunder who had been suffering from COPD passed away. This was a great shock to all in the family. He was a self-made man. He rose from the ranks to retire as a General Manager in National Textile Corporation in India. An extrovert and go-getter fondly loved by one and all.

Among all these ventures, in 2015 we were to celebrate our 50 years of marriage. As we were in Puri in 1990, on completion of 25 years landmark I had made a mention of our desire to revisit 50th anniversary. It was the grace of Lord Jangannath that it did happen. Besides, Kavita, Anita, & Riya, all my siblings and all but two of Sheela’s sisters with their spouses were present during the occasion. My sister Latha took a major responsibility in the organization. When I made the travel reservation none of this was planned. We had just made a mention of our program to everyone and would be happy if anyone could join. On the day in Puri there was a surprise classical dance program was also arranged by Kavita. On return, there was another party – arranged by Anita – among her circle of friends in Northern Virginia. For us it was a total surprise.

The following year Kavita completed 50 years. Anita again had arranged a party. Arati, Kavita’s cradle friend, from Australia was the most surprise guest. Kavita while serving the school, managed to obtain her Clinical Doctorate in Audiology (Au. D.). She chose me over Adam to decorate her with the hood during the award ceremony. This was best served by my doctorate degree – a prerequisite to don a hood. Kavita’s doctorate was a remarkable achievement and it stood testimony to the saying that it is never too late to learn. Subsequently, she retired from the school system after 20 years and now practicing on her own. Her efforts are commendable the way in which some of her clientele appreciate her service. Besides her profession Kavita is also actively spiritual. She follows Swami Yogananda practices Yoga. We had been to my nephew Adveteeya’s place two years ago and he is teaching Bhagavadgita to both of us. Last year, at Parakalmut she took Sharanaghathi (total surrender) according to Vishistadwaitha traditions and samasharanam.

Jay finished his school in 2015 and continued college at VCU from where Adam had graduated. Jay completed his graduation in 2019 and is now working for Federal employment at FDIC. In 2018 Dave finished his school and joined Virginia Tech.

Riya is going to school and in grade III. Besides, she is learning Bharath Natyam dance, and vocal music in South Indian style, and violin in western style.
In 2018 another memorable event happened like all our get together at Puri in 2015. This was in California when Shyla’s daughter Pooja got married. Like Kavita she is also married to an American, Sean.

A recent incident this year was Sadguru recognizing Sarasa, his teacher during his school days, had organized a function in Mysore to honour her. This has been the talk of the family and people who know Sarasa. Even before this event, being aware of Sadguru’s popularity, I was following his life and deeds on a global scale closely on social media. His concepts in promoting Yoga, to bring joy to millions are laudable. Whether it is mysticism, providential, or his extraordinary abilities one has to accept the special qualities he is endowed with. As he himself admits, people follow him because of his logic. But this much is certain – He is common-sense to the core and a marketing genius. But, his deeds in mass plantation and educating village children have earned him the coveted position.

Thus, we (Sheela and I) attended one of the Inner Engineering Program he ardently sells for the betterment of humanity. As a prerequisite, one has to take 7 online courses. His lectures on the course were a way different from his lectures available freely on the social media. At the end, we are happy to have taken the program. I followed the yoga – Shambhavi – diligently and found of immense help. Sheela could not derive full benefits because of her health predicaments. Benefits In my case were that at least, I came out of the medication for blood pressure being on it for the past five years. Also, the A1C marker came down from the borderline of 6.0 to 5.6. I feel more energetic than I used to be.

While my last sister Shyla and two of Sheela’s sisters are in US There are many others from the next generation in this country tipping the ratio away from India. My niece Shilpa, brother Babu’s daughter married to Sridhar is settled in California. They have two daughters, Satvika and Sahana. My niece Manasa, Raghu’s first daughter came here to study in the state of Florida. So did a classmate of her, Amit. They subsequently got married and are now in the state of California. They have a son and a daughter Vibhav and Shriya. My two nephews Adviteeya and Apratim, Leelu’s sons are in the country. Adviteeya, a pulmonology specialist from Cornell University is practicing in Atlanta. Adviteeya is married to Chaitanya. They have a wonderful child Vishnu. Apratim, a post graduate engineer from Stanford is working in California and is married to Seetha, a classical dancer. My other two nephews both Latha’s sons are here. Abhishek is working for an Indian firm in California. Abhishek is married to Dilnawaz. They have two sons – Druv and Jahan. Dhruv is studying in Bombay. Anmol, with a post graduate degree from Columbia University is working in Washington D. C. Anmol is married to Star and have a two year old son Nikhil. My nephew Utsav and niece Pooja, Shyla’s children both born here are working now. Utsav after graduation from UCLA is working for the Navy. He is married to Josie and have a one year daughter Alma. He completed his post graduate in Business Management from Harvard this year. Pooja also has completed her post-graduation this year.

Sheela’s niece Sunita, Vatsala’s daughter is married to Uday are settled in Canada. Their two daughters Samyukta and Naintara have graduated in Canada and are working. Sheela’s nephew Ashwin, Vatsala’s son, is married to Stacy and are working in California. They have a son, Aman and a daughter Mia. Sheela’s nephews, Vinay and Vikram, Geetha’s sons born in this country are in North Carolina and Seattle. Vinay is busy with his start-up company married to Sony a CEO of another start-up company. They have one daughter, Ishia and two sons, Keshav and Akash. Vikram is working for Amazon and married to Abigail. They have two boys – Miles & Webb. Sheela’s nephews Varun and
Gautham, Nalini’s children are in Virginia. Varun after graduation was serving Marines and now a Graduate student of Business Management in George Town University D. C. Gautham has completed his masters and working for Virginia School System.

Outside the American continent our family members are distributed in India, Australia England and Germany. In India, my niece Chaitra, Sarasa’s daughter, is married to Raghavan (popularly known Prasad) and they have a son Abhyudaya and a daughter Anupama. Chaitra was earlier working for INFOSYS and now taking care of their children. My nephew, Apoorv, Raghu’s son an Engineer is having his own business. My niece Sumi, daughter of Brother Babu, and married to Raghav, both in IT profession. They have a son, Avyukth and a daughter, Avyaya. My niece Kavya, Paddu’s daughter is working for an IT company and married to Amaresh who is having his own business. They have a son Achintya (Suggu). Sheela’s niece Sunayana, Meera’s daughter, is married to Arun, both Architects. They have two daughters, Diya and Drthi. Sheela’s niece Poonam, brother Babu’s daughter, is married to Gopu are having two daughters, Medha and Krishna. In Australia, Sheela’s niece Anusha, daughter of Latha, is married to Anand in Corporate line. They have two daughters Anvika and Anya. Sheela’s nephew Tejas, brother Babu’s son married to Ninanda is in IT line and is settled in Australia. In England, my niece, Kavana, daughter of sister Paddu is a lawyer is working for Ph.D. in Law at Cambridge and is married to Ramana working for Google. In Germany, Sheela’s niece, sister Latha’s daughter Divya is working in the area of clean energy.

This biography is dedicated to my three grandchildren and their cousins. Details in the form of a family tree is available on the website along with this biography.

Sometimes, I wonder if all family members had worked together for a common cause, it could have been a large corporate venture considering diversity in talent and individual achievements. With the completion of 80 years as per Hindu calendar on the auspicious day of Andal’s birthday we had a religious ceremony – Sudarshan Homam at home. Previous night my father had appeared in my dream for the first time. We were fortunate to have among us relatives and friends coming from far-off places. We also had a weekend get-together at a nearby State Park Resort in the company of friends and relatives on the 16th of this month. Like always all these arrangements were made pains takingly by Kavita and Adam with precision.

This is a story of one of many families struggling to move out from lower economic strata to a better one, looking for opportunities to do so. The extent of success varies. Sheela and I consider it to have been more fortunate compared to many.

For Sheela & myself it has been a long and memorable journey in the company of siblings on either side and their families and friends. We look forward to continued company to share both pleasure and pains before last lines are written.