First Decade (1951-1960): The Beginning of the Journey

The Department of Electrical Engineering is one of the first three engineering departments, started in 1951, with the first batch of students being selected from B.Sc. graduates and a few M. Sc. students. During the first two years the lecture classes and electrical machines laboratory were organized in the present old building and surrounding sheds. By February 1954, the ground floor laboratories of Electrical Machines and Electrical Measurements were set up in the present location. The teaching staff consisted of Prof. N. Kesava Murthy, Officer-in-charge of department, S. K. Ghosh (Lecturer), and three Instructors - B.K. Mukherjee, S.P. Roychoudhury and D. V. S. Murty.

As the I.I.T. [then known as Higher Technology Institute (HIT)] was sponsored and aided by UNESCO, Professors on deputation from abroad were aiding the departments. The Department of Electrical Engineering had one Professor (Electrical Machines) from Poland and Prof. V. M. Narbutt (Electrical Measurements and Instruments) for two years from 1955-57. From the beginning the acting Director Prof. R. A. Kraus, Directors Sir J. C. Ghosh, and Dr. S. R. Sengupta (from 1954) were very keen in providing the department with a good Electrical Measurement Laboratory, for which UNESCO provided instruments and testing equipments. D.V.S. Murty, when interviewed for the post of Instructor, was asked for his interest and skills to set up the Electrical Machines Laboratory. Prof. N. Kesavamurthy, took great interest in setting up the Electrical Measurements Laboratory by 1955, to the utmost satisfaction and pride of Dr. S. R. Sengupta. Prof. D. V. S. Murty was sent to M/s Cambridge Institute Co. Ltd., U. K. for training in the field and practice for three years under the Government of India overseas scholarship scheme. The first lab attendant of Measurement Laboratory, Mr. S. P. Bhattacharya, was also sent to West Germany for training at M/s Siemens. Dr. S. R. Sengupta, went to a great length to have teachers trained in institutions abroad for improving the technical education in IIT. Likewise, S. P. Roychoudhury (to Germany for Ph.D.) and P. K. Rajagopalan (to USA for MS) were deputed by the institute for advanced studies.

Prof. K. B. Menon returned from UK and took over as Professor-in-charge of the department in 1955. Prof. K. Sukumaran (the first faculty having a Ph.D.) joined as the first Head in July, 1956 from Guindy Engineering College, Madras and served for 2 years. Prof. K. B. Menon succeeded him as the Head of the Department in July, 1958.

In 1955 the PG programme (M.Tech. in Electrical Machines) was started and much later in July 1959 the second PG programme i.e. M.Tech. in Control System Engineering was introduced. The PG programmes then, were of 1 year duration. The first JEE for admission to IIT was organized in May 1955 for selecting the best students. By then, the department was reasonably staffed. Practical training for 2nd year B. Tech. students was organized during summer vacation in the department itself and later training was arranged by the Training & Placement Section for both 2nd and 3rd year students in industries. Research in Electrical Machines was initiated by Prof. N. Kesavamurthy, with P. K. Rajagopalan and V. Subba Rao (Research Scholar) as students. Prof. N.Kesava Murty wrote a book on "Electric and Magnetic Fields" published by Oxford Publications. Many faculty who joined the department are: Prof. T. Srinivasan, Prof. B. S. R. Iyengar, Prof. Thomas Philip, Prof. M.R. Krishnamurthy, Prof. R. N. Basu, Prof. S. K. Basu, Prof. K. V. Gopalratnam, Prof. I. Gopal Reddy, Prof. P. C. S. Krishnayya, Prof. K. Gopichand, and Dr. R. E. Bedford.

A number of Associate Lecturers joined the Department around 1959: Prof. V Balaram Murty, Prof. S. R. Gupta (1958), Prof. S. C. Bhar, Prof. H. L. Nakra, Prof. A. R. Raha, Prof. K. Mallikarjuna Rao, and Prof. A. K. Chattopadhyay (1960). Dr. A.Chatterjee ( PhD from Birmingham ) joined as a Lecturer in 1959.
Second Decade (1961-70)

The demand for engineers for nation building resulted in the intake being doubled by the end of first decade. During the two wars necessity for increasing the intake was further felt. Creation of a special stream of scientist engineers was felt desirable. Science graduates with B. Sc. qualification were selected to undergo the three-year engineering programme leading to the B. Tech degree.

Although GOI directed to start a course on “Instrumentation and Control” at IIT Kharagpur and in spite of Director, S.R. Sengupta’s wish, only the 3-year B. Tech. (Electrical Engineering) was offered to the first batch of scientist engineers and nearly 50 students passed in 1964. These special courses were offered for 3 years and were subsequently closed down. Apart from scholars pursuing research for PhD, the department also had some teacher trainees. The teacher trainee programme was introduced by GOI for improvement of engineering education. The objective was to train engineering graduates for a period of three years under the supervision and guidance of a Professor. The trainees were required to pursue an M.Tech. programme. On completion of the programme, the trainees were recruited as lecturers in different engineering colleges in the country.

The M. Tech course in “Control System Engineering” that started in 1959 was facilitated by the newly established "Control Systems Lab” with special equipment procured with UNESCO assistance. Prof. J. B. Cruz (Jr.) was deputed for 2 years for aiding the courses in Control System theory and practice.

The M. Tech. programme in “Power Systems” was started by Dr. S. P. Roychoudhury in 1963. When Dr S. P. Roychoudhury left for R. E. C (presently N. I. T) Durgapur, the course was streamlined by UNESCO Prof. I. P. Zherikin from USSR. Prof Zherikin also taught “Design of Small Electrical Machines” in the M Tech Course and guided A.K.Chattopadhyay in his M.Tech Project during his stay in the Department.

Dr. M. Datta, retired Chief Engineer of WBSEB joined in 1964 for teaching Power Systems and was in the department for two years. The High Voltage and Power Systems Laboratories were developed and the department started “Testing & Consultancy” as desired by the Indian Industry. The one-year DIIT programme in "Electric Traction" was started in 1967 and ran for two years. Its primary objective was to assist engineers from the Indian Railways to start and operate electric traction in India. Dr. K. Gopichand who returned from USSR after his Ph.D. organized this programme. The department conducted the first three day Seminar on “Electric Traction” with nearly forty participants. The DIIT course was closed down after the departure of Dr Gopichand. A shorter and diluted version of three months intensive training course was subsequently jointly started by the mechanical and electrical engineering departments of the institute for technical personnel from the Railways.

The long standing plan of having a B. Tech. program in “Instrumentation Engineering”, was not favored by the GOI which suggested that IITs should concentrate on PG programmes. This resulted in starting of a one-year DIIT programme in Instrumentation in 1969. The directive of GOI to the IITs to help the industries, in as many ways as possible, resulted in the following steps at the institute: a) 2-week to 12-week special short term courses for engineers from industry. b) Establishment of a Central Workshop & Instrument Service Section (CWISS) to render various services, needed for testing, research and consultancy. c) Establishment of Sponsored Research & Industrial Consultancy Cell (SRIC).

The QIP (Quality Improvement Programme) cell was set up on 1967 for bettering the skills and academic qualifications of teachers of engineering colleges in India through short term programmes, sequential summer schools and selecting them for Ph.D. programmes.

Research started in the department with Dr. P. K. Rajagopalan, becoming the first Doctorate of the department in 1960 and subsequently M. R. Krishnamurthy and D. V. S. Murty obtained their Ph D degrees by 1965. Later, research scholars V. Subba Rao, A. K. Basu, B. Kanta Rao and K. P. P. Pillai
obtained their Doctoral degrees. The strength of the department in the field of Electrical Machines was augmented by the contribution of Prof. N. Kesava Murthy. Research activities also started in Power Systems and Control Systems.

The increasing academic activity demanded expansion of the faculty strength. At the same time a few teachers after obtaining Ph. D. left and joined as Professors in Regional Engineering Colleges, while others left for better opportunities abroad as well as in India. The strength of the department grew to new heights by developing research and laboratory facilities. The institute had sanctions from BOG for the number of positions under each category of the three tier (Professor, Assistant Professor and Lecturer with the designation of Associate Lecturer abolished in this decade) system. New additions in this decade, apart from those already mentioned, were: Prof. A. Chatterjee (from Birmingham), Prof. Y. P. Singh (B. Tech, M. Tech of the department), Prof. K. Saran, Prof. A. K. Basu (M. Tech, PhD of the department), Prof. S. N. Bhadra, Prof. M. L. Chanana, Prof. S. Sinha, Prof. K. Venkatratnam, Prof. P. Bhakta, Prof. R. Kasturi, Prof. P. B. Duttagupta (PhD from UK), Prof. P. Doraraju, Prof. T. N. Saha (PhD from UMIST), Prof. N. K. De, Prof. N. C. Ray, Prof. S. Chaudhuri, Prof. D. K. Mitra, Prof. D. C. Saha. In addition to the teaching load, many faculty members subsequently completed their PhD research work in the Department.

**Third Decade (1971-80)**

In 1972, the DIIT program in "Instrumentation" was converted to M. Tech. program, with the result that all the present four M.Tech. specializations were then offered. Academically two main groups, i.e. the Power and Electrical Machines and Control and Instrumentation were formed. It must be said that the department then suffered due to lack of funds and also due to the shrinking opportunities for studies/research abroad.

During the year 1970-71, the department had the addition of two professors, Dr. P. K. Rajagopalan (Control System Engineering) and Dr. D. V. S. Murty (Instrumentation Engineering). It was possible to enhance the contributions in the areas of Control System Engineering and Instrumentation Engineering all over the country through the continuing education programmes for teachers and engineers from industry. Teachers from engineering colleges went through the three year (three summers) sequential summer schools for obtaining an M. Tech. by completing their dissertations from their respective colleges.

In 1970, the Curriculum Development Cell (CD cell) was set up with a view to modernize the curricula of courses, to suit the developments in technology practices in India and abroad. During the years from 1970, the CD cell, under the stewardship of Dr. D. V. S. Murty and later Dr. T. N. Saha, conducted a lot of seminars (first with VCs of universities), meetings and deliberations for effecting the desired changes in curricula of B. Tech. and M. Tech. programs of the department. At the beginning of this decade, the trimester system got replaced by the semester system and this transition was made seamless by Prof N. Kesava Murthy and K. V. Gopalratnam.

The increased exposure to electronics to Electrical Engineering students, addition of circuit analysis and synthesis at all levels, introduction of the compulsory subject “Instrumentation” at both UG and PG levels for all disciplines, addition of "Power Electronics" in the PG course on “Electrical Machines” were some of the timely changes introduced to modernize the courses.

Prof. A. K. Chattopadhyay who returned from UK with Ph.D in Power Electronics from UMIST, Manchester in 1971 pioneered the course of Power Electronics in the department by developing theory courses and the Power Electronics Laboratory (with a grant of 22 lakhs from AICTE). Teachers as well as research scholars opted to work in the area of power electronics. The prevailing M. Tech Course in Electrical Machines was updated and redesigned as Machine Drives & Power Electronics (MDPE) from 1980 under his leadership. First Ph. D in the field of Power Electronics was awarded from the Department in 1977 to Mr. T. J. Rao.
Towards the end of this decade, Prof. K. B. Menon retired and Prof. N. Kesava Murthy took over the charge of Head of the Department. During 1980-1981, Prof. A. K. Chattopadhyay left for Baghdad, Iraq to serve as a Visiting Professor in the University of Technology, Baghdad. During this period, the institute had stopped recruiting B. Tech as faculty. A B.Tech graduate was then recruited as a Senior Research Assistant (S. R. A). New additions to the faculty list during this decade were: Prof. G. P. Rao (M.Tech, Ph.D from the department), Prof. M. K. Ghosh (Ph.D from USSR), Prof. S. S. Rana, Prof. S. K. Das (S.R.A a B.Tech from the department), Prof. S. Sengupta (S.R.A), Prof. T. K. Basu (B.Tech, M.Tech of the department and Ph.D from IIT Delhi), Prof. K. B. Mishra (Ph. D from Roorkee University), Prof. S. Maka (1980).

Fourth Decade (1981-90)

During the fourth decade, the Electrical Engineering Department went through phenomenal changes, in many respects. One of them being the "Technology Policy" envisaged by a large number of experts in the country, dictating what should be undertaken in education field, to plug the deficiencies in education of scientists and engineers. Thrust and stimulation was given to courses leading to “Instrumentation” and “Computer Technology”, drive from the GOI to enable IIT KGP to start B.Tech. programs in these two disciplines. Added to this was the apparent surplus of resources due to conversion of the five-year degree programme to a four-year programme. The Senate of IIT took the decision of introducing three additional B Tech programmes of which two from the department, namely B. Tech in Instrumentation Engineering and B. Tech in Energy Engineering were approved. The department then had the maximum total number of students in B Tech and M Tech.

Thus, the long cherished wish of Dr. S. R. Sengupta to establish B. Tech. program in "Instrumentation Engineering" in the Electrical Engineering Department was fulfilled when the program started with the admission of fifteen students in 1982. By then, enough realization about the needs of developing alternative electrical energy sources was vetted by the “Technology Policy” for education in starting an “Energy Engineering” program at the B. Tech. level. Motivated by this policy, the department launched the UG programme in “Energy Engineering” with an intake of fifteen students. Both these interdisciplinary courses were coordinated by the department.

Reasonable allocation of funds enabled the modernization of laboratories in these areas. The advent of the computer age was heralded in the department by setting up a Computer Lab with thirty-two PCs. This enabled the teachers, students and staff to use and apply computers for their projects, experiments, research and teaching.

To enhance the standard of education, lecturers' posts were abolished at all IITs and thus the strength of department rose with a large number of Professors and Assistant Professors all having Doctoral qualifications. Research and consultancy work sponsored by industries and government funding agencies was not only encouraged but made mandatory for future growth of the department.

The post of HOD was made to go on rotation in a department. After Prof. N. Kesava Murthy retired in 1982, Prof. P. K. Rajagopalan took over but after a few months became Dean. Prof. D. V. S. Murty, served as HOD for three years (1983-86). During this decade, a lot of encouragement was given to teachers to write text books and QIP cell was assigned the task. Prof. D. V. S. Murty wrote a book on "Transducers and Instrumentation" and Prof. K. B. Datta on "Matrix and Linear Algebra".

The research activity became quite vigorous and new frontier areas were being ushered in by the faculty. Prof. G. Prasad Rao, along with his research scholars, considerably enhanced the research work in the area of "Control Systems" especially in the area of "System Identification". The department became also a centre of research in Power Electronics and Power Systems Engineering. Research was also initiated in Instrumentation. Optoelectronics was introduced in the Instrumentation programs. Towards the end of this decade the first sponsored R & D project
Prof. V. Balarammurthy, Prof. D. S. Naidu and Dr. T. R. Padmanabhan left the department. The first two left for USA and the third moved to TISCO. Prof. A. K. Chattopadhyay received the 3rd Bimal Bose Award in 1986 for his outstanding contribution in the field of Power Electronics from IETE (India), New Delhi. He along with his Research Scholar (N. Meher) bagged the Best Article prize for their paper in “You are a Genius Contest” sponsored by Bhartia Cutler-Hammer Ltd. in November, 1986. In 1986, Prof. T. N. Saha (1986-89) took over charge of the department from Prof. D. V. S. Murty who retired in 1989. Towards the end of this decade, Prof K. V. Ratnam (1989-91) became the Head after Prof. T. N. Saha.

With retirement of experienced professors, recruitment against vacancy continued. The institute policy changed and instead of having sanctioned posts for each category of faculty, the total number of faculty at the department level and at the institute level was taken as the datum. Advertisements for faculty positions in the news papers no longer specified the number of vacancies against any category. New additions in the faculty in this decade were: Prof. G. S. S. K. Durgaprasad (Ph.D from IIT-D), Prof. A. Barua (Ph.D from IIT-KGP), Prof. T. K. Bhattacharya, Prof. S. Banerjee (Ph.D from IIT-D), Prof. K. B. Datta (Ph.D from C.U), Prof. A. K. Sinha (Ph.D from BITS-Pilani), Prof. G. D. Ray (Ph.D from IIT-D), Prof. J. Pal (Ph.D from Roorkee Univ., now IIT-Roorkee), Prof. S. Sen (Ph.D from IIT-KGP), Prof. A. Patra (B.Tech, M.Tech, Ph.D from IIT-KGP), Prof. B. M. Mohan (Ph.D from IIT-KGP), Prof. S. Mukhopadhyay (B.Tech, M.Tech, Ph.D from IIT-KGP).

Fifth Decade (1991-2000)

This decade witnessed vigorous teaching and research activity in interdisciplinary areas. Integration of new fields with the core disciplines of the department opened up new areas for study, research and development. Research and teaching activities started in the areas like Signal Processing and Imaging, Speech Processing, Embedded Systems, Fault Analysis and Diagnosis, Fault Tolerant Control, VLSI, Hybrid Circuits, Bio Reactor Control, Bio Medical Instrumentation and Imaging, Optical Sensing, Reduced order modeling, Decentralized control, Periodic controllers, Fuzzy Control, Soft-computing methods, Bifurcation theory, Chaos and Nonlinear dynamics, Biological / Gene / Bio-chemical networks etc. The IIT policy of recruiting faculty with Ph.D at the entry level boosted up enhancement of qualification of all members of the faculty. Ph D guidance and sponsored project and consultancy were considered as the basic criteria for career development of a faculty.

Prof. T. N. Saha assumed the post of Dean Academic Affairs. On completion of tenure of Headship, Prof. K. V. Ratnam handed over charge of the department to Prof A. K. Chattopadhyay in 1991. In 1994, Prof. Y. P. Singh took over the charge of the department from Prof. A. K. Chattopadhyay.

The Planning Commission of Govt of India decided to boost R & D work in IITs (still 5 in number) and IISc. Technology Development Mission (TDM) was created over the plan period. The department participated in a big way. TDM-CNIA (TDM Communication Networking and Intelligent Automation) was proposed along with IIT Kanpur as the major partner. Prof S. Sinha was the over all Project Coordinator. Quite a few proposals from the department were approved and successfully pursued. Two important works were on “Monitoring System for Overhead Equipment in Electric Traction- Development of a Non invasive Technique” and “Intelligent Air Conditioning System”.

In 1997, Prof P. B. Duttagupta took over as Head of the department. Prof S. Sinha joined as the Dean of Institute Planning and Development, which he had to quit for health reasons. Prof M. K. Ghosh became the Dean of Academic Affairs. The departmental research work on all fronts gained momentum. Prof. A. K. Chattopadhyay became an IEEE Fellow in 1991 “for leadership in the development of power electronics research and development programs in India”. (first time by an IIT Faculty in India) and later an IEEE Visiting Professor as recognition of his commendable work.
in power electronics. He became a Fellow of The Indian National Academy of Engineers (FNAE) in 1992. Prof. Umbahen from Germany visited the department for some time for carrying out collaborative work in Control Systems with Prof. G. P. Rao. On the initiative of Prof. G. P. Rao, some grants were received from Abu Dhabi for the establishment of state of the art computer facilities in the department. Prof N. K. De co-authored a book on “Electric Drives” published by Prentice Hall (India) in 1999.

In 2000, Prof. T. K. Basu became the Head of the department. The decade bade farewell to a large number of senior and reputed faculty members: Prof. K. V. Ratnam, Prof. R. Kasturi, Prof. B. R. Raghavendran, Prof. T. N. Saha, Prof. A. K. Chattopadhyay, Prof. K. B. Datta, Prof. Y. P. Singh and Prof. S. N. Bhadra retired. During this period, Prof. T. S. Subbarao, Prof. P. Bhakta, Prof. G. P. Rao (moved to the Middle East) and Prof. L. Roy (joined as Director, R.I.T, Jamshedpur and later became the Chairman, P.S.C, Bihar) took voluntary retirement. New additions to the faculty were: Prof. P. K. Datta (M.Tech, Ph.D of the department), Prof. D. Das (Ph D from IIT-D), Prof. N. K. Kishore (Ph.D from I.I.Sc), Prof. D. Kastha (Ph D from USA), Prof. A. Rautray (Ph.D from Sambalpur).

Sixth Decade (2001-2011)

The departmental activity had already taken a modern shape. In conformity with the tradition of the department, this decade saw an intensive activity. Institute wise all the courses and the curricula were revised. Large class rooms (capacity of 200/ 400/ 800) and tutorial rooms were built in the lecture hall complex. New schools for research and studies were established. The facilities of the Education Technology Centre established a decade back were made use of by a large number of faculties of the department. Since its inception, the department has been enjoying a special reputation for its dedicated and excellent teaching. It now came forward and participated in various schemes for development of Learning Resources, funded by the institute or the Govt. Of India (like NPTEL). This contribution of the department has been appreciated nation wide by all.

For his contribution to the area of Non linear Dynamics, Prof. S. Banerjee was honored in 2003 with Santi Swarup Bhatnagar award and C. S. I. R. Fellowship (the fifth in the institute and the first in the department). He co-edited (with G.C.Verghese of MIT) an IEEE Press Book (2001) on “Nonlinear Phenomena in Power Electronics-Attractors, Chaos and Non-linear Control”. In 2001, Prof A. K. Chattopadhyay, on invitation, authored a Chapter on “AC-AC Converters” for the Power Electronics Handbook (Ed. Dr. M. Rashid) published by Academic Press (USA). In December 2005, National Power Electronics Conference (NPEC 2005) was organized by the Department with Dr. Chandan Chakraborty as the Technical Program Chair and Prof A. K. Chattopadhyay as the General Chair. Dr. C. Chakraborty was warded the Bimal Bose Award in 2006 from IETE (India) for his outstanding contribution to Power Electronics. Prof S. Banerjee authored a Book "Dynamics for Engineers" published by John Wiley & Sons, UK in 2005. Prof S. N. Bhadra, D. Kastha and S. Banerjee published a Book "Wind Electric Systems" published by Oxford University Pub., New Delhi in 2005. In 2008, a book "Measurement & Instrumentation: Trends & Applications" was published by Ane Books (also adopted by CRC Press). The book is edited by Prof. M. K. Ghosh, Prof. S. Sen and Prof. S. Mukhopadhyay is a collection of chapters written by faculty members from different departments of the institute. It is a documentation of the research activities carried out by the institute faculty in the advanced areas of measurement and instrumentation.

Towards the end of this decade the B.Tech programme in Energy Engineering was discontinued. In 2010, the department actively contributed when the institute started its new venture in part-time M. Tech programme (3 years duration) for teachers of AICTE approved engineering colleges and industry personnel. Currently the "M Tech Electrical Engineering" course under this scheme is running for the first three batches. The classes are telecasted from the studios located in the Institute every Saturday and Sunday. The students may attend the classes from the studios located at the Institute and the extension centers at Kolkata and Bhubaneswar. The students come to the Institute
on the last weekend of every month to complete the Laboratory experiments.

Prof D. C. Saha took over as Head in 2003 followed by Prof. S. K. Das in 2005. The departmental strength got depleted with the retirement of some faculty members. At the beginning of the decade Prof. M. K. Ghosh, Prof. S. Sinha (continued as Emeritus Professor for another 3 years), Prof. P. B. Dattagupta and later Prof. D. C. Saha and Prof. N. K. De retired. Prof V. G. Rau took voluntary retirement on health grounds.

The department kept itself equally active in sponsored research and consultancy in collaboration with Indian and foreign Institutes. Prof T. K. Basu became the Chairman, Education Technology and later took voluntary retirement, Prof. S. Sengupta left on deputation to assume the charge of Vice Chancellor, West Bengal University of Technology, Prof P. K. Dutta assumed the charge of Chairman, Medical Science and Technology Centre. Prof A. Patra became the Chairman, VLSI Centre and subsequently the Dean of Alumni Affairs and International Relations. A new "Embedded Systems" Laboratory was established in the department.

In 2007, Prof. A. K. Sinha took over charge of the department from Prof. S. K. Das. He was succeeded by the present Head of the Department Prof. J. Pal in 2010. In 2011, Prof. S. Banerjee took voluntary retirement and joined IISER, Kolkata.

New additions to the department in this decade are: Prof. A. Mukherjee (M.Tech, and Ph.D from the department), Prof. A. K. Deb (Ph.D from I.I.T-Delhi), Prof. A. K. Pradhan (Ph.D from Sambalpur), Prof. C. Chakraborty (Ph.D from the department), Prof. D. Chatterjee (Ph.D from IIT-Kanpur), Prof. G. Poddar (Ph.D from IISc.), Prof. S. Chattopadhyay (Ph.D from I.I.Sc.), Prof. K. Biswas (B Tech and PhD from the department- the first lady teacher), Prof. P. Bajpai (Ph.D from I.I.T-Kanpur), Prof. T. Bhattacharya (2011, Ph D from I.I.Sc).

In Retrospect

Looking back, the six decades of journey of the department appears to be very colorful and glorious too. It is the saga of a unique and brave struggle of an academic community against the fear of being earmarked as an obsolete and classical department in the wake of rapid transformation taking place in the broader discipline of electrical science and engineering. Throughout this period the department has always been able to keep abreast with the latest development and diversifications in its own and allied fields of study. The mantra has been its dedication and capability to adapt new technology without ever losing its identity. This tradition continues. Last two decades have especially witnessed the departments maturity shown through its prudent and timely adaptation of the new areas fusing them with the departments major focus to power engineering. This had always been the strength of the department. The fusion enriched both aspects of the discipline of electrical science and engineering - the classical and the modern equally. Thus, today apart from its earlier focus on power, machines, followed by control and instrumentation, the department has been able to occupy a prominent place in the modern areas also. The range of activity is very wide and diversified from classical to modern, milliwatts to megawatts, theoretical to practical, and conventional to non-conventional. But all these have never been encouraged to be achieved at the cost of teaching. Life had never been easy for IIT teachers. It has been more difficult for the teachers of Electrical Engineering because of its self inflicted strict discipline and Spartan culture in matters of academics. The routine work load has always been heavy with teaching, tutorial and laboratory classes. The assignment sheets to be set up and solved, tutorial copies to be checked, marked and entered in the registers weekly, In the laboratory class one has to know the experiments well, may be one should have a dry run of those, check the circuits, correct the laboratory records, conduct oral examination of the students, oversee the results of the experiments and enter daily marks. It is a continuous evaluation process in the true sense. Electrical technology (ET) laboratory has been a dreaded subject to all the students. It is common to all engineering undergraduates, and ET teachers are hated for being stickler to discipline and regimentation. Every student is under the
scanner by the teachers. You can not take risks with electricity. The discipline percolated in other spheres of life too - of the teachers and the students. Once an electrical engineer, you become very circumspect about life in general.

In brief the department has always been enjoying the reputation of doing the best be it an academic or a corpus activity. The imprints are visible. The contribution of the department to the process of growth and development of the institute vis-a-vis of the nation through academic and other plans cannot be overemphasized. Be it introduction of the institute Ph.D and M.Tech programmes (1950 - 60) or Sequential Summer School programme for the teachers of the country (1970s) or M.S programme for Project Staff (1980 - 90) or 5 year Integrated M Tech programme (1990s) or the recent 3 year distance mode M.Tech programme for teachers of AICTE approved engineering colleges (2010s) or be it JEE reforms, the Department of Electrical Engineering has been taking a constructive and leading role over the decades. Such endeavors of the department had been very often benevolent in nature, which benefitted a large section of the society spread beyond the IIT campus.

The department now runs two four-year B.Tech programmes, four two-year M. Tech programs, four five-year Dual Degree programs, one three-year distance mode M. Tech programme for teachers in addition to the regular M.S and Ph.D research programs. In the research field, so far number of degrees awarded are 140 in Ph D and 44 in M S (by research) (with the credit of producing the first M S of the Institute in 1992). Academic laurels of highest order won by the faculty: IEEE Fellow and Lecturer, recipient of Santi Swarup Bhatnagar Award and CSIR Fellowship.

As mentioned, the department never failed to contribute its best for the development and growth of the Institute. It always came forward. Thus, its faculty have also assumed various administrative and corpus positions like Member(s) of B.O.G, Deputy Director (Prof. K. B. Menon) (leaving aside Prof. C. S. Jha as the Director!), Dean Faculty and Planning (Prof. P. K. Rajagopalan 1983), Dean of Academic Affairs (Prof. T. N. Saha in 1990 and Prof. M. K. Ghosh in 1997), Dean of Institute Planning and Development (Prof. L. Roy in 1993 and Prof. S. Sinha in 1997), and Dean of Alumni Affairs and International Relations (Prof. A. Patra in 2007), Professor-in-charge of examinations, Chairman (CSE 1982), Chairman (JEE), Chairman (GATE), Chairman, Advanced VLSI Design Lab (Prof. A. Patra, 2004 to 2007), Head, SMST (Prof. P. K. Dutta, since 2009); Chairman CET (Prof. T. K. Basu, 2005 to 2009), Chairman (Electricity, Prof. L. Roy, Prof. A. K. Sinha, Prof. N. K. Kishore, Prof. D. Das - departmental responsibility by default), Chairman Technology Telecom Centre (Prof. M. K. Ghosh), Chairman H.M.C (Prof. J. Pal, 2008-2009) etc.

The tradition of excellent teaching, research and active participation in corporate developmental activities will continue for the decades to come. Salute to the tradition and spirit of the department, and also to those who have brought the department to this great height or are going to carry the baton handed over to them by their predecessors for years to come. Salute to all the staff, students and faculty.

(Contributed by Prof. P. K.Rajagopalan, Prof. D. V. S. Murty, Prof. S. Sinha, Prof. M. K. Ghosh, Prof. A. K. Chattopadhyay and Prof. T. N. Saha.)