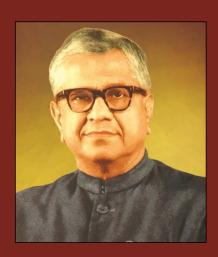




Founder and Builder of Manipal



Padma Shri Awardee Dr. T. M. A. Pai 30-04-1898 to 29-05-1979

Manipal is a place born out of one man's dream- Dr. Thonse Madhav Anant Pai. It is a testimony to the fact that no matter how big a dream is, it can always turn into reality. The once barren hillock is now India's largest education township with more than 24 institutions of learning.

Manipal Academy of Higher Education is the result of the single minded dedication of the founder Dr. T. M. A. Pai. It was his vision to see the bare hilltop of Manipal transform into one of the premier centres of learning.

Manipal Academy of Higher Education was founded on one principle; one unshakeable belief- that it must make available the best of education to its students. The last six decades, have institutes at Manipal taking meticulous, small steps to build reservoirs of intellectual wealth and academic excellence.

In the process, Manipal Academy of Higher Education has created some of the country's best institutes across diverse streams like medicine, dentistry, engineering, pharmacy, hotel management and communication.

Each institution at Manipal Academy of Higher Education is geared to meet the ever changing demanding standards and to create professionals and citizens of great value by inspiring them in multiple ways.

Chemical Engineering Department MIT, Manipal

Golden Jubilee Celebration, December 2019



Patrons

Dr. Ramdas M. Pai

President and Chancellor, MAHE, Manipal

Dr. Ranjan R. Pai

Chairman, MEMG, Bangalore

Dr. H. S. Ballal

Pro Chancellor, MAHE, Manipal

Dr. H. Vinod Bhat

Vice Chancellor, MAHE, Manipal

Dr. Narayana Sabhahit

Registrar, MAHE, Manipal

Dr. Vinod V. Thomas

Registrar Evaluation, MAHE, Manipal

Advisors

Dr. D. Srikanth Rao

Director, MIT, MAHE, Manipal

Dr. B. H. Venkataram Pai

Joint Director, MIT, MAHE, Manipal

Dr. Jayadeva Bhat

Former HOD, Chemical Engineering. Dept, MIT, Manipal

Dr. Vijaya M. Kini

Associate Director (Alumni affairs), MIT, MAHE, Manipal

Dr. Harish Kumar S.

Associate Director (Industrial Liaison, Placements, Practice School), MIT, MAHE, Manipal

Dr. Leon Ittiachen

Adjunct Professor, Chemical Engineering Department, MIT, Manipal

Executive Committee

Dr. S.V.S.R. Krishna Bandaru

Organizing Secretary

Dr. K. Balakrishna Prabhu

Convener

Dr. M. Srinivas Kini

Coordinator

Souvenir committee

Dr. K. Balakrishna Prabhu

Ms. Suma Shettigar

Dr. C. R. Girish

Dr. Gautham Jeppu

Dr. P. Vairavel

Mr. Sriprasad Acharya

Mr. K. Laxman Kumar

Stage Arrangements and Mementos

Dr. M. Srinivas Kini

Dr. Shanmuga Priya

Dr. D. Harshini

Ms. Lavanya

Mr. Sadanand Tendulkar

Ms. Shraddha Pai

Mrs. Anurupa V

Hospitality committee

Dr. Harish Kumar

Dr. Gautham Jeppu

Dr. C. R. Girish

Mr P. L. Adiga

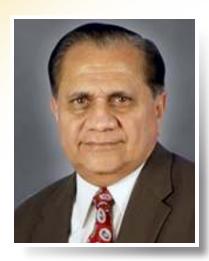
Mr. Janardhan

Mr. Hariprasad Uppara

Editors

Dr. K. Balakrishna Prabhu

Ms. Suma Shettigar



Dr. Ramdas M.Pai
Padma Bhushan Awardee
President & Chancellor
Manipal Academy of Higher Education, Manipal

It is gratifying to know that the Department of Chemical Engineering of Manipal Institute of Technology is celebrating its Golden Jubilee along with Silver Union celebration of 1994 Alumni. It is indeed an event which shall arouse the happy chords of the faculty and the students, particularly of those alumni who have gathered here to see their alma mater grow to such great heights of development. The Institute is progressing very well and has earned great reputation, shaping the destiny of its alumni to excel in their professional career. My greetings and best wishes to the faculty and the students.



Dr H S BallalPro Chancellor,

Manipal Academy of Higher Education, Manipal

The Department of Chemical Engineering of Manipal Institute of Technology has earned the distinction of completing fifty years of its working and is on the threshold of celebrating its Golden Jubilee along with the Silver Reunion of the 1994 batch of alumni. It is indeed an occasion to congratulate the staff and students who could accomplish this distinction. I take pleasure in conveying my congratulations and best wishes to the entire team associated with this achievement.



Dr. Narayana Sabhahit
Registrar
Manipal Academy of Higher Education, Manipal

I am extremely glad to know that the Department of Chemical Engineering, MIT Manipal is celebrating golden jubilee this year. It is indeed a momentous occasion to cherish the memory of last 5 decades. Chemical Engineering department was established in the year 1969 with B E Chemical Engineering program. Since then, the department has grown remarkably well in pedagogy and research, and currently offers B Tech, M Tech and Ph.D. program. Over the years, the department has produced many illustrious alumni spread across the globe. Since the golden jubilee celebration coincides with silver jubilee batch reunion, I am sure this will be a memorable event in the department.

I wish the organizers the very best for conducting this event successfully.

Preface



Dr. Balakrishna Prabhu K. Professor, Department of Chemical Engineering, MIT, Manipal

The Chemical Engineering Department is completing fifty years of delivering excellence in technical education and contributing highly proficient engineers to the nation and the world. It is indeed a joyous moment for all the stakeholders who can look back with much gratification at the strides made by the Department since its founding in the year 1969.

We are extremely pleased to place this Golden Jubilee Souvenir before you which is being brought out to mark this historic milestone being achieved by the Department.

The Golden Jubilee is an occasion to cherish the achievements of the past, take stock of the present and strategize for the future. It is also a time to recognize and pay tributes to all the faculty, staff, the management and the alumni who contributed to the growth and success of the Department.

We would like to thank all the administrators of Manipal Academy of Higher Education and other dignitaries who sent warm greetings and congratulatory messages on this momentous occasion.

We are immensely thankful to our beloved Director Dr D Srikanth Rao and Joint Director Dr B H V Pai for their guidance and support. Their critical inputs from the very beginning have been vital in shaping the contours of this volume.

Invited articles contributed from the former faculty, and alumni encompasses an important part of this souvenir. Our thankfulness goes out to all the contributors of articles who have taken out their precious time to pen their reminiscences and sweet memories about their Alma Mater. What exudes through every article of theirs is the love and affection for the Department and the nostalgia of life lived in MIT and Manipal!

We are obliged to the Department of Alumni Affairs for providing with the data base of the alumni contacts for emailing the invites to our alumni.

We are grateful to MIT Central Library for preserving the volumes of all the year books of the past batches in the digital form from which we could gather the class photos of the batches right from inception of the Department. We were, however, lacking two photos- of the 1974 and 1988 batches. Our thanks to distinguished alumni Mr. Praful Rangaishenvi and Mr. Vijay Kumar for providing these photographs just in the nick of time.

We have provided the individuals name list under most of the photos. We regret if we could not give them in all as they were not available.

We acknowledge the help received from MrTS Vishwanathan (1976 batch) and MrCM Balaram (1974 batch); their enthusiasm for the Department is very inspiring.

This souvenir could not have materialized but for the continuous support received from the team members of the souvenir committee, to all of whom we express our sincere thankfulness. In particular our gratitude goes out to coeditor Ms Suma Shettigar for doing all the compilation work and editing of the articles meticulously; Dr. Gautham Jeppu and Dr C R Girish for painstaking collection of photos; to Ms Suvaleena Paul for sharing the Department photos from her collections; to Dr Krishna Bandaru and Dr M Srinivas Kini for their valuable inputs from time to time.

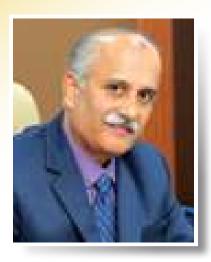
Hearty Congratulations to the Batch of 1994 who are celebrating their Silver Jubilee Reunion this year.

We hope this souvenir will give a historical perspective of the progress made by the Department since its inception. We fondly hope that the ensuing bonding during the Golden Jubilee will lead to more engagements between all stakeholders in future in the service of the Department.

On behalf of Souvenir Committee

Dr Balakrishna Prabhu K

Convener and Co-Editor



Dr. D. Srikanth Rao

Director MIT, Manipal

Delighted to note that the Department of Chemical Engineering is celebrating the Golden Jubilee this year. My Congratulations and best wishes to all the faculty members, staff, and alumni who have helped to propel the Department to its present status of preeminence.

The department embodies the spirit of the words of the founder and the maker of modern Manipal Dr T M A Pai, 'Any human activity has always a small beginning and as good work turned out each year gets multiplied, the promoters themselves feel surprised at the result.' What is true for institutions started by him is also true for the Department of Chemical Engineering. Started with only the undergraduate program in the year 1969, the Department today has risen to a state of strength with full-fledged laboratories and research facilities that can support a strong focus on research. The approved UG student strength is recently increased to 120 with two sections confirming the desirability of the Chemical Engineering Department at MIT among students. The Department today offers PG and PhD programs and presently has 22 faculty members.

The Chemical Engineering Department has played a crucial role in educating generations of students, who have gone on to play important roles in society, as entrepreneurs, technocrats and academics. I congratulate each one of our alumni on their success. Special Congratulations to the class of 1994 who are celebrating their Silver Jubilee Reunion this year.

Learnestly appeal to our distinguished alumni to contribute to fostering the growth of their Alma Mater. Opportunities to contribute are many; you could generously institute endowments, offer internship and placement opportunities to our students and so on.

This juncture provides an opportunity for moments of reflection and introspection on the achievements of the past fifty years and the challenges that are in the offing.

The committed and highly qualified faculty of the Department have set a very high standard in teaching learning. While maintaining these high standards in pedagogy, it is time for our faculty to further boost efforts in R&D and innovations.

The emerging challenges in energy, environment, providing clean air and water, to name a few, are becoming all too apparent for everyone to see. The acute effects of these are being manifested at the national and global stages. I believe Chemical Engineers are in a unique position to contribute to providing sustainable solutions in mitigating these challenges.

I look forward to days in the future in the next fifty years when many great innovations come from the Chemical Engineering Department of MIT. With the quality infrastructure facilities and sophisticated instruments being made available in the Department and Institute, the foundation has been laid. I believe the Chemical Engineering Department is well-geared to make the transition to next level.

On this happy occasion of the completion of 50 years of its founding, I wish the Chemical Engineering Department a very bright future ahead.



Dr. M. Vijaya Kini
Associate Director
(Alumni, Public Relation & International Relation)

I am very happy to know that the Department of Chemical Engineering at Manipal Institute of Technology has completed 50 years of existence. Over the years the Department has imparted high quality education to its students who have done exceptionally well in their careers. Truly, the Department is preparing leaders for the modern world.

I wish the Faculty members the very best and I am sure the department would rise to be one of the best in the country in the years to come.

Message from HOD

Dr. S V S R Krishna Bandaru

Professor & Head of the Department Department of Chemical Engineering, MIT, Manipal Organizing Secretary, Golden Jubilee Celebration Committee



It gives me immense pleasure to write this message for the Golden Jubilee Souvenir. It's a great opportunity and privilege to lead the department during this time period of golden jubilee year, a very special occasion for the department.

The department of Chemical Engineering was established in the year of 1969 with an undergraduate strength of 40 students and the first batch of Chemical Engineers graduated in the year 1974. Presently, the approved student strength is 120 for the undergraduate course and 18 for the post graduate course. Till date, 47 batches of UG and 11 batches of PG students have graduated from the department.

The department believes that academics, research, technology & training, and alumni reach out, are the four essential pillars for the growth and success of the department. The graduates from the department, widely enrol for their master's and doctoral programs in top ranked universities. This highlights the academic reputation of our department.

Department has state-of-the-art research facilities to support academics and advanced research. The department also encourages the students and faculty members to undertake multidisciplinary and collaborative research works. The faculty members are encouraged to be a part of faculty training programs to update to the current technology and knowledge.

The department has a robust alumni linkage across India and the globe. Our alumni are present in various industries/organizations, such as, petroleum, petrochemicals, fertilizers, energy sector, pollution control, entrepreneurship and academics.

I would like to thank the administrators of Manipal Academy of Higher Education for their continuous help and support extended to the department throughout this long journey. My sincere thanks to the administrators of MIT for their encouragement and endless support to the department. My special thanks to our beloved Director Dr D Srikanth Rao, and Joint Director Dr B H V Pai for their unrelenting support towards Golden Jubilee Celebration. The constant help received from the Associate Director - Alumni Dr M Vijaya Kini along with Assistant Directors is gratefully acknowledged.

My thanks are due to our alumni for their significant support and involvement in the progress of the department. My sincere gratitude to Dr Leon Ittiachen for being the link between the 1994 Batch and the Department for coordinating various activities during this celebration.

I congratulate the efforts of the souvenir committee headed by Dr Balakrishna Prabhu K in reaching out to all the stake holders of department within a limited period of time and bringing out this memorable volume.

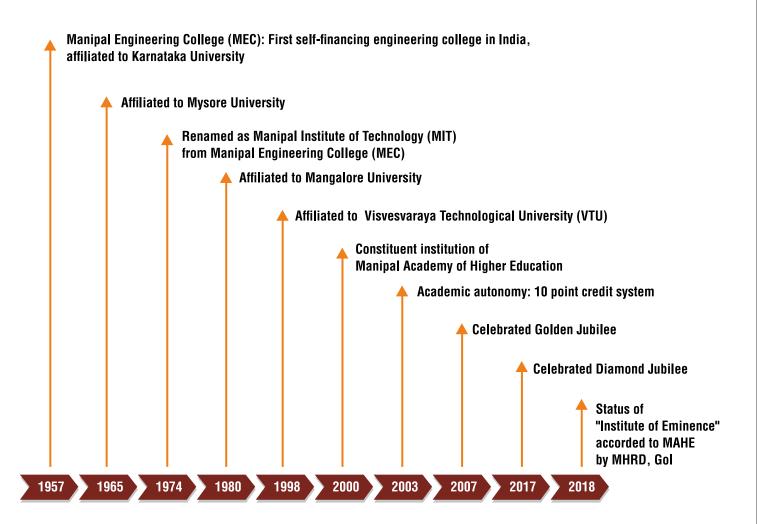
I hope the Golden Jubilee paves the way for a glorious future for the department.

Manipal Institute of Technology

Manipal Institute of Technology (MIT), Manipal was established in the year 1957 as one of the first pioneering self-financing engineering colleges in the country. In the year 2000, it became a constituent institute of the Deemed University- Manipal Academy of Higher Education (MAHE). With a total student intake of about 2000 per year, and around 10000 students over 625 faculties, over 1000 support staff, over 30000 alumni, the Institute provides the right ambience and platform for the students' all round development. It has the requisite student to teacher ratio of 14:1. MIT has 16 undergraduate programs, 25 Masters Programs and Doctoral programs in all streams of engineering and science under 18 different departments.

To promote innovation, incubation and entrepreneurship, the Innovation Center at MIT houses Manipal University Technology Business Incubator and Central Instrumentation Facility. The institute undertakes sponsored research programs supported by funding agencies such as DST, CSIR, AICTE and the Ministry of Environmental Sciences. It has collaborative research programs in association with premier research laboratories and institutes in India and abroad. The institute has an innovative, flexible syllabus based programs that involve participation of all stakeholders like management, academia, students, alumni, industry to discuss updating of the course contents in a continual process. With state-of-the-art facilities and experienced faculty members, MIT is certainly one of the most preferred technical institutes in India.

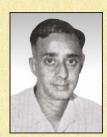
Institute Milestones



Heads of Manipal Institute of Technology



Prof. K B Krishna Rao 15-07-1957 to 25-06-1958



Prof. R K K Narayan 26-06-1958 to16-03-1959



Prof. M N Kamath 17-03-1959 to 30-10-1961



Prof. P Venkataraman Bhat 31-10-1961 to 20-06-1971



Prof. B V Krishnamurthy 01-07-1971 to 30-06-1976



Prof. V Chandrashekhar 01-07-1976 to 31-01-1980



Prof. T Radhakrishnan 01-02-1980 to 31-03-1980



Dr. K V Kamath 01-04-1980 to 29-07-1985



Prof. U R Kamath 30-07-1985 to 31-12-1986



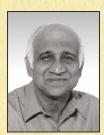
Prof. Alladi Prabhakar 01-01-1987 to 08-02-1996



Prof. P V Bhandary 09-02-1996 to 08-10-2000



Dr. M N Shetty 19-10-2000 to 08-10-2002



Dr. B S Prabhu 09-10-2002 to 25-04-2006



Dr. Raghuvir Pai 26-04-2006 to 04-06-2006



Brig. Dr. S S Pabla 05-06-2006 to 19-04-2009



Dr. Narayana Sabhahit 20-04-2009 to 07-06-2009



Brig. Dr. Somnath Mishra 08-06-2009 to 14-06-2010



Dr. Kumkum Garg 04-08-2010 to 30-04-2012



Dr. Vinod V Thomas 01-05-2012 to 22-09-2015

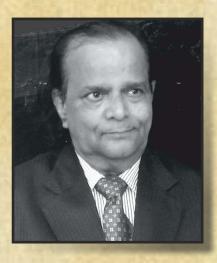


Dr. G K Prabhu 23-09-2015 to 31-12-2017



Dr. D Srikanth Rao 01-01-2018 to

In loving memory of



Late Dr. N. Subrahamanyam

Former Prof. & Head

Dept. of Chemical Engg,

MIT, Manipal



Late Dr. P.G.Krishnamurthy

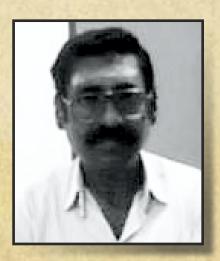
Former Prof. & Head

Dept. of Chemical Engg,

MIT, Manipal



Late Dr. R Sampath Kumar
Former Prof. & Head
Dept. of Chemical Engg,
MIT, Manipal



Late Mr. Srithar
Former Senior Clerk
Dept. of Chemical Engg,
MIT, Manipal

Growth of the Department

Dr. M. Srinivas Kini

Professor, Department of Chemical Engineering, MIT, Manipal Coordinator, Golden Jubilee Celebration Committee



The department of Chemical Engineering at Manipal Institute of Technology, Manipal is completing its fiftieth year of existence and it is my privilege to write about its growth from inception.

The first batch of Chemical Engineering students were admitted in the year 1969. The first two years were common for all branches, hence the first faculty to join the department was Dr. N. Subramanyam, as the Professor and Head of department in 1971. Subsequently Prof. Sampath Kumar, Prof. P.G. Krishnamurthy, Mr. B. Hanumanth Rao, Prof. Jayadeva Bhat, Prof. P.K.A. Muniswaran and Mr. Krishnaswami joined the department. The non-teaching staff Shri. K. Sadananda Nayak, Shri. B. Kushala Shetty and Shri. K.K. Nair were transferred from other departments to the Chemical Engineering department in the year 1971.

Along with Prof. P.G. Krishnamurthy, Shri. K. Sadananda Nayak, Shri. B. Kushala Shetty and Shri. K.K. Nair were instrumental in setting up the laboratories by fabricating most of experimental rigs in-house.

The five-year B.E program started with intake of 40 students and the first batch graduated in 1974. The five-year program continued till 1979. The first four-year B.E program started in the year 1980 onwards.

In 1986, Shri. Veerendra Heggade, Dharmadhikari of the Dharmasthala Temple, visited the department and was particularly interested in seeing the laboratories, which were later replicated, when SDM College Dharwad started the Department of Chemical Engineering.

The management encouraged the staff to pursue their PhD degree under Quality Improvement Programme (QIP) in the year 1987 under the leadership of the then Principal Prof. Alladi Prabhakar. As a result Prof. Jayadeva Bhat, Prof. P.K.A Muniswaran, Prof. P.S. Murthy and Prof. B.N. Reddy obtained their PhD from reputed institutes.

One of the high points in Chemical Engineering Department was the hosting of Chemical Engineering Congress (CHEMCON), IIChE in the year 1992. The CHEMCON was a grand success under the leadership of Prof. K.J.R. Sarma, who was the Organizing Secretary.

After MIT became an autonomous college affiliated to MAHE in the year 2000, the department started offering PhD program. This gave a big boost to research activities in the department and Prof. V.R.C. Murty, faculty in the department was the first to register for PhD (part-time) in 2001, under the guidance of Prof. Jayadeva Bhat and Prof. P.K.A. Muniswaran. After this, many of the faculty who did not possess PhD degree registered in the department.

In the year 2001, the department shifted from Administrative Block 1(AB1) to a separate building which already had some of the Chemical Engineering laboratories.

The M.Tech. programs in Chemical Engineering was started in the year 2010. This further led to a spurt in research activities and publications along with procurement of sophisticated instruments like AAS, UV spectrophotometer, TGA, TOC, BET analyser, Particle size analyser, Rota-evaporator, Cascade Control, PLC and MIMO for laboratory and research work. Apart from these, sophisticated instruments such as NMR, XRD SEM, AFM, and Ion chromatography are available in Central Instrumentation Facility of the Institute.

The core research strengths of the department lie in areas of waste water treatment, pollution control, renewable energy, catalysis, nanomaterials, process control, novel drug delivery, multiphase flow and surface phenomena.

The department signed a Memorandum of Understanding with South Alabama University, USA in 2010 and Nottingham University, United Kingdom in 2013 for five years. Under the International Association for Exchange of Students for Technical Experience (IAESTE), many of our UG students have carried out their project and internship (one or two months) in reputed institutes in Canada, USA, Middle East and European Countries.

The faculty of the department Prof. S. Sivasankaran was granted a Japanese Patent in 2015 for his research work in catalysis.

The following are the awards instituted by our Alumni

- Best outgoing student, B.Tech and M.Tech by Class of 1994 in memory of Late Prof. P.G. Krishnamurthy
- Student obtaining highest marks in Mass Transfer subject by Class of 1994 in memory of Late Prof. P.G. Krishnamurthy.
- The Most admired teacher In Gratitude towards Enlightenment' award instituted by Shri. Nandakishore S Rathi, distinguished alumnus of 1979 batch in memory of Late Prof. R. Sampath Kumar.

A family member of Prof. P.G. Krishnamurthy donated a corpus to the department; from the interest accrued an annual technical event was initiated in his name from the year 2019.

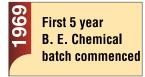
The department has received a funding amounting to ₹1 crore from various agencies/institute like Korean Institute of Science and Technology-South Korea, DST-SERB, VGST, KSCST and MAHE, Manipal.

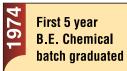
It was a proud moment for the department when its parent MAHE was awarded the Institute of Eminence (IOE) title by the Ministry of Human Resource and Development (MHRD), Government of India, in the year 2018.

Starting from the first batch in 1974 to 2019, forty-seven Under Graduate batches have graduated. The total alumni strength of the department is about 2200.

The department is set to make great strides in the years to come with the support of all the stakeholders.

Department Milestones









CHEMCON- Chemical Engineering Congress, International conference of IIChE held at MIT, Manipal





B.Tech. Chemical Engineering programme was accredited by NBA for 5 years





National Annual Symposium "Chemignite" started











Department of Chemical Engineering

Vision

To be the department that fosters excellence in education, research and innovation in Chemical Engineering and emerging inter disciplinary fields.

- 1) To provide quality graduate education that will prepare graduates for leading roles in their chosen career and for the life-long learning.
- 2) To develop technology through excellence in research, in conjunction with graduate education that is recognized by peers in the profession in the emerging fields of Chemical, Biochemical, Energy, Environmental and Material Science.
- 3) To achieve technical excellence through Industry-Institute interactions.
- 4) To produce graduates who are able to perform in multi-disciplinary teams and demonstrate superior team leadership.

Mission

Dr. TMA Pai Gold Medal Awardees from Department of Chemical Engineering

Dr. TMA Pai Gold Medal is a highly prestigious medal awarded to only a single undergraduate student every year scoring the highest marks/CGPA on completion of the course. So far from the Chemical Engineering branch there have been four recipients. They are as follows:

Batch	Name	Percentage
1975-76	Vitta Surendra Babu	82.33
1978-79	Srikantha Balakrishna	83.19
1988-89	K R Prakash	84.65
1993-94	Tarlochan Singh	85.70

Department Faculty



Dr. Anindita Laha Ph.D.(Chemical Engg., IIT Hyderabad) Assistant Professor E-mail ID: anindita.laha@manipal.edu

Contact No.: 0868670961

Research Interests: Nanotechnology, Drug delivery,

Electrospun fibers, Polymer Science.



Dr. Anoop Kishore Vatti Ph.D. (MPIE, Germany) Assistant Professor E-mail ID: anoop.vatti@manipal.edu Contact No.: +918106673321

Research Interests: Electronic Structure Theory, Density Functional Theory, Molecular Dynamics Ion Solvation, Defect Chemistry,

structure and stability of surfaces



Dr. Balakrishna Prabhu K
Ph.D. (Water treatment, NITK Surathkal)
Professor
E-mail ID: balakrishna.prabhu@manipal.edu

Contact No.: 0820-2924316 (O)

Research Interests: Mass Transfer, Water Treatment, Membrane

Technology, Materials Science, Process Control



Dr. Gautham J. P.
Ph.D. (Environmental Eng., Auburn University, USA),
Associate Professor
E-mail ID: gautham.jeppu@gmail.com
Contact No.: 8762213942

Research Interests: Water treatment, Arsenic, Fluoride removal,

Biogas, Ground water modelling, Geochemistry



Dr. Girish C.R. Ph.D., (Chemical Eng., Manipal University) Associate Professor E-mail ID: cr.girish@manipal.edu Contact No.:0820-2924316

Research Interests: Wastewater Treatment, Environmental Engineering,

Biodiesel production



Dr. Harish Kumar S.
Ph.D. (Chemical Eng., Manipal University)
Professor
E-mail ID: harish.kumar@manipal.edu

Contact No.: 0820-292561

Research Interests: Hydro Dynamics, Fluid-Solid operations,

Pollution Control Engineering, Energy Engineering



Dr. Harshini Dasari Ph.D. (Clean Energy & Chemical Engineering, KIST, Korea) Associate Professor E-mail ID: harshini.dasari@manipal.edu

Contact No.: 9177304954

Research Interests: Heterogeneous Catalysis, Nanomaterials,

Fuel cells



Dr. S.V.S.R. Krishna Bandaru Ph.D. (Chemical Eng., IIT Madras), Professor & Head E-mail ID: krishna.bandaru@manipal.edu

Contact No.: 0820-2924311

Research Interests: Fluidization, Biofuels, Biochar, Renewable Energy, Wastewater Treatment, Separation Processes and Heat

Transfer.



Lavanya M
M.Tech. (Industrial Biotechnology, MAHE)
Assistant Professor – Sr. Scale
E-mail ID: lavanya.m@manipal.edu
Contact: +91 820 2924324

Research Interests: Fluid Mechanics, Biochemical Engineering.



Laxman Kumar K

M.Tech. (Petroleum Refinery Engineering, IIT Guwahati)

Assistant Professor – Sr. Scale

E-mail ID: laxman.kumar@manipal.edu

Contact No.: 0820-2924314

Research Interests: Microfluidics, Process Control,

Molecular Dynamics & Simulation



Dr. Muddu Madakyaru

Ph.D. (Process System Engineering, IIT Bombay)

Associate Professor

E-mail ID: muddu.m@manipal.edu Contact No.:0820-2924316

Research Interests: Process Control, Linear and Nonlinear System Identification, Model Predictive Control, Adaptive Control, Adaptive Model Predictive Control, State Estimation, Wavelet based Multi-scale Filtering and soft sensors. Optimization and Scheduling, Statistical

Process Control, Fault Detection and Diagnosis



Dr. Nethaji S

Ph.D. (Chemical Eng. CSIR-CLRI) Assistant Professor – Sr. Scale E-mail ID: nethaji.s@manipal.edu

Contact No.: 0820-2924316

Research Interests: Effluent treatment processes, Solid-liquid interactions, Adsorption, Photo catalysis, Graphene based materials



Muthukumaran P

M.Tech. (Biotechnology, VIT, Vellore) Assistant Professor – Sr. Scale E-mail ID: pm.kumaran@manipal.edu Contact No.: +91 820 2924324

Research Interests: Biochemical Engineering, Environmental Biotechnology, Waste Water Treatment, Enzymology, Renewable

Energy



Dr. P. Vairavel

PhD (Chemical Eng., MAHE, Manipal) Assistant Professor - Selection Grade E-mail ID: vairavel.p@manipal.edu Contact No.: 0820-2924316

Research Interests: Mass Transfer, Heat Transfer, Chemical Reaction Engineering, Down-stream Processing, Bio-process Engineering,

Fermentation Technology, and Bioreactor Design.



Dr. Raja S.

Ph.D. (Biotechnology, Manipal University)
Associate Professor – Sr. Scale

E-mail ID: raja.s@manipal.edu Contact No.:+91 820 2924316

Research Interests: Bioprocessing, Downstream Processing,

Environmental Biotechnology.



Dr. S. Shanmuga Priya
Ph.D. (ChemicalEng., NIT Tiruchirappalli)
Associate Professor – Sr. Scale
E-mail ID: shan.priya@manipal.edu
Contact No.:0820-2924314

Research Interests: Energy and Environmental Engineering, Solar Energy, Energy Efficiency, Solar Photo-catalysis, Bio Energy and Industrial Waste Water Treatment.



Sandeep Parma M.Tech. (Chemical Eng., NIT Rourkela) Assistant Professor – Sr. Scale E-mail ID: sandeep.parma@manipal.edu

Contact No.: 0820-2924316
Research Interests: Membrane Technology, Nano Fluids and

Separation Technology



Dr. M Srinivas Kini
Ph.D. (Chemical Eng., Manipal University)
Professor
E-mail ID: srinivas.kini@manipal.edu

Contact No.: 0820-2924315

Research Interests: Environmental Engineering, Process modelling&

simulation and Transfer Operations



Dr. Sneha Malhotra
PhD (Chemical Eng., IIT Roorkee)
Assistant Professor
E-mail ID: sneha.malhotra@manipal.edu
Contact No.: 8369976492

Research Interests: Multiphase flows, Microfluidics and Nanofluidics,

CFD Modeling and Membrane Separation



Sriprasad Acharya

M.Tech. (Chemical Plant Design, NITK, Surathkal)

Assistant Professor - Sr. Scale

E-mail ID: sriprasad.acharya@manipal.edu

Contact No.: 0820-2924316

Research Interests: Reaction Engineering, Renewable Energy,

Biofuel Cells, and Drug delivery



Suma Shettigar M.E. (Chemical Eng. ICT, Mumbai) Assistant Professor E-mail ID: shettigar.suma@manipal.edu

Contact No.: 0820-2924316

Research Interests: Waste Water treatment, Membrane Technology, Environmental Remediation and Chemical Reaction Engineering.



Dr. V. Ramesh
Ph.D. (Biotechnology, Manipal University)
Associate Professor
E-mail ID: ramesh.v@manipal.edu

Contact No.:+91 820 2924316

Research Interests: Bioprocessing, Downstream Processing.

Adjunct Faculty



Dr. B. Mahipal Reddy Retd. Chief Scientist, IICT, Hyderabad AICTE_INAE Professor Email ID: bmreddy@iict.res.in



Dr. Girish Rao Manager, Bitumen Research, Shell Technologies Centre, Bengaluru Email ID: girish.g.rao@shell.com



Dr. Janhavi Raut R&D Director Unilever R&D, Bengaluru Email ID: Janhavi.Raut@unilever.com



Dr. Leon Ittiachen
Professor, Dept. of Biotechnology
Sahrdaya College of Engineering, Trichur, Kerala
Email ID: leon@sahrdaya.ac.in



Mr. Suresh Sharan Tiwari
Former Senior General Manager (Projects),
Dangote Industries
Email ID: tewarisuresh@gmail.com

Non-teaching staff



Anil Kumar House keeping staff - II +919611493115



P Ganesh Prabhu Senior General Duty Worker +919482094224



Janardhana Padmashali Senior Technician Janna.padma309@gmail.com +919901731749



P. Laxminarayana Adiga
Deputy Engineer
pladiga@rediffmail.com
+918310864788



Rashmitha Assistant Engineer rashuk5@gmail.com +919743888066



Sadananda Tendulkar Assistant Engineer +919481144607



Vijayalaxmi H Senior Clerk vijayalaxmi.mit@gmail.com +919880383965











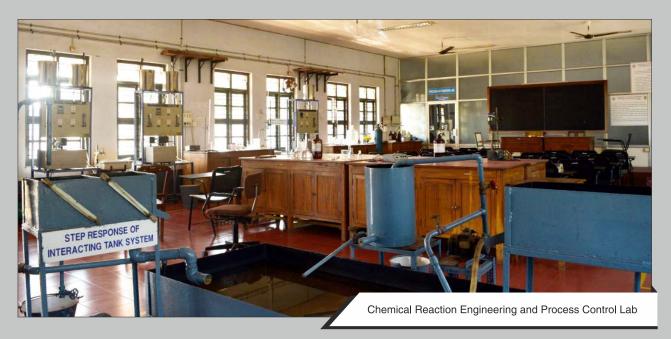










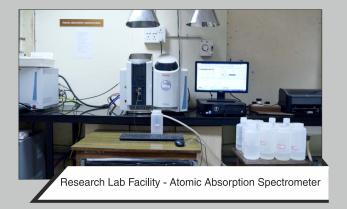




Chemical Reaction Engineering and Process Control Lab



Chemical Reaction Engineering (PFR & CSTR setups)

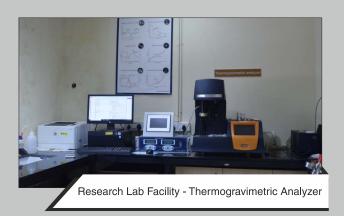














Former HODs

SI.No.	Name	Tenure
1	Dr. N. Subrahamanyam	Nov 1971 to May 1977
2	Dr. R. Sampath Kumar	May 1977 to July 1982
3	Dr. P. G. Krishnamurthy (Incharge)	July 1982 to Nov 1982
4	Dr. K. J. R. Sarma	Nov 1982 to Oct 1991
5	Dr. Jayadeva Bhat	Oct 1991 to Apr 2001& Feb 2009 to Dec 2011
6	Dr. P. K. A. Muniswaran	Apr 2001 to Apr 2004
7	Dr. P. S. Murthy	Apr 2004 to 2007& Apr to June 2008
8	Dr. B. N. Reddy	Apr 2007 to Apr 2008
10	Sri S. Sivasankaran (Incharge)	June 2008 to Feb 2009
11	Dr. S. Harish Kumar	Jan 2012 to Jan 2017

Retired Staff



Mr. K. Sadanand Nayak
Contact No.: +91 6364324160



Mr. D. Sadhu Poojary
Contact No.: +91 9845210916



Mr. B. Kushala Shetty
Contact No.: +91 9481753669



Mr. Raghavendra Shenoy
Contact No.: +91 9945878774 (pp)



Tribute to Dr. K. J. R. Sarma

Dr. K. J. R. Sarma

Former Professor & Head, Department of Chemical Engg., MIT, Manipal

Dr. K. J. R. Sarma was one of the early builders of the department who joined as Professor and Head in November 1982, a post he held till October 1991. He was instrumental in streamlining many of the laboratories. His students still remember him as a soft spoken and fatherly figure who was friendly towards them. He was a committed member of the Indian Institute of Chemical Engineers (IIChE) and was instrumental in establishing an active Student Chapter in MIT Manipal. As the Organising Secretary, Dr. K J R Sarma ably conducted the International Annual Conference of IIChE-CHEMCON-92 during December 1992, which is still regarded as a high point for the Department.

The Chemical Engineering Department offers rich tributes of love and respect to Prof. K J R Sarma for his immense contributions in its growth and development.

Dr. Jayadeva Bhat

Former Professor & Head, Department of Chemical Engg., MIT, Manipal Email: jayadev48@yahoo.co.in Contact No.: +919845547713



It gives me great pleasure that the chemical engineering department is celebrating Golden Jubilee on December 21st,2019. Fifty years of existence of the department is an important milestone in its history and now it is a time to pause, ponder and take stock of past achievements and prepare oneself to meet new challenges and opportunities ahead.

I have had a unique opportunity of being one of the faculty members associated with first batch of chemical engineering students when I joined the department in 1973 and continued to be associated with it until my retirement in 2013. I also had the privilege of being the first Associate Director (R&D) of MIT Manipal (2001 - 2005). The chemical engineering department is well recognized in India and abroad. The students joining the department come through the competitive examination and undergo rigorous training during their four-year study. The department program has been accredited by NBA. Obviously chemical engineering alumni are doing extremely well in India and abroad in chemical industries, research and other activities. They can play an invaluable role by contributing generously towards infrastructure, laboratory facilities and research.

On this momentous occasion of golden jubilee celebrations, My heartiest congratulations and best wishes to the HOD, current and past faculty, students, staff and alumni of chemical engineering department.

Dr. P. K. A. Muniswaran

Former Professor & Head

Department of Chemical Engineering, MIT, Manipal

Email: munishpka@yahoo.com



I am glad that our department has completed 50 years of glorious service to its students and I am proud that I was a part of it for 34 years until 2008. I cherish all those years. My apologies for not being able to attend the Golden Jubilee function as I am in Melbourne now and will be back in India only in April.

My best wishes to all the faculty and staff on this happy occasion and I wish the department a bright future.

Dr. P. S. Murty

Former Professor & Head

Department of Chemical Engineering, MIT Manipal

Email: parimimurthy@rediffmail.com

Contact No.: +919849689918



I was extremely happy when the Convener, Golden Jubilee Organising Committee, Department of Chemical Engineering, MIT, Manipal informed me that chemical engineering department is celebrating its 50 years of fruitful existence in the field of technical education and on behalf of chemical engineering department and MIT, he is inviting all former professors to make it possible to be present for this very special event and take part in the celebrations.

Chemical Engineering department for all these years could maintain highest academic standards and produced quality chemical engineers who were making significant contribution in their chosen field both in India and abroad thus bringing laurels to the department and to the Institute as well.

I joined the department as a lecturer in the year 1982 and served the department for more than 25 years and was working as professor and Head of the department at the time of my leaving Manipal in 2008. It is a matter of pride and I derive immense satisfaction when I think that I am a part of such a glorious department.

We, the faculty members, worked as a team with excellent co-operation in all development activities of the department and were always able to maintain pleasant atmosphere and cordial relationship among all of us. Life in Manipal is calm, quiet and peaceful and I and my family members have thoroughly enjoyed every moment of our stay at Manipal.

On the occasion of the department reaching this milestone, I send my best wishes to the convener of organising committee, to all faculty and staff of chemical engineering department and wish the function a grand success.

Dr. B. N. Reddy

Former Professor & Head Dept. of Chemical Engineering, MIT, Manipal Email: bnreddy09@gmail.com
Contact No.: +91 9490923986



I am extremely happy and delighted to be present on the occasion of Golden Jubilee celebrations of Department of Chemical Engineering, Manipal Institute of Technology. It was my good fortune to be associated with Chemical Engineering Department during its growth and excellence in imparting meaningful and quality education.

I joined the department in 1982 as Lecturer and occupied various academic positions during my tenure. I left the department in April 2008 as Head of the Department after rendering 26 years of fruitful and eventful service. I have spent the best and most cherished part of my life with the department and at Manipal that I continue to consider my presence at Manipal as my homecoming.

During my stay with Department of Chemical Engineering, I enjoyed excellent support and cooperation not only from departmental colleagues but also from other departments. In fact, I was friendly and liked by almost all the senior faculty of other departments without any ego problems. The most important aspect is that there is no discrimination among faculty like seniors and juniors and everybody worked as a unit in imparting quality education and shaping the future of many students to become responsible and successful citizens.

I have maintained very cordial relationship with all my superiors and juniors and I am very happy for their support for giving me an opportunity to contribute for the development of the department and the Institute.

I owe my respect to the management of MIT for giving me opportunity and scope for enhancing my personality and my ability by involving in many co-curricular and extracurricular activities of the department and MIT.

I have had the good fortune of interacting with students of department and college and extending my help and academic support in moulding their career. I am very much happy and satisfied that many of my students have occupied coveted positions in the academic and industrial establishments in the country and the world.

Finally, I would like to thank the Director and Head of Department of Chemical Engineering and faculty for inviting me to be part of Golden Jubilee celebrations of the department and I wish them success in making the department a Centre of Excellence in Chemical Engineering.

Prof. S. Sivasankaran

Faculty (Retired),
Dept. of Chemical Engineering, MIT, Manipal
Process Consultant, M/S Kerox Chemicals
Email: shivashankaran.shankar@gmail.com
Contact No.: +919448857942



Memoirs of Life in Manipal, the El Dorado

I am very fortunate to have lived and worked in Manipal for over 30 years. I had joined the Department of Chemical Engineering as a faculty in 1984 and retired in 2017. During this period of 33 years I have seen the transformation of Manipal, MAHE, MIT and the Department of Chemical Engineering.

I may classify life in Manipal into two periods, B.C (Before Computer/Internet) and A.C. (After Computers/Internet). The sea change in life has started happening from 2000 when the Tech boom has started in India and MIT joined MAHE.

The B.C. period (1984-2000)- Manipal

Manipal was like a hill resort with lot of greenery and a thick forest welcomed us when climbing the Manipal hill near the Syndicate circle. There were no telephones at home. To make a phone call we had to wait for an hour in the BSNL telephone booth. There were no electronic gadgets. Even a second—hand 2 in 1 tape recorder cost a fortune. But land was available at a mind-boggling cheaper rate of ₹ 250 to ₹ 500 per cent when my monthly salary was around ₹ 1800. We walked around Manipal. Only few cars were there in the campus. It used to rain heavily for a week. Cost of quality education was cheap and faculty could give best education to their children.

The B.C. period (1984-2000)-MAHE/MIT/ Dept. of Chemical Engineering:

Teaching was the main job during this period at MIT and I have learnt the basics in teaching subjects like Thermodynamics and Reaction engineering from my senior Prof. Jayadeva Bhat. Our students were highly motivated and competent enough to match the students of NITK. Many of our students have become entrepreneurs. We had long vacations. Life was blissful in serene Manipal.

The A.C. period (2000-continuing)-Manipal:

Computers, Cell phones, Cars (the 3 Cs) have become common and life-style has started changing. More buildings have come up. Forests were destroyed. Rain fall has decreased. Thus Manipal has started losing its identity as a hill-station.

The A.C. period (2000-continuing) - MAHE/MIT/ Dept. of Chemical Engineering:

MIT had joined MAHE in 2000 and research work had begun. MAHE was generous in providing huge funds for development of infrastructure for research in MIT. I am fortunate to set up the basic facility for doing research in the Chemical Engineering Department by procuring and installing many sophisticated instruments like Gas-Chromatograph, BET apparatus, Ultrasonic Processor etc. I could develop a new field of research, that may be called as "Ultrasound Assisted Processes". My applied research work has resulted in 2 patents. One patent was granted in Japan and another has been filed. Thus I could do applied research work till I retired in 2017. The academic freedom to teach under MAHE helped in improving our teaching methods to produce engineers with good professional competence.

Thus I could enter Manipal when it was like a hill-station and left after it has become University town. My best part of life was spent in Manipal when it was like an El Dorado, the mythical city of gold.

Dr S Harish Kumar

Associate Director (Industry Liaison, Placement and Practice School)

Professor & former Head
Department of Chemical Engg., MIT, Manipal
Email: harish.kumar@manipal.edu
Contact No.: +919663301894



Golden Memories and Experiences

After the completion of M Tech from NITK (formerly KREC), Surathkal, I joined Manipal family on September 29, 1993 and have been happily serving this great institution "Mighty MIT" since twenty-seven years.

I had an opportunity to serve MIT at various responsibilities which include coordinator of academic section, block warden, head of Chemical Engineering department and presently Associate Director – Industry Liaison, Placement and Practice School. It is a great learning experience in each and every stage of professional journey at MIT.

I was fortunate to work under the great personalities – Dr K J R Sarma, Dr Jayadeva Bhat, Dr P K A Muniswaran, Dr P S Murty and Dr B N Reddy who were the former heads of Chemical Engineering department. Also, I had an opportunity to learn teaching and administrative skills from them and I am thankful and grateful for their kind support and valuable guidance in the department.

I got promoted as Professor in 2011 after completion of my PhD from Manipal University (now MAHE) and I am fortunate to receive my PhD degree from the Honourable President of India in the Convocation held during 2010 at Manipal. I will be failing in my duties if I don't remember my GURU Dr DVR Murthy, former Professor & Dean, NITK, Surathkal. I am thankful and grateful for his valuable guidance and kind support extended as a guide to my PhD thesis without which I would not have attained this position at MIT, Manipal.

I took charge as head of Chemical Engineering department on January 1, 2012 and served for a period of five years. These five years are the most memorable period and I had an opportunity to lead the team – Chemical Engineering at MIT.

I had a great opportunity to work under three Directors of the institute Dr Kumkum Garg, Dr Vinod V Thomas and Dr G K Prabhu. I am thankful and grateful for their able support and kind cooperation during my tenure as HoD. We renovated and revamped all our Chemical Engineering laboratories by adding new bench scale experimental set ups. Also, we added a high end instrumental analysis laboratory comprising sophisticated instruments to strengthen our research work in the department.

During my tenure, we worked and successfully achieved and got outcome based NBA accreditation to the Chemical Engineering program at MIT and also NAAC accreditation to our University. We were able to establish a strong industry – institute connect with reputed companies like Shell, SABIC, Reliance, MRPL – ONGC, BARC for collaborative research and students' internships/placements. We have conducted more than fifty guest lectures/ seminars/ symposiums during this five year. A corpus fund from the alumni batch of 1984 with the matching grant from our University is created to institute the awards to the meritorious students of Chemical Engineering every year in memory of late Professor Dr P G Krishnamurthy from the annual interest incurred from the corpus. Similar initiative from the alumni batch of 1994 was initiated to institute prize for "The most innovative project award" carried out by the students and also to begin a lecture series to be known as "Class of 1994 – Back to college lecture series" at MIT. One more distinguished alumnus Mr. Nandakishore Rathi visited MIT and donated a corpus to institute a yearly award in the annual interest incurred to a faculty of Chemical Engineering as "The most admired teacher award". As per his wish, the students of seventh semester will elect the most admired teacher by voting every year.

I take this opportunity to extend my heartfelt gratitude and thanks all my colleagues, the non-teaching staff and most importantly the students of Chemical Engineering for their constant support and kind cooperation during my tenure as HoD of Chemical Engineering.

Presently, I am heading as Associate Director – Industry Liaison, Placement and Practice school. This is the most challenging and learning experience with the corporate world. Apart from regular placements and recruitment drive, I along with my team initiated MoUs/NDAs with the reputed companies for collaborative research, faculty sabbatical and live projects to our students. I am fortunate to work under the able guidance of our beloved Director Dr D Srikanth Rao and Joint Director Dr B H V Pai. I am grateful and thankful to them for their constant support and kind cooperation.

I am thankful to the organisers for giving me an opportunity to share my memories and experiences in the souvenir being brought out to commemorate Golden Jubilee of the department of Chemical Engineering at MIT where I am proudly serving for the past twenty-seven years.

Mr. B Kushala Shetty Sr. Technician (Retd.) Chemical Engineering Department MIT, Manipal. Mob: 9481753669

I started my career in the Bio-chemistry department of KMC Manipal in the year 1965. During those days the soil testing for the Department of agriculture under Syndicate bank was conducted there. Later this was shifted to the Civil Engineering Department of MIT Manipal. Alongside, I too got transferred to MIT from KMC.

The Chemical Engineering Department was started in the year 1969. It was during the year 1971 that I was transferred to the Chemical Engineering Department from Civil Engineering and it was here that I served for the next 33 years of my life. When I had joined the Department Prof. Subramanyam had just been appointed as the first HOD. There were other stalwarts like Prof. P.G. Krishnamurthy and Prof. Sampath Kumar in the Department.

I had technicians Mr. Sadanada Nayak and Mr. K KNayar for my company as colleagues. We assembled the experimental set ups under the able guidance of Prof. P G Krishna Murthy in four laboratories: Heat transfer lab, Fluid flow lab, Mechanical Operations Lab and Momentum transfer lab. It is heartening to learn that most of these set-ups are still in good working condition, being used by students in regular laboratory experiments. During those days, it was quite routine for us to work beyond office hours after 5 pm for setting up equipment and to help students in their project work. I am very proud of these contributions made by me to our Department.

I want to mention one more aspect of working at MIT. No one ever felt any undue pressure or harassment from anybody. Still everyone did their job well. Employee satisfaction is undoubtedly an important reason behind the success of our Institute.

Those days our institute was affiliated to Mysore University and then later to Mangalore University. Finally, we were affiliated to MAHE in 2000. I got superannuated from service in the year 2004 after attaining the age of 60. Presently I am leading a very happy retired life staying at my home at Indrali, Udupi.

I am indebted to the Great Founder of Manipal, Padma Shri awardee Dr. T M A Pai, and family for giving me an opportunity to make my career in the Department of Chemical Engineering of MIT and be a respectable citizen of this country. For this I remain ever grateful.

Dr. M. B. Saidutta

Chairman,

IIChE, Mangalore Regional Center.

Professor and former HOD of Chemical Engineering,

NITK, Surathkal

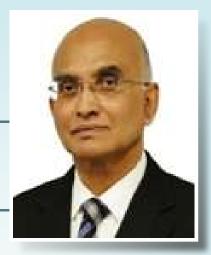
Email: saidutta.mb@gmail.com



It is my pleasure to know that the Department of Chemical Engineering at Manipal Institute of Technology is celebrating its Golden Jubilee this year. The department has been in the forefront of imparting Chemical Engineering education in Karnataka, and has earned a name for itself on delivering quality education. The faculty in the department were also instrumental in establishing the Mangalore Regional Center of Indian Institute of Chemical Engineers (IIChE) to nurture fellowship among working professionals in the field.

It is pertinent to note on this occasion that the Chemical Engineering Department had organized the 45th Annual Conference of IIChE, CHEMCON 92, at Manipal in December 1992 under the aegis of Mangalore Regional Centre.

I congratulate the Department of Chemical Engineering of MIT Manipal on the occasion of Golden Jubilee and wish them great success in crossing more milestones with their pioneering effort.



Mr. C. M. Balaram 1969-1974, First batch of B.E. Chemical Email: galileocm5@gmail.com

Many thanks for the invitation to attend the Golden Jubilee Celebrations of the Chemical Engineering Department at MIT. As much as I would like to attend, I have prior commitments during that period and would have to regretfully decline. My apologies.

Attached, please find a brief write up of my memories at Manipal. I have kept it short and more general as recollections of many specific events have faded away over the years. But I will always cherish the memories and treasure the bonding.

I am retired now, doing occasional freelance consultancy or part time work.

Let me take this opportunity to offer my congratulations to MIT for organizing this historical and significant event. A momentous occasion to be remembered.

The MIT Memories (1969 – 1974)

Congratulations to the Department of Chemical Engineering at Manipal Institute of Technology (MIT), on the grand occasion of its Golden Jubilee Celebration. It is indeed a momentous occasion.

As a member of the Class of 1969-74 and being among the first batch of chemical engineering students to graduate from MIT, it has been a unique privilege to be attached to that great institution of learning. In the early years, there were compelling demands to be addressed and formidable hurdles to overcome to administer the process and set the pathway to form the department and progressively develop the curriculum for chemical engineering. The Institute responded to the challenges commendably, setting up systems, structural frameworks, procedures and allocating resources where appropriate to formalise and institutionalise the programme. Since then, it has been an exercise in continual improvement with best practices put in place in the pursuit of chemical engineering excellence.

The MIT years bring back fond memories. The strategic location of the campus, the contemporary architecture, the natural landscape and the tranquility of the surroundings and the open spaces are things to be remembered and cherished. The ambience and the facilities, provided the right platform to focus on the primary objective of learning, acquiring knowledge, sharpening skills and enhancing competencies as the years progressed.

As a foreign student, the opportunity to interact with and work with a group of students from diverse backgrounds representing local multiculturalism and multilingualism has been a privilege, not to forget the long standing relationships developed since, spanning almost 50 years. My Malaysian college mates, attached to chemical

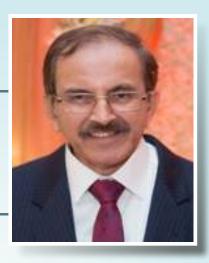
engineering and other disciplines gave me wholehearted and unconditional assistance throughout my stay at MIT. The mutual support and camaraderie that was demonstrated in various areas of engagement has been a true representation of the deep bonds of friendship that were fostered. In many ways that set the tone for teamwork and team dynamics, which is crucial to organization excellence in today's highly competitive environment.

The foundational knowledge picked up at MIT has been a significant enabler in defining and shaping my personal development and the career path that I pursued in chemical engineering for the subsequent 36 years before I retired. The opportunities to apply the fundamentals of chemical engineering has been numerous, be it in process design, project management or process plant operations, where one is constantly challenged to streamline, optimize, innovate, intensify and develop meaningful solutions and sustainable outcomes, as part of the ongoing effort to remain relevant and competitive. The teaching interventions and learning experience assimilated from MIT, together with the organizational and management skills acquired over the years has been instrumental in supporting my ability to respond to these evolving needs in a constantly changing business environment.

Let me take this opportunity to extend my thanks and appreciation to the organizing committee of this prestigious event and to wish the occasion great success and the Institute, continued glory and recognition in the years ahead.

Mr. Praful Rangaishenvi

1969-1974 batch of B.E. Chemical Previously All India Sales Head at Sulzer Pumps India Ltd. Contact No.: +91-98675 62288 Email: prafulnr@gmail.com



I am from the first batch of Chemical Engg. that passed out in 1974. MIT was then known as Manipal Engineering College (MEC) and our passing out certificates bear the name of MEC. I was one of the few students from Karnataka (from Dharwad) and having done B.Sc. I, I got direct admission to second year B.E. and I had to simultaneously study the few subjects of first year B.E. like Engineering Drawing for which classes were held in late evenings after class.

Our memories though very much faded are very much memorable. The hostel blocks I to VI, the North Indian and South Indian messes (vegetarian and non vegetarian) were quite sufficient to cater to the various students coming from all over India. There were a few private messes outside the campus and very few students stayed outside the campus.

Our batch was of approximately 35 students headed by our HOD Prof. N. Subrahmanyam and other department faculty included Dr. P. G. Krishnamurthy, Dr. Sampath Kumar, Mr. Hanumant Rao, Mr. Jayadeva Bhat. The college principal was Prof. B.V. Krishna Murthy and Prof V. Chandrashekar was the vice Principal. Many of us became quite successful in our career and are now living satisfactory retired lives.

As the Department was new, some of the labs were delayed in being made ready well into the semester, but that did not hamper our studies in any way. Those were the days of "Slide Rule" much before the advent of Engineering calculator, no xerox machines etc which necessitated copying notes from one another in case of absence of class due to sickness. Weekends would be catching up on Bollywood movies in Udipi or once a month to Mangalore which included butter chicken in Motimahal and gadbad icecream in Komal's Restaurant which at that time were dream outings for us. Manipal then was mainly full of students of Medical, Engineering, Dental and Pharmacy colleges and their staff with comparatively few from local population. Valley View International was a little out of budget for us as we lived meagerly on our limited monthly allowances.

Another unforgettable feature of our time was that there was only one girl in the entire college among all the boys and she was from Civil Engg. Dept. If memory serves me right, she was the daughter of one of the faculty of MEC.

It is a proud moment for all of us Alumni that your Department is celebrating the Golden Jubilee this year and I wish your team all the very best to make the function a grand success.

Mr. T S Vishwanathan

1976 batch of B.E. Chemical Technical Facilitator- Services Division Ion Exchange (India) Limited, Bengaluru Email: ts.vishwanathan@ionexchange.co.in Contact No.: +919341478833



My life in M IT Manipal

It is indeed very pleasing to recollect moments being in MIT from 1971 to 1976 and also in the Chemical Engineering Department between 1972 and 1976. It was a peak monsoon when my dad dropped me in Hostel Block I - room no. 7 and I was joined later by roommates Mr. Rajan Menon (B.E. Mech., who has his own manufacturing set up now in Malaysia) and Mr. Nalin Kumar Chawda (B.E. Mech., who was in Shriram Bearings Limited, Ranchi when I met him last in late 80s). Initially, we had to go through the "formal interaction with the seniors", an unpleasant and petrifying experience as well. Monsoon was so severe that we used to get drenched while going to the class at 8 AM. Raincoats, umbrellas and boots all over the place could be seen! Black leeches also did not spare us as they used to stick not only to the walls but also onto our skin. Yet, we always looked forward to the rains every year. We used to play football in wet grounds coached by Sam (the then College player, presently settled in Trichy). Real fun indeed!!

A cosmopolitan atmosphere in MIT that turned us from boys to real professional men in life – colourful lungis were a hallmark and great fashion and also pyjamas used to be the sight in the hostels and so were different languages prevailing from Kashmir to Kanyakumari. First year was common for all branches. Being in Section I, I wish to remember our English lecturer Mr. K. T. Gatti, Maths lecturer Mr. K. Narayan Rao and Chemistry lecturer Mr. M. VaradaKini.

From second year onwards, it was a "more" serious affair with subjects being tougher and tougher. I can still remember those classic lecturers on "Mechanical Engg" and "Theory of machines" by Mr. K. S. Bhandari who also happened to be an MIT student a few years earlier. This is the year from which the classmates were the same right through till the end of the curriculum. There were hardly a few from South India in our class with most of them being from Mumbai (the then Bombay) and interior Gujarat. A few from North were there too. My class mate and later on my roommate for three years, Mr. Jeyakumar (a Malaysian presently settled in Adelaide having retired from SHELL) gave me a lot of guidance and inspiration to do well and I am very grateful to him. We have also met on a few occasions post 1976 though not frequently and we could recollect being together. In fact, he also gave me a handful of thoughts to share in this article. We had another close friend and class mate of ours as well, a tall East African, by name Mr. David Abranches, who is presently settled in Melbourne.

One will not forget happy moments in the department we had with our faculty viz., Dr. N. Subramaniam, Dr. P.G. Krishnamurthy, Dr. Sampath Kumar, Mr. Muthuraman, Mr. Muniswaran, Mr. Krishnaswamy, Mr. Hanumantha Rao and Mr. Jayadeva Bhat. They were just outstanding mentors and peers too, who inculcated good values and discipline in us, only to focus on professional engineering and steer away from the distractions (bad elements such as cigarettes, liquor, drugs, fights, strikes etc.,). Leadership by example was the order of the day. Such cordial relationship between lecturers and students, the best we could see!!

PGK was our (Jeyakumar and me were batch mates) project guide in the later years of our curriculum and was very inspiring. In the third year, the first subject of Chemical Engineering was Stoichiometry (taught by JB if I recollect) was a tough one. Later on, as the years progressed, we had lot of tougher ones viz., Heat Transfer, Mass Transfer, Fluid Mechanics, Process Engineering Economics, Process Control etc. When we used to come out after appearing in the exams, we would not know what our score would be. So tough the situation used to be!! Being of the third batch, the department was just fantastic and had all facilities required for us to learn and graduate. At the end, in 1976, Mr. Jeyakumar and I came out with distinction (in fact, we both had first class with distinction in all the five years in the midst of tough study – life balance in the campus). I am glad to share that we both came within first ten ranks of the university (Mysore University then). Mr. Vitta Surendra Babu, our class mate from Bellary, who came within first five of the university, turned out to be the winner of Dr.T M A Pai Gold Medal of the college. Though there were uncertainties regarding the recognition of the degree elsewhere in India or abroad at that time, many of us have excelled in life. Kudos to MIT as well as Chemical Engineering Department!!!!

While we were serious in studies, our enjoyment was never limited. Almost every weekend, we used to go to Udupi temple where we could just walk through to have a darshan of Lord Krishna whereas now we see a long queue. That would be followed by a meal at Diana's - fruit salad, puri - bhaji, coffee and falooda and also movies at Kalpana and Alankar theatres. Our periodical outing to Hotel Usha cannot be forgotten. Local cuisines such as Kori Roti and Chicken Curry were yummy. Mitra Samaj's Goli Bajji, Masala Dosa and Chiroti Milk sweet were out of the world. Well, being in the campus, how can one forget Pandu Shop's lemon juice or Kamath canteen's hot potato wada, Tuppadosa or cold flavoured milk in Manipal Milk Bar? All messes served good food with varieties including Sunday lunch feast. Moreover, there were private messes viz., Wilson's mess which used to serve European food with eggs and bread, Zoroastrian mess serving Parsi food and Krishnan Kutty's mess down the valley serving spicy beef and what not. Late night studying was common as the exams came closer with the stalls outside serving bread, omelette and chaya. No dearth of varieties!! Our stroll in Tiger Circle to bury our sorrows and periodical Tamil Association meetings are still fresh in our mind.

Being with Mr. Jeyakumar, I was close to the Malaysian team too. We all even met in Kuala Lumpur twice in the last two years. There have been frequent reunions in India too in which I have been a part. My last visit to MIT was in December 2017 for an Alumni Meet when I was amazed to see the developments in the campus including hostels and also a marvellous Food Court! Those who visit today feel happy to see the vibrancy in the campus.

Today, we are proud to be associated with MIT, currently being one of the renowned institutions in India and the rest of the world. The experiences we gained in living and studying in Manipal made us the successful men we are today. This may be the achievement of our peers/alma mater which made MIT what it is today.

Finally, it is always nice to recollect my past in MIT which has personally let me reach this high position in our organization and society. Memories are endless!!

God bless all with continued success!!!

Dr. Ganapathy Ayappa

1984 (4 year) batch of B.E. Chemical Professor and Chair, Department of Chemical Engineering Indian Institute of Science, Bengaluru Email: ayappa@iisc.ac.in



I personally extend my warm wishes and congratulations to all the faculty and staff, past and present, of the Department of Chemical Engineering at Manipal Institute of Technology on the occasion of this Golden Jubilee. This is truly a landmark in the long history and journey of the department. With the development of modern chemical engineering and the interdisciplinary nature of technology development, chemical engineers will continue to play a pivotal role in this evolution. The Chemical Engineering Department at MIT has played a significant role by imparting knowledge and giving an opportunity to several graduates to take part in this exciting journey. We look forward to the continued commitment to excellence in chemical engineering education.

Dr. Prakash R. Kota

1989 batch of B.E. Chemical Managing Director / CEO Kerox Chemicals Pvt. Ltd. Email: prakash@kerox.org



ChE at MIT - The 1985-1989 Era

The Golden Jubilee of the Chemical Engineering Department at Manipal Institute of Technology is a happy and proud milestone for all its alumni. I was an undergraduate student in the Department during the years 1985-1989, well before the Department's halfway mark of 50 years. It was a totally different world compared to our present 2019. It was a time straddling the old with the new. It was devoid of personal computers, mobile phones, internet, emails, WiFi routers, Google, Facebook, WhatsApp, flat panel TV's, round the clock digital entertainment and credit-debit cards. There was no concept of word processors, spreadsheets and digital presentations. Our version of Facebook and WhatsApp was walking to the room of our buddles and knocking on their door!

The years 1985-1989 were formative years for me and my classmates. Our experience was a solid foundation of traditional chemical engineering; along with a healthy dose of extracurricular activities such as sports, music, movies, culinary joys and exploration of the South Canara region. The educational program comprised of a rigorous Monday to Saturday schedule, with Saturday being half a day. We had wonderful food messes and every student will vouch that they were a highlight of our Manipal experience. So, it made sense to wake up early enough to have a sumptuous breakfast before heading to college.

Reaching the class on time at 8:00 am was quite a dash, with students' speed walking or running; and a profusion of bikes making their way. The short break from 10:00 am to 10:30 am was a welcome respite for many to sip on their favorite beverages and snack at the local college canteen. There was a Syndicate Bank branch located on the ground floor of the main building and many found the time to withdraw some money during this short break. There was no concept of ATMs and we had to ensure a regular supply of cash for all our day-to-day expenses. After more course work, we had a luxurious lunch break from 12:30 pm to 2:00 pm. It was then back to classes, until the day ended at 4:00 pm or 5:00 pm, depending on the class schedules.

The first year at MIT, 1985-1986, was a mix of physical sciences, mathematics and introductory courses in mechanical, electrical and civil engineering. The program was a blend of classroom lectures and laboratory sessions. Workshops and courses in engineering drawing were something brand new for us. It gave us a taste of the classical engineer in the making. We used a wooden board and mini-drafter contraption for our drawing classes. The wooden board worked really great during the monsoons and doubled up as a canopy over our heads while getting to the classrooms! We learned how to create projections, sectional views, isometrics and developments using the minidrafter contraption, all by hand. This is a lost art today, since it's all done now with 3D software packages.

Our professors and teachers during the first year were excellent and much admired. Many strolled into the classrooms with just a duster and a box of chalk. They were dedicated to the teaching profession and had a focused teaching style. Watching our teachers fill the black board with concepts and mathematical equations with fluency and ease, gave us the confidence that we could do the same, once we grasped it. Many thanks to them for giving us a great start at MIT.

The ChE curriculum at MIT was based on the classical and traditional approaches. It was a package of in-depth course work in unit operations and unit processes, thermodynamics, fluid dynamics, heat transfer, mass transfer, reaction engineering, process control and instrumentation. I particularly liked the laboratory courses, since we could test out the theoretical concepts with actual pilot scale equipment.

We had excellent professors and teachers in our ChE Department. They were committed to the teaching profession and gave their best to us; and this is no exaggeration. Our class strength was under twenty and we could therefore spend enough time with the professors. Walking into their chambers to clarify a doubt, ask a question and debate with them on concepts was a norm. We needed no special appointments. They were always available to us and they were approachable. Our teachers were a blend of experienced professors and those starting their teaching careers. All of them had a master's qualification while some had earned Ph.D.'s. Combined, the teachers and the students constituted a wonderful community and eco-system for education.

I had met Prof. Dr. K.J.R. Sarma, the HOD, prior to joining MIT, on a grey and rainy monsoon day in June 1985. I had stepped into his office with my father, Mr. K.V. Ramanath, who was a chemical engineer as well, to figure out whether MIT was for me. Prof. Sarma was sitting, with a large writing board resting on the arms of his chair and the table. He greeted us with much kindness and patiently answered our queries. I was convinced that MIT should be by engineering college. In 1986 he taught us one of the first courses in ChE, chemical process calculations. Later, he taught us engineering plant design in 1988. He was well liked by all students and was a father figure to us, firm but very kind.

My personal gem in the ChE department was Prof. Dr. P.G. Krishnamurthy. Dr. PGK, as he was known, was a legend. Every student, even some of his colleagues, were intimidated by his very presence. During our freshman year, our seniors brainwashed us with scary stories about his strictness in class. But, they all unanimously agreed that he was a brilliant man and teacher. I was quite fascinated by the man behind the legend. He had a program, called "Contact Session", which was held every Monday after college hours, starting at about 6:00 pm and going on for about an hour or two. Anyone was welcome. The agenda was to ask him a question on anything and he would engage with us to answer it; and much to our amazement, elucidating the answer from us, nudging us to think originally. I decided to attend those sessions in my second year and I continued till I graduated. I soon learned that I had to be in the classroom before 6:00 pm, otherwise we were not allowed to enter. The dress code was definitely a buttoned shirt and no t-shirts. These may sound like quirks, but once we attended, the time was well worth it. It was an excellent mental gym for budding engineers.

Very early on, in the 3rd semester (1986), I had barged into Dr. PGK's cabin and asked him to explain what chemical engineering was all about. He gave me a succinct definition, that rings true even today – conversion of available materials into useful products, through physical or chemical processes, under optimum conditions.

The most famous course that Dr. PGK taught us was mass transfer, during the 6th and 7th semesters (1988). Those courses were excellent and he challenged us mentally to think beyond the ordinary. It was not about books and formulae. It was about building complex engineering models through intuition, deduction and application of first principles. It's been over 30 years since I graduated, but I can still vividly recall the classes that he taught us on distillation, extraction, leaching, adsorption and absorption. We had an enjoyable laboratory course on heat transfer with him and it was a terrific learning experience. I had often debated with Dr. PGK and had many technical arguments with him. Sometimes the debates would be very heated and we would not speak for a few days. In the end, the truth of science brought us back to the discussion table - he as teacher and me as student.

Another stalwart was Prof. P.K.A. Muniswaran (PKAM). His style of teaching was one of supreme clarity. He would define a concept, work out the mathematical model for that and illustrate them with problems. He taught us heat transfer (1987), simultaneous heat and mass transfer (1988) and the mass transfer lab (1989). It was in these classes that we became comfortable with dimension less numbers in chemical engineering. You name them; we knew them all – Biot, Gratz, Grashof, Colburn, Knudsen, Nusselt, Prandtl, Reynolds, Schmidt, Sherwood, Stanton and more. He had a knack to teach anyone on how to solve ChE problems. We are much indebted to PKAM for molding us into confident chemical engineers.

We were also fortunate to have a dedicated teacher in Associate Professor B. N. Reddy, affectionately called BNR. He too had a lovely and clean style of teaching. He taught us a course in Unit Operations (1987) and the associated labs. For some strange reason, I can still recall his lectures on particle settling in fluids, sedimentation, packed beds and fluidization. He was very friendly to students and approachable. He was the glue between the students and the department, even after we had graduated.

Very early on, in the 2nd year (1986-1987), Assistant Professor Raghavendra Rao (RR) introduced us to fluid dynamics. It was a very confusing course. We were trying to tame fluid flow through mathematics. Oddly enough, since it was so untamable, I went on to explore it even further during my graduate Ph.D. studies in the US. Associate Professor P.S. Murthy (PSM) taught us a course in engineering plant design and economics (1988). Most students were good buddies with him, since he had a very friendly disposition with them. Associate Professor K. Raghunathan (KR) taught us reaction engineering (1988-1989). We all knew that this was an important course. However, by this time, since we had spent about 3 years in the Department, many opted to figure out this subject themselves, having been trained to be self-learners.

I have great admiration for Assistant Professor S. Sivasankaran (SS), for many reasons. He had joined the department when we had entered MIT (1985). He was a new entrant to the teaching profession. He worked real hard to teach us, much harder than the students. He taught us unit chemical processes (1986-1987) and chemical engineering thermodynamics (1987-1988). We are in touch with each other even today, after all these years; and I have had the pleasure of working with him on some commercial engineering problems. He has super enthusiasm for chemical engineering and has a holistic understanding of our profession.

We were gifted with a good teacher in our senior year (1988-1989). A freshly minted M.Tech graduate from I.I.T (Bombay), Assistant Professor Balakrishna Prabhu, joined the department in 1988. This was much needed and he was about our vintage. He taught us process control and instrumentation. This was a very different course and he made us comfortable with it; especially the application of Laplace Transforms to solve problems. He too has been in regular touch with me over the years.

My classmates and batchmates enriched my experience at MIT. However, my classmates glued it all together. We were a small group and came from various parts of the country – Ramprasad Bangaru, Dipal Parikh, Sudhakar Reddy, Ashok Balasubramanian, Ajay Mehta, K.U.S.L. Prasad, Riyaz Ahmed, Amit Rao, Kunal Kamdar, Madhav Shenoy, Ravi Gollarkeri, Ramchandra Shenoy and Rajith Shenoy. I'm missing a few names, but it's been over 30 years.

Our graduating ChE class was the smallest and it was commonly accepted that the curriculum was the toughest. We actually collaborated very closely, be it for understanding a concept, solving engineering problems, working on design projects, sharing lab work, partaking in the industrial tour, or just hanging out and having a good time. Our ChE batch was one of the first to wrap up exams in 1989 and we wanted to trumpet as loud as possible. I still do not know how it was made possible, but some of my classmates had convinced the Udupi temple authorities to bring their temple elephant to the campus on the day we finished our last University exam. Yes, we strolled down with the elephant from the main quadrangle to the hostels. Those were our days!

Dr. L V Muralikrishna Reddy

1990 batch of B.E. Chemical Ph.D., FRSC, FIE, FWAPS, FIET(UK), FISTE, FIIChE Former President, The Institution of Engineers(India) President, Indian Technology Congress Association Email: mlingireddy@yahoo.com



MIT is the epitome of diversity with nostalgic experience. I cherish every bit of my life at MIT; the moments and memories stand fresh even today as if it happened in recent times. In over six decades, MIT inhabits a predominant role in fostering thousands of brilliant minds who are bestowed immensely to engineering and technology. Academic rigour aside, MIT is a cultural gold mine, that I have elicited to the greatest extent. I adored the alma mater that played a significant role in enlightening my consciousness by inculcating high values in life.

It's a collection of beautiful reminiscences in the journey of earning a coveted degree of chemical engineering at remarkable facilities of MIT; applauds to benevolent visionary management. At that time, the branch of Chemical Engineering remained most protracted, resilient and arduous in the institute with very few students in a class, but the admiring faculty made things simple in erudition. Undoubtedly, friendly and accessible faculty, well versed in captivating teaching & learning strategies helped in traversing the portals of MIT. The constant pressures of the demanding academic curriculum, quest in learning, attendance anxieties, tensions associated with exams & whole night studies, among others are now recollected and relished with rejoice. Organic chemistry in the fourth semester and Mass transfer in final year are some of the climaxes of my discreet struggles in earning my accredited graduation.

My momentous memories strongly allied with edifying campus ecosystem, cosmopolitan hostels and multiethnic food blowouts. The MIT hostels are incredibly composed of delight and bliss, which in turn positively shaped my professional and personal life path. As part of my professional pursuit, I visited numerous engineering institutions and interacted with several engineers, nevertheless, nothing comes-across as such a cohesive campus; more precisely the corresponding appealing hostels of MIT. The recollection of hostel life with a wide-ranging stay options, nutritious food at Cosmo and SINV Mess, affordable logistics and friendly neighborhood amenities are everlasting and regular topics of discussion among friends and family. The pleasure associated with food joints; weekend, month-end and year-end parties at the Mess; outside eateries like Usha, Diana, Big-Daddy, Shanthala, college Cafeteria, and Night Food-Carts remain highpoints of notable and complete life experiences. The endless night chats, the entertainment at Kamath Circle and TC, sunsets at Endpoint, movies at Udupi, regular visits to Venugopala Swami and Sri Krishna Temple are adored excitements.

Without exception, the MIT voyage is a time-honoured experience, and I am grateful to legendary educators and fabulous management. Hoping MIT will continue to nurture the aspirations of new generations in cultivating disciplined and passionate engineers for societal good.

Dr. Leon Ittiachen

1994 batch of B.E. Chemical (Adjunct Faculty, Dept. of Chemical Engineering, MIT, Manipal)
Professor, Department of Biotechnology
Sahrdaya College of Engineering & Technology Trichur, Kerala
Email: leon@sahrdaya.ac.in
Contact No.: +91 98460 33233



Reflections of an MIT Chemical Engineer

Traveling through memory lane on the formative years of my educational life, the initial four years I spent in MIT stand out as a foundation to my career growth as an educator. It seems all the more surreal as I have spent the last four years regularly coming back to this school on a hillock interacting with the present students of the Department trying to pay back to this institute a part of what they have given me.

So what has changed in the last 25 years?

The long treks with my huge drawing board to the Chemical Equipment drawing class now all seems archaic as the present engineer doesn't need a square piece of wood to protect him from the Manipal elements. I revel in the fact that I can call myself a BG (Before Google) Engineer which meant that the questioning of our all-knowing professors was limited. It took too much time and effort to trudge upto the library to figure out, if what you were taught, was right or wrong. The few who attempted this trek to enlightenment got waylaid by the aromas of the keshtu stall just outside of the library. Then we had only REC Suratkal (now NIT) under the Mangalore University offering a Chemical Engineering degree So it was a fairly simple process, we wrote the exam, REC Suratkal marked our papers and we failed. Life moved on from one Lab to another one semester merging into the next and many taking an extra year in between to cushion things. I remember we had an 8 hour Lab in the basement of the Main Building which had an examination that allowed you a one hour break for lunch. Chemical rats we were called.

Our professors all had initials and I trust if one was asked their full names at a viva, we would not have passed. So we had PSM taking Heat Transfer, BNR taking Industrial Chemical Technology, KBP taking Process Control, JB taking Process Calculations, PGK with Mass Transfer and KJRS with SHMT (Simultaneous Heat and Mass transfer). I remember asking my senior what SHMT was all about. He said it's like an Eagles Greatest Hits compilation except here you got the worst parts of Heat transfer and Mass transfer all rolled in for one subject. An excellent analogy and today he is the Head of an engineering plant at Jamnagar.

We were the outliers of a forgotten generation. Devoid of woman and song (wine there was always plenty of) the old MITian had to find creative ways to spend his time. As someone said you would see more cows on your walk from 9th block to the main building than women engineers in MIT. Today our once barren campus has a near fifty percent ratio of the fairer sex but very few cows. Things do change.

Today's students are different, as I walk around the Blocks at night I am met with pin-drop silence as everyone lies cocooned in their own cyber bubble. The food is tastier, the food court fancier. The classrooms all air-conditioned and the hostels too. A multiplex in Manipal bringing you the latest Hollywood fare unlike the Video Projection halls that showed seedy grainy movies from a VCR.

Yet would we change the period we studied in?

Never.

For walking through these hallowed halls, having both our Silver Jubilee of the 1994 batch and the 50th Jubilee of the Department we feel truly blessed to have studied here.

To the Institute that reared us and the Department that taught us.

Thank you.

Mr. Faizan Lalljee

1995 batch of B.E. Chemical Reengineering Consultant & Trainer with Banks & Financial Services and Manufacturing sectors, England Email: flalljee@gmail.com



Manipal Institute of Technology-A True Alma Mater

I'd like to begin with greetings to all and congratulations on the Golden Jubilee of the Department. I feel very elated writing this article and contributing on this grand occasion. Surprisingly enough it still feels like a recent past although close than 25 years have passed by since we passed out in 1995. I am sure the campus has changed and so has Manipal but my memory still holds the picture of 1995 and the great time our batch had. It's a humble attempt to share with you some great moments and recollections.

Taking a vicarious journey back to 1991, I remembered the straight road from the main building passing through the library, Mass Transfer Lab reaching 4th Block. This road seemed to be the busiest at 07:45 and I remembered the arduous task to carrying our drawing boards, drafters for engineering drawing lecture.

Our Department had a students' association called Chemical Engineering Association (pardon me for any inaccuracies) and I happened to join into one of those meetings to discuss and plan activities. I felt very strongly about taking this association to the next level something that our batch believed in completely. This prompted rollout of the event Cheminar where we had other universities participating in paper presentation contest. The guest of honour was Dr. M.M. Sharma from the esteemed University of Mumbai, Department of Chemical Technology (UDCT). It was a great session listening and getting to know about his perspective about Chemical engineering practice. It was truly an event where every member of our batch and department had contributed tremendously to make this event successful.

I remembered my project work was something that attracted lots of attention and smiles. I worked on a project to extract starch from Tamarind seeds to make Glue for paper. I was looked at with skepticism and smiles as most of the projects were technical and more sophisticated. There were statements like, "You could finish the project in your backyard within a week". I'll leave the technical details but believe me just trying to crush the seeds took the life out of me! All the great glue that I made was ultimately used up by my roommate and neighbours!

A very proud moment for me was to be one of the two students from MIT selected for an award from REC Surathkal for academic performance. It was an award for us but also recognition for our department for all the hard work that went in and help us bring out the best in such forums.

As the degree programme came to a close, it was a moment of excitement and sadness. Entering into the real world, armed with a degree and confidence but at the same time leaving Manipal with great memories. There is so much change happening currently in the world around us with very exciting times too. The boundaries between traditional disciplines are blurring but the fundamentals remain intact. I still play a memory game of recalling the books and authors that we used during our course work and one thing that certainly comes up is the smile on my face.

I would like to take this opportunity to wish all success to our department and students for all future endeavors.



Mr. Ravi Prakasha 1999 batch of B.E. Chemical Email: rprakasha@gmail.com

My college days were unforgettable and in fact were the happiest days of my life. I feel proud to say that "I am from MIT", being one of the oldest engineering colleges, which is recognized and respected all over the world.

"Knowledge Is Power" is MIT's motto, which drives us towards a culture of excellence, empowerment and enrichment. The college has molded my personality and created new vision for the future. During those days, along with classroom lessons, the faculty were kind enough to go beyond textbooks and share their experience & knowledge, providing us lessons of life. I would like to thank the wonderful faculty, management and founders of MIT Manipal.

Let's make a habit to enjoy the journey of life. During the journey of life, we always tend to worry about difficulties and think that, we will enjoy life after that difficulty has passed over. Similarly, in college I used to think that I will be happy after engineering, once I get a job. Today, after two decades, we cherish those times as the most wonderful period of our life.

Manipal a small hill station with endpoint sunset view adjacent to a river, beach in close proximity, temples in Udupi and waterfalls of Western Ghats all within reachable distance, was a beautiful place to study and spend four wonderful years. It is a town brimming with colleges, from Medical, Pharmacy to Management etc. and students galore with a fun filled environment throughout the year and each and every one dreaming a better future.

Dr. Oishi Sanyal

2011 batch of B.Tech. Chemical Postdoctoral researcher, School of Chemical and Biomolecular Engineering, Georgia Institute of Technology, Atlanta, Georgia (USA) Incoming Assistant Professor (tenure-track), Department of Chemical and Biomedical Engineering, West Virginia University, Morgantown, West Virginia (USA) from June-2020]

Email: oishisanyal@gmail.com
Linkedin: www.linkedin.com/in/oishisanyal/



MIT Chemical Engineering through an alumni lens

Who doesn't like reminiscing good old college days? So, when I got the opportunity to write in honor of the MIT Chemical Engineering golden jubilee celebration, it gave me a valid excuse to take a trip down memory lane.

Like most students who come to Manipal, college was my first "taste of freedom" and also my first experience of what being a real adult meant. I came to Manipal from the "City of Joy" with little or no understanding of what one might say are basic life-skills. So, it won't be an exaggeration to say that my Manipal days were instrumental in preparing me for the life ahead. Back when I was a student – I did what every student does, viz. complain about the grueling semesters. After the first couple of weeks into every semester, our schedule would barely leave us any time to breathe -thanks to the dreaded sessionals, endless assignments, lab reports and finals. Also, not to forget- the 8 o' clock classes, the lack of holidays and for chemical engineering students – the frequent design classes on Saturdays! While what seemed like torture back then, looking back we lived some memorable moments in midst of our demanding schedules- the last-minute group studies, the all-nighters, standing in line at the coffee shop at midnight and, getting photocopied notes from Xerox Shop Akka. We all rejoiced when we managed to get through Basic Electrical Technology and Engineering Physics in our first years. As Chemical Engineering students, we breathed a sigh of relief once we were done with Transport Phenomena and Process Design and Drawing.

Once I stepped out of Manipal and went on to pursue graduate school in US, I realized how much different MIT was from other engineering colleges in India. In fact, it won't be an exaggeration to say that the amenities and opportunities that our university has to offer in terms of technical or non-technical activities are at par with many US universities. While the typical Indian education system famously relies on rote learning mechanisms, Manipal gave us the opportunity to think "out of the box". Throughout the year, we had the opportunity to participate in the technical festivals (Tech-Tatva) and be a part of tech clubs (I was an Akshay Urja club member) which significantly broadened our horizons beyond usual course work. The practice-school program in MIT was also unique and gave us our first taste of research – an experience I found invaluable as I went on to pursue a PhD thereafter.

On retrospection, I also realize that choosing chemical engineering was the best decision of my life though it meant going against the conventional wisdom of choosing computers/electronics. Our department not only provided a solid foundation of basic courses, it also ensured that we make informed career choices once we finished our degrees. We were given the opportunity to experience both "real" process engineering during our industrial visits as well as fundamental research during our practice school.

Our faculty members were available to talk to us, not only on subject matters, but also about our career choices. I must also emphasize that the rigorous course work at Manipal really made the graduate level course work feel quite easy during my Ph.D. Most importantly, I had learnt to self-teach myself- a tool which has been valuable throughout my research career. I still have some fond memories of Prabhu Sir teaching us how to solve the Ponchon-Savarit and McCabe-Thiele methods using those large graph papers and Raval Sir (who I believe has moved to a different university now) teaching us how to design chemical reactors using our drafters and the big drawing sheets. I remember feeling like a "real" engineer when we worked on our Advanced Control case studies that Prabhu Sir had assigned us. Moreover, we were given a flavor of many state-of-the-art modeling and simulation software, which was uncommon among most Indian colleges back then. As I was applying to academic positions and had to explain my teaching philosophy, I drew inspiration from a lot of strategies that our professors at MIT Chemical Engineering used to teach us.

As our department is celebrating its golden jubilee, I feel really proud to count myself as an alumna of this department. Our department really emphasized on a "holistic" education system – a concept still alien to most academic institutions in our country. The friendships and acquaintances that I developed with students from all over the country made me a more broad-minded person. It often comes as a surprise to many when I say that I barely experienced the so-called "culture shock" after coming to US. Deep down, I know it is perhaps because Manipal had already enabled us to co-exist with people with different cultural backgrounds and be accepting of people who are unlike ourselves. Looking back, I also realize that our department and Manipal, in general, was far ahead of its times in terms of inclusivity. We are nearing 2020 and the world is just waking up to realize the potential of women scientists and engineers. Back in Manipal, this was never an issue— we never felt that our efforts or talent was underappreciated because of our genders. It was expected that all of us be equally ambitious and pursue our goals with gusto. At the risk of sounding like a cliché, I honestly believe that out of all the educational institutions that I have been in, MIT Manipal played the most significant role in shaping my career. I wholeheartedly congratulate the chemical engineering department for the wonderful 50 years and wish for many more glorious decades ahead. I further hope, that all those who are currently students in our department cherish these beautiful four years and realize that they are lucky to be part of this fraternity.

Mr. Shobhit Kumar

2011 batch of B.Tech. Chemical Scientist/Engineer-SD at Vikram Sarabhai Space Centre Indian Space Research Organization (ISRO) Thiruvananthapuram, Kerala Email:shobhit_kumar8@yahoo.co.in



Reminiscences of my Experience at Manipal

I deem it as a privilege to pen down this memoir for my alma mater. I believe Manipal occupies a special place in the hearts of every MITian, no matter what they achieve and wherever they go. The very mention of KC, TC, Canteen, 10th Block hostel, NLH, IC and Quadrangle buildings certainly brings back beautiful memories of campus life that we had at MIT. Nonetheless, the only engineering department which has been privileged to have its own building is our dearest Department of Chemical Engineering! Being an old department, it has come a long way in imparting quality education and training to its students. It is heartening to note that the Department of Chemical Engineering at Manipal Institute of Technology is celebrating Golden Jubilee and is turning 50 years old now! I take this opportunity to congratulate and thank all my professors and the present faculty members as well as staff for their perseverance and dedication towards making this department an outstanding one amongst all other departments of MIT.

I recall the initial days of my college life at MIT. Being fresh out of school and having limited exposure to the outside world, Manipal was a "New World" for me. The year was 2007 and MIT was celebrating Golden Jubilee of its establishment. The campus at MIT has always been exuberant with some or the other activities going around the corner, be it TechTatva or Revels, and that really amazed me. The first-year classes used to be in NLH and as I recall, our section was a mixed bag with friends from Civil, Instrumentation & Control, Electronics & Communication and Chemical, the latter being in majority. We came from different geographies and cultures of India and therefore were a "mixed bag" with multitude of talents. As I had joined almost a month late after beginning of the session, I used to go for evening classes to make up for the course work. Later in the evening after classes, heavy showers would continue non-stop for hours! That experience perhaps made me well-acquainted with the typical coastal climate of Manipal and I made it a habit to keep an umbrella in my bag, something which I practice even today! Of-course the Baadam Milk, Coffee, Paavbhaaji and Chhole Bhatoore offered by the canteen brought some respite after a hectic day. Assignments were fun to do in the first year as solutions were always available in advance at Shiva's shop! Though in second, third and fourth years, assignments posed their own challenges and we had to be inter-dependent on each other to find the correct solutions. The solutions and photocopy notes would either be circulated through Shiva's shop in batches or through Google talk/Yahoo/Facebook messenger, as those were pre-WhatsApp days! In fact, that's how we learnt team work, which is very essential in professional life.

The library would usually be vacant until the beginning of sessionals and end semester exams! And a day or two before the exams, it would be overcrowded to the extent that there would barely be any vacant seat due to collective group study! I believe every MITian has enjoyed this phase of fun coupled with some anxious moments and has kept cool temperament towards life. Perhaps this, I believe, has resulted in building the confidence to face challenges in life and has been the very reason behind MITians excelling worldwide in their areas of expertise.

The professors at Department of Chemical Engineering have always been very helpful and approachable. The teaching methodology incorporating case studies is well-appreciated as it helps in developing problem-solving skills. The classroom programs have been well-supported by the laboratory facilities along with industrial tour/vocational training at chemical industry for imparting practical knowledge of the concept learnt in theory. The laboratory report writing skills certainly helps in developing the aptitude for scientific research.

The kind of recognition one gets after passing out of MIT is equally worth mentioning. I very well recall my initial days at IBM which was my first job through campus recruitment. When I introduced myself to my senior colleagues that I am from MIT Manipal, to my amazement, they had great regards and words of praise for this institute!

I convey my best wishes to all the faculty members and staff of the department for making this event a Grand Success!!

Mighty, Mighty MIT!!

Dr. Madhuwanthi Buddhadasa

2012 batch of B.Tech. Chemical Postdoctoral Researcher, Chem SIN - Chemistry of Surfaces, Interfaces and Nanomaterials (formerly known as CHANI)
UniversitéLibre de Bruxelles, Brussels, Belgium Email: mbuddhadasa@ymail.com



When I first entered MIT to study chemical engineering, I was about 17 years old and fresh out from school. Being an international student from Sri Lanka, I did not speak the native language nor did I know anyone from this land. Everything was new to me. Yet, I was greeted by some of the kindest and smartest people I have met in my life and I quickly made many friends. The Department of Chemical Engineering is the place where I learnt the basics of my current career which I truly enjoy. I was fortunate to have been a student of this department where I saw how dedicated and passionate the academic staff was in their teaching. They were always available to patiently answer any questions and doubts I had, and gave me the most needed opportunities and help required to grow and reach my full potential as an undergraduate student. The exams were tough, competitive and you never knew what to expect. But that's a characteristic of a good department that trains its students to think out of the box and be prepared to apply their knowledge to solve any relevant problem.

My university experience could not have been better. The institute offered its students the perfect combination of opportunities to pursue their academic and non-academic goals to the highest. This is what gave me entrance to one of the best universities in the world to pursue my doctorate. I will always be grateful to this department, its professors and technicians, and cherish my memories of it. My experience in MIT and Manipal contributed to a lot of what I am today and I am proud to be part of this great community. I wish MIT and the Department of Chemical Engineering a brilliant future!

Mr. Girish Kamath
2016 batch of M.Tech. Chemical
Doctoral Candidate, Department of Chemical and Biological Engineering
University of Saskatchewan, Canada
Email: girishkamat642@ymail.com



I completed my undergraduate degree from MS Ramiah Institute of Technology in Bangalore in 2014 and decided to pursue a masters degree to gain a deeper understanding of Chemical Engineering. I was drawn to Manipal because of its proximity to the Western Ghats and the Arabian sea which promised endless adventures and an incredible cuisine. In addition to this, my interactions with the alumni of MIT and discussions with the faculty of the chemical engineering department during the application process convinced me that I would grow professionally and academically through challenging course work, meaningful research and a vibrant student experience. The rigorous academic culture was intimidating at first, but the courses were well structured, the faculty encouraged classroom discussions and the campus culture was conducive for learning. Another major selling point for me was the University's policy of allowing its students to choose elective courses from any of its various programs to help its students tailor their program to their individual career goals. I chose statistics courses offered by the mathematics department which gave me the tools I needed later in my career in grad school. This mix of set curriculum coupled with the freedom to explore areas of our interest made the learning experience fun.

I grew passionate about research by conducting experiments in one of the chemical engineering department's well-furnished labs. The University's policy of allowing its students to work off-campus for the final year project afforded me an opportunity to explore this passion further by carrying out industrially funded research at the Materials Science division of Poornaprajna Institute of Scientific Research. The M.Tech. program had certainly prepared me for this chosen path. Whether your final goal is to enter the job market or pursue a higher degree; the time you invest on yourself at MIT will prepare you for any challenge you can anticipate.

Ms. Anusha Mehendale
2017 batch of B.Tech. Chemical
Chemical Product Engineer at Bleko Chemicals B.V., Netherlands
Email: anushak.mehendale@gmail.com



After grade 12, like any other school graduate, I was exhilarated to begin my chapter of university studies. I was now an undergraduate student - an aspiring chemical engineer- with a sound background in science and was well-informed that Chemical Engineering is not the same as Chemistry like how any ordinary person assumes it to be. I was joining the institute of my dreams. Studying at MIT, Manipal was the fruit of my labour; my hard work and dedication in class 11 and 12 had come to fruition.

MIT has time and again proven to be a holistic hub of learning. The quality knowledge and wisdom imparted has truly been second to none. We, a lot of 18 years old, were provided with innumerable opportunities to develop our technical and creative skills. All the doors of opportunities, be it in research, innovation, fine arts, sports, or entrepreneurship were just a step away; we as students, had to simply walk-in and the platform was up for a grab.

The transition from assimilating engineering basics to absorbing and implementing them in our respective engineering fields, as one can naturally imagine, is a challenge. Our department of Chemical Engineering guided us and trained us over the four years helping us glide through our learning curve as smoothly as possible. The foundational concepts of chemical engineering such as fundamentals of momentum, mass and heat transfer, reaction engineering, thermodynamics, fundamentals of mathematics and numerical methods, process and dynamics control, process and plant designing etc. were laid firmly by theoretical and practical means of learning.

We students were regularly challenged to address and apply these concepts with our critical thinking and problem solving skills. These challenges in the form of tests, quizzes and practical experiments helped us identify our strengths and weaknesses; they also helped us discover the field of chemical engineering we aspire to venture in our career. We were also given a lot of exposure to the current industrial scenarios through guest lectures, special talks and presentations.

I had a wonderful opportunity of serving as the Class Representative during my 3rd and 4th year of undergraduate program. I found myself in the heart of curricular activities. Our faculty meticulously organised classes and other activities keeping our best interests at heart; they ensured that the academic year ran smoothly like a well-oiled machine. The national-level symposium, "CHEMIGNITE" was always the most-awaited event of the year. This event provided us the opportunity to host various technical and cultural activities for participants that hailed from institutes all over the nation. We eagerly looked forward to this week every year!

It warms my heart when I recollect all the friendships made, lessons learnt, and experiences from my undergraduate studies. These four years prepared us for the long journey ahead. We students are truly indebted to our faculty members for sculpting us in different ways and providing us the necessary cocoon before we took off on our career paths.

Ms. Lakshmi Kamath
2017 batch of B.Tech. Chemical
Application Engineer, Honeywell Process Solutions,
Honeywell Technology Solutions Ltd., Bengaluru
Email: soniakamath.9@gmail.com



Mighty, Mighty MIT!

August, 2013: I walked into MIT campus searching for the Chemical Department. I walked to Academic Block 5 (AB5) and asked someone where the chemical department is. She said he has no idea and we both started exploring AB5 for our respective departments. Both of us couldn't find our department as well as the way to come outside AB5! We were lost and had to call a senior to get us out.

First year of engineering is like Gudbud Ice-cream (Gudbud ice-cream is a mixture of different ice-cream, jelly, dry-fruits and fresh fruits). I used to wonder why do I need to study Electronics when I have chosen Chemical Engineering. I expected that I will fail in Engineering Drawing but cleared it. With the same happiness, I threw my drafter only to find out that Chemical Engineering had a subject called Chemical Engineering Drawing (CED) in 3rd semester!

August 2014: The Real fun begins.

Class Representative election was going to be conducted and I decided to contest for fun. I was shocked that I won the election. Thanks to my gang of friends had managed to convince a lot of people to vote for me. With great power comes great responsibility! I was responsible for cancelling classes, convincing professors to not take free classes, apart from being the communication between teachers and students.

We had a range of subjects in 2nd year. There was a subject called PDDCE (Process Design and Drawing of Chemical Engineering) which was a 6 credit subject and the end semester exam was for 4 hours. I have kept my drafter safe since then. Never know when I would need it again! The labs were the fun part of Chemical engineering. Climbing on the table to see the temperature of Heat exchanger in Heat Transfer lab, carrying buckets of water, using sieve for mechanical separation were memorable. We used to joke that we are construction site workers separating sand using sieve.

There were lot of groups in the class but united we stood when it came to assignment tests. End semester exams and studying at the last moment would go hand in hand. Completing the entire syllabus in one night would be an achievement. Chemignite was Chemical Engineering department's fest in which we all would participate.

August 2016: Did time fly?

We were busy attending classes, studying for assignments, sessional, end semester exams and placement! And then the time came for farewell and none of us could believe that amazing college life is coming to an end. The thought that there would be no more having fun in college, no more Tiwari Chat, no more class parties was hard to digest. But life must go on. I was happy that I got an internship offer in Honeywell Technology Solutions Pvt Limited, Bangalore in their Performance Material and Technology department. The credit for this goes to my teachers, parents, friends, lab assistants etc.

The class photo shoot followed by class party is something which I will never forget. We had made a poster representing our class, had got trucks with music systems and danced even after our legs gave up.

January 2017: A new phase

Internship in Honeywell showed me real applications of what I had learnt as a part of curriculum. I was lucky that my internship got converted into full time employment and I am currently with Honeywell as Application Engineer in the Development team of Unisim Design Software.

August 2018: Coming back to MIT

Life gave me a unique chance to visit MIT, this time as a recruiter. Honeywell sent me to MIT to select students from Chemical engineering for internship. It was the happiest moment for me as I could give back something to Chemical Engineering department which gave me a lot.

Chemical Engineering department is great because of the people in it. I miss my good times in MIT. I would love to thank MIT, Manipal for making me what I am today.

Ms. Sanjula Kammamettu

2017 batch of B.Tech. Chemical PhD Student - Process Control, Department of Chemical and Materials Engineering University of Alberta, Canada Email: sanjula1996@gmail.com



To the reader - this is a memoir, rather, an ode to the Department of Chemical Engineering at MIT. Manipal is a place I hold dear to my heart, and this department plays a starring role in invoking this emotion. The ChE department, in the three happy years I spent here, became home and a haven. The people here helped me develop skills and habits that have continuously strengthened my academic abilities, as well as my drive to delve further into engineering. They allowed me the freedom to learn at my own pace, sometimes almost painstakingly slow, other times frenzied and frenetic, but always encouraging. I cannot remember a time when any professor in this department did not have, or make, the time to sit down with me and explain concepts as many tries as it took for a harried undergraduate student to understand with more than a modicum of confidence.

Despite having been away from Manipal for just over two years, I still think of the ChE department as my place. I still miss those muggy afternoons spent in the CRE lab, hours spent poring over Seborg, and Fogler's volumes. Those hours are some of my most productive and peaceful study sessions to this day, safe in the knowledge that there were professors to help me through the course work, just a few steps away. I still chuckle to think that I would just be found lounging on the floor of the corridors during free hours, books and papers splayed out, and all that I ever encountered were amused smiles and cheery quips. Every bit of effort I put in towards my own progress in the field was more than equally matched by the faculty that taught me. Being a student here also taught me to question everything, and to ask for what I needed when I needed it and it is worth saying that as I go through different stages of my higher education, I increasingly realize how important these traits are as a student, and as a researcher. More importantly, in my time here, I forged good rapport with the faculty, and obtained the best guide and mentor a student could hope for, who teaches me to be ambitious yet pragmatic, but above all, to have strong interest and unwavering respect for my work. The presence and counsel of such people in my life is a privilege and an honour that I hold proudly.

An expanding skill set for me to progress in my field, knowledge and experience of a nurturing educational environment, and lasting bonds - these are the most valuable gifts being a student of the ChE department at MIT has given me. This is a department that takes pride and joy in its students' achievements, so much so to the extent that when I visited them after my Masters' degree, it felt like a bigger homecoming. I congratulate all members of the department who have spent precious years moulding it into a house of learning, and on your Golden Jubilee. I hope you continue to nurture and groom students to excel for many more years, and that we, as alumni, do the department great credit. To all the students studying in this lovely place, and those to come, know that you are in an environment that cares about your progress, and celebrates your successes. This is a home that welcomes you back with open arms.

Mr. Varun Harnathka

2018 batch of B. Tech Chemical Consultant, Praesto Consulting Pursuing M.Eng Chemical Engineering at Cornell University '19 Email: harnathka.varun@gmail.com



Memories of MIT Manipal

I often say: "I was born in Guntur but brought up in Manipal". As the Chairperson of Red-X (socio-adventure club), Finance and Sponsorship Head of Scio Benevolent Foundation (NGO), member of Blitzkrieg dance club, organizer of Chemignite, the host for Revels, and a medal winner for excellent performance in academics, I can proudly say that MIT Manipal made me who I am today.

In my very first semester, despite the incessant torrential downpour, I was able to leverage the incredible amount of freedom, by exploring the Western Ghats with my budding friends. The friendships only grew stronger with time over the mischievous things we did in the hostel, the countless pranks we played in class, and the more than occasional dance sessions at clubs. As the year was nearing the end, before I knew it, I was a part of seven clubs.

As I entered the second year, I was introduced to the world of Chemical Engineering. As a student who gains 90% of the learning through classes, I felt extremely lucky to find such passionate, approachable, and motivating teachers in the department. For the first time, I visited my father's rice-bran oil extraction plant back home, and my interest in the field just grew deeper. From an average student, I went on to become the topper of the class and was fortunate to have gotten the opportunity to work with Laxman sir on projects associated with large corporations such as Shell. What makes MIT's Chemical Engineering department so special is their focus on strengthening the basic concepts, which helped me bag an internship at Sun Pharmaceuticals and eventually admits from two lvy League Universities.

In addition to academics, I was able to build upon my leadership skills by organizing events like Chemignite (a National level symposium) as a part of the activities of the student chapter of Indian Institute of Chemical Engineers. The experience I gained prepared me for leadership roles at various other clubs. Under the guidance of MIT's most dynamic director Dr. G.K. Prabhu, I organized 7 medical camps, 6 adventure trips, 5 career counseling sessions, represented the college in 4 dance competitions, organized Sunburn Campus (Asia's largest music festival) for 3 consecutive years, and anchored for famous artists such as Terence Lewis, Nucleya, and The Local Train. I gained essential life skills that I believe are as important, if not more than the technical skills.

MIT Manipal has given me an all-round development. It has been a roller-coaster of new experiences and emotions. All I want to do today is go back and take one more walk at Malpe beach, eat one more meal at Dollops, dance one more time to Bollywood music at Remix and have one more laugh with my friends at Kamath Circle.

Ms. Suvaleena Paul 2019 batch of B.Tech. Chemical Systems Engineer Trainee, Infosys Limited, Mysore Email: suvaleenapaul.sp@gmail.com



MANIPAL, an ode in itself. Manipal is that ex, from whom you never ever move on and you are even happy about it. Not only were those four years of engineering life a pure bliss, but also the most memorable part of every Manipalite's life! Probably, the only engineers in India, who miss their college life, are the ones graduating out of the mighty Manipal Institute of Technology, a place we like to call Home. Every inch of Manipal leaves a long etched memory in your heart. Be it the old-fashioned days in Kamath Circle or the flashy life at Student Plaza, our batch is blessed to have witnessed it all.

The Chemical Engineering Department comprised of one of the best parts of my Manipal life. My batch had the privilege of being a part of just one section, which not only brought us closer, but along with all the professors, brought us together as a Family. The best part of being a part of a compact department is the feeling of ownership. What ever happened across the department, it always felt like an incident of your own family. Be it a success or failure. When seniors were placed into good companies, even we took pride in it, as an event of the whole department. The most striking phenomenon is the bonding of each and every student with the professors.

It is not like we did not have bad days, or our actions did not magnify our differences. It is striking to think today, how after every incident, we had a guardian to go to. Be it the Head of the Department or any other professor. At the end of the day, we were treated like their children and forgiven. This gave us opportunities to make mistakes and opened a window to learn from them. Today, as an alumna I can proudly say that the experiences that we have gathered from those incidents actually shaped us to become better human beings and prepared us immensely for the corporate world. It feels bizarre to think, how after everything, we never fail to miss walking down the corridors of the two storied building that protected each and every student from the consequences of our actions. What we learnt in those four years is beyond the four walls of a classroom.

Representing a class for three consecutive years not just got me closer to my fellow peers but helped me be an integral part of the department. Be it the success of Cheminova in Tech Tatva or a fulfilling Chemignite or be it seeing IIChE student chapter flourish, Chemical family celebrated every success and failure together. This was most evident at dinners during Chemignite. I bet no other department would take such pride in their mutual bonding, as we did. The department stood apart, far away from the rest of the college, emanating the wisdom for being among the oldest departments of MIT.

Graduating out of the department, in its fiftieth year of existence, just made college life even more special. Even though many of us have drifted away into different walks of life, those three years will remain ever etched in our hearts. At any given point, each of us would always want the best of the best for the department. May God bless each and every faculty and staff members and may the students keep excelling in the coming years.

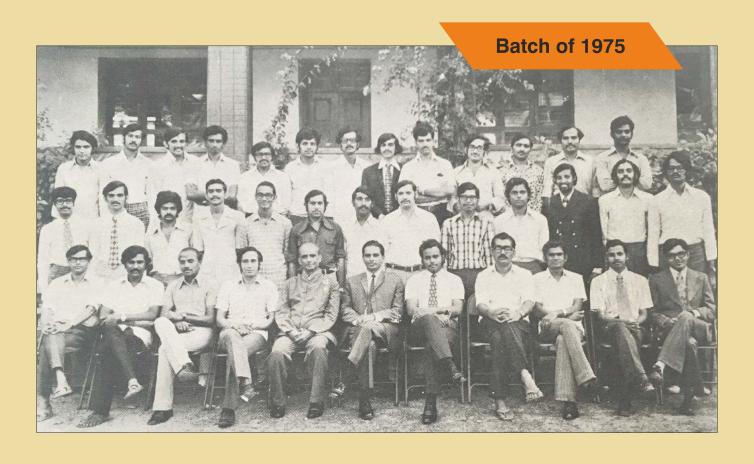


Bachelor of Technology - Chemical Engineering

Batch of 1974



Sitting (L-R): Mr. M S Muthuraman, Mr Muniswaran, Prof. Y R Yaji (Vice Principal), Prof. Shivswami (Vice Principal), Dr. N. Subrahmanyam (HOD), Prof. B V Krishna Murthy (Principal), Prof. V Chandrasekhar (Vice Principal), Dr. Sampath Kumar, Dr. P G Krishnamurthy,, Mr. Hanumant Rao, Mr. Jayadeva Bhat, Mr. Hemant Kumar Standing 1strow(L-R): Mr. Francis Fernandes. Sudhir C Joshi, Yogendra Pai, T V Srinivasan, Akshat K Chinai, Dipak Kumar S. Kapadia, Shabhir I Rupawalla, Rajan B. Purohit, Narang Jaspal Singh, Kishore M Adhia, Sudir Sukhtankar Standing 2ndrow (L-R): V Nageswara Rao, Ramachandra G Pai, C M Balaram, Deepak V Kulkarni, N Uday Kumar Rai, Yashkaran Singh Lauly, Kiran P Sanghvi, Kirthi Kumar Thakkar, Praful N Rangaishenvi



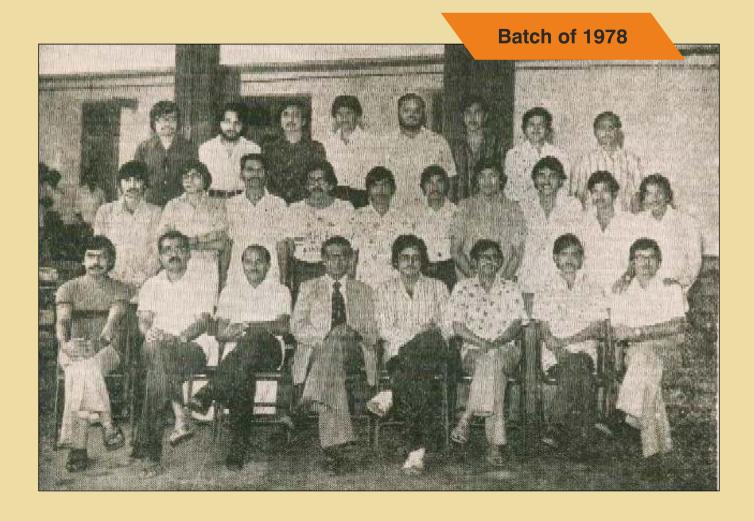




Sitting (L-R): Mr K C Augustine, Mr P K A Muniswaran, Dr S J Bhat, Dr R Sampath Kumar, prof. T Radhakrishnan, Prof. V Chandrasekhar, Dr. N Subrahmanyam, Prof. B V Krishna Murthy, Mr. B Hanumantha Rao, Mr. N Krishnaswamy, Mr Jayadeva Bhat

Standing (L-R),1st Row: Vinod C Vachhani, Bharucha Aspi Jal, Mansukhlal V Lalkiya, Bachulal B Khanpara, Bharat R Joshi, H R Bavaria, Satish V Khadke, H C Engineer, Toquir, Harshad Shah, G A Ratankumar, Kamal Saha Chowdhury, Bhuva M B Vikram Kher, Bankim Desai

Standing (L-R), 2ND Row: Manoj I Sheth, Vittal das Nayak, Krishna Prasad Y, Bharat Dave, Jayantilal G., Hasmukhlal Delvadia, Pawaskar Uttam G., Amitava Sarkar, Anil Pradhan, Varaprasad Rao D., Jasani Mansukh, Amrish Desai, Mayur Vyas, Ramesh Patel

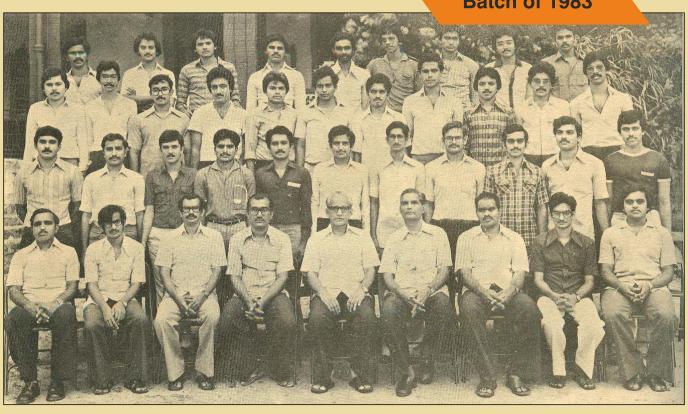


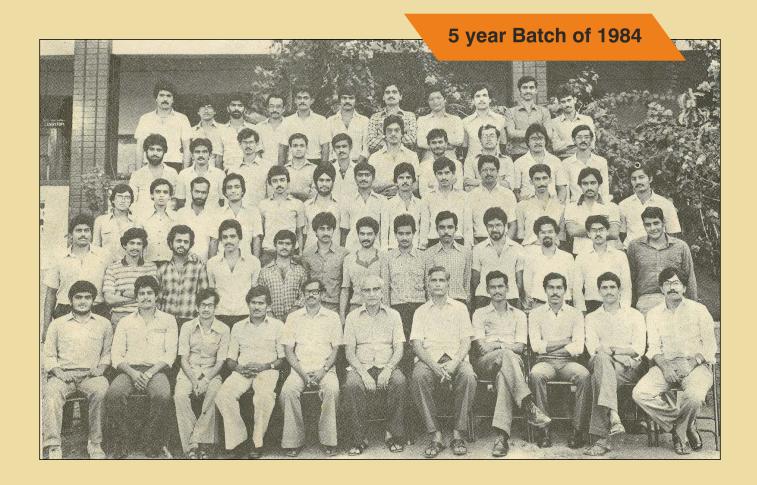


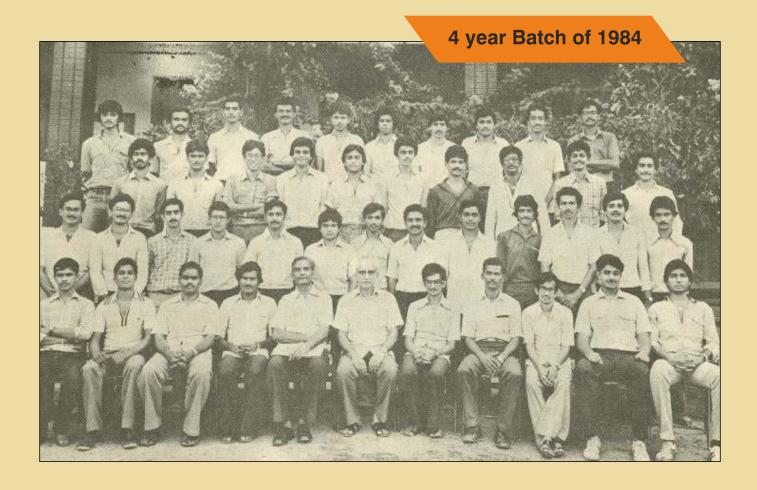


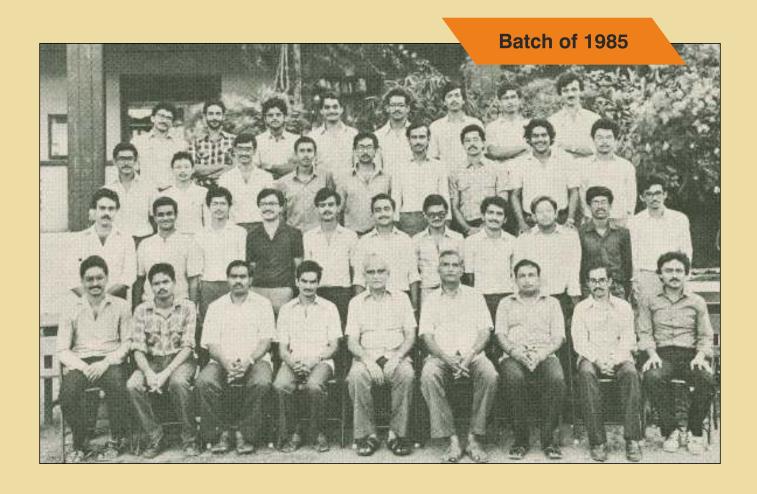














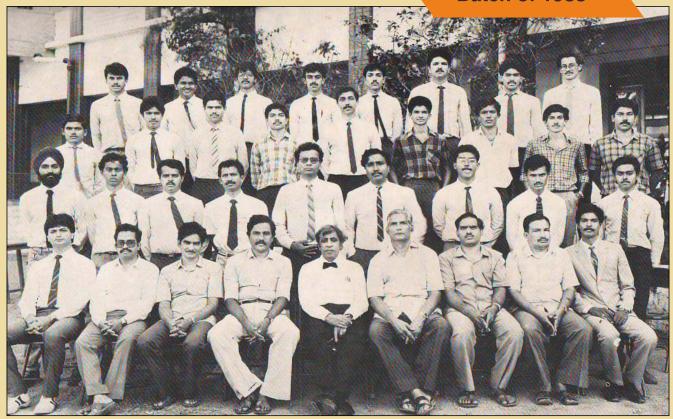


Sitting (L-R): Praveen Jain, Naveen Jain, Sanjay R Mawalkar, Mr. S. Sivasankaran, Mr. Jayadeva Bhat, Prof. U R Kamath (Principal), Dr. KJR Sarma (HOD), Mr P K A Muniswaran, Mr. K Raghunathan, Anup Druve, Sanjay Shah Standing 1strow(L-R): Rahul Gokhale, Ketan Druve, Jeevan Mahajan, Lalit Jain, Gopal Kalra, Mehul Naik, Pramod Ghuge, Anant Kamath, Avinash Patil, Suhas Bhandarkar, Shailesh Bhat

Standing 2ndrow(L-R): Pranav Mehta, Srinivas Vaidya, Parimal Khandhar, Shailesh Balghat, Ashit Kadakia, Donald Lewis, Deepak Kini, Abhay Hanmansagar

Standing 3rdrow(L-R): Ajit Prabhu, Subba Reddy, Rajnish Nayak, Irfan Mulla, Ramon Saldanha, Hemant Nantiyal, Sudarshan Rao





Sitting (L-R): UtpalVacharani, MrSivasankaran, Mr B N Reddy, Mr P K AMuniswaran, Prof. AlladiPrabhakar (Principal), Dr. K J R Sarma (HOD), Mr P S Murthy, Mr K Raghunathan, D SelvaNayagam

Standing 1st row(L-R): H Joginder Singh, PadmanathanShenoy, Aziz Akhtar Sheikh, VipinMadhani, SushilJhawar, Pravin Shetty, Sarangshu S W, Jayantnath

 $Standing \ 2^{\text{nd}} \ row (L-R): Narsimha Prabhu, K Rajeev, Nitin Mascarenhas, Ravikumar, Ajay Shinkre, Jawaharlal Reddy, A Vijaykumar, Sanjiv Menon, Sudipto Mukherjee$

Standing 3rd row(L-R): Mahesh Nagarkatti, Rajesh Raghavan, VinitMajumdar, Sanjay Jha, Dinesh Guota, Rajesh Reddy, Balkrishna Shetty, Chandrashekar Shetty



Sitting (L-R): Mr Naveen Shetty, Mr. K Raghunathan, Mr. S. Sivasankaran, Dr. K J R Sarma (HOD), Prof. Alladi Prabhakar (Principal), Mr P K A Muniswaran, Mr P S Murthy, Mr Balakrishna Prabhu

Standing 1strow(L-R): Kamdhar Kunal Mahendra, Ram Prasad Bangaru, B Ashok, Ravindra Gouerkeri, K R Prakash, Dipal D Parikh, Ramachandra M Shenoy, Venugopal Reddy, Srinivas Reddy, Ajay K Mehta

Standing 2^{nd} row(L-R): Rajith V Shenoy, D Amit Rao, Shyam Prasad Kamath, B Madhav Shenoy, Puneet Jain, G Sudhakar, Krishnan Mahesh Gopi



Sitting (L-R): P Krishna Prasad, Mr. B N Reddy, Mr Balakrishna Prabhu, Dr. K J R Sarma (HOD), Prof. Alladi Prabhakar (Principal), Dr P G Krishnamurthy, Mr. S. Sivasankaran, Mr. K Raghunathan, Mr P K A Muniswaran, Mr P S Murthy Standing 1strow(L-R): Nishil Desai, S Gautam, S Mural Krishna, Vivek Mehta, Ashish Kulkarni, C S Raghunath, K Vishu Prasad, Gurnish Singh Chhabra, Atul Jain, Sandeep Shah, Chandrashekar Reddy, Riyaz Ahmed Assadi, Shakeel Shetty

Standing 2ndrow(L-R): M S R V K Ranga Rao, Rajendra Kumar Jain, V Ramakrishnan, Ronald D'Souza, Ravi Shankar Moorthy, B Raghavendra Pai, Murali Krishna Reddy, Chirag Dhuvad, Amitabh Malhotra, Purushotham Shanbag, Sudhir Gupta



Sitting (L-R): Jitendar Manocha, Mr. K Balakrishna Prabhu, Dr. M. B. Saidutta, Mr Sivasankaran, Dr. P G Krishnamurthy, Prof. Alladi Prabhakar (Principal), Dr K J R Sarma (HOD), Mr P K A Muniswaran, Mr Jayadeva Bhat, Mr P S Murthy Standing 1strow(L-R): Maddi Raja, Adil Nasir, Ajay K Singh, Sumit Gupta, P Venkateshwar Rao, V Bharat Reddy, Murali K Sambamoorthy, Shyam Das S, Atul Suri

Standing 2ndrow(L-R): Poojan Dargan, Swaminathan M B, Ketan Mehta, Raman Sethi, Rakesh Shah, Prabhu Anand Joseph, Shasti Kumar Tirupur, Suresh Krishnamurthy

Standing 3rd row(L-R): Suresh Iyer, Nilesh Shah, Subamanya K, Raghu Varma P, Animesh Gupta, Vijay Kumar Nair



Sitting(L-R): Mr S Srikanth, Mr Balakrishna Prabhu, Mr. B N Reddy, Dr Jayadeva Bhat (HOD), Prof. Alladi Prabhakar (Principal), Dr. K J R Sarma, Dr M B Saidutta, Mr P S Murthy, Mr S Sivasankaran

Standing 1strow (L-R): Sameer Sood, Sunil Mehta, Rakesh Kumar Mehta, Suresh V Iyer, Gurdeepak Singh Bakshi, Rajeev Behl, Animesh Gupta, Amrit Banerjee, Arun Correa, Reeben Thomas

Standing 2ndrow (L-R): Felix C Kandathil, Prakash Nayak, Sudeep Majumdar, Ranjan Varma, M P Rajesh, Nikhil Mehta, M S Balasubramanyam, Kalyan Kumar, Nilesh Yoddha

Standing 3rdrow (L-R): Yash Khanna, Anurag Newatia, Amitava Banerjee, K Ashwin, Sandeep Gupta, Hemal K Shah, T V V S Ramakrishna, Ashish Jain



Sitting (L-R): Mr. K. Balakrishna Prabhu, Mr. V. R. C. Murthy, Mr. S. Sivasankaran, Prof. (Dr.) Jayadeva Bhat (H.O.D) Prof. (Dr.) Alladi Prabhakar (Principal), Mr. P. S. Murty, Vikram Kamath, Samtha Lal.

Standing 1strow (L-R): Milan R. Montairo, Jagdish Kewal Ramani, Ravi Chandra Reddy G., Dwaraknath C. V., Amithab Kharbanda, Vipin Agarwal, Anirudh Parekh, Amrit Banerjee, Anurag Khare, Arun Kejriwal, Krishnam Raju, George Markos.

Standing 2ndrow (L-R): Ashoo Agarwal, Neeraj Bhartiya, Rajat Mathur, Kaushik N. Malladi, Vishal Sood, Shanker Arenja, Arun Kumar, Pramod E., L. Shailendra.

Standing 3rdrow: Rohit Malik, Munish R. Verma, Ramachandra Raju, S. Sundar, Puneet Seth, T. Vetrivel, Kishore K., Habib Bharat.

Standing 4throw (L-R): Vivek V. Pai, Rustom J. Bandorawala, Bharat, Saurabh K., Rajesh Shetty, K. P. Gurunath, Sameer Sood. Vivek R. Verma, Prakash S, Nayak



Sitting (L-R): Rajendra Naga Prasad, Mr. B. N. Reddy, Mr. Harish B., Mr Subramania, Dr. Jayadeva Bhat (H.O.D), Prof. (Dr.) Alladi Prabhakar (Principal), Dr. K. J. R. Sarma, Mr. S. Sivasankaran, Sanjeev Dhavan, Leon Ittiachen Standing 1strow (L-R): Ravikiran, Deepak Ramachandran, Harish P. Arya, V. Narayanan, Amit K. Banerjee, Rahul Jain, Samta Lal, V. Sanjay, Uma Sunderam, Sajal K. Mitra, Gagan Arora, Anant Purohit, Roshan D'souza, Vipin K. Agarwal, C Sripathi, Pramodh E.

Standing 2ndrow (L-R): Harish P. S, Tarlochan Singh, Vijay K. Dua, Deepak Arora, Bhavesh B. Shah, Neeraj Khanna, Shoumik Guha, Balaji Y., J. Srinivasan, Murtaza R., Arun Thekedath, Rohit Arora, Rajashri Dutta, Binoy Kejriwal, Bharath Vasireddy, K. R. Giridharan

Standing 3rdRow (L-R): Ramakrushna Rajha, Hari Prasad S., Sandesh Shetty, Salil Vij, G. Subramanian, Anand Rao, Amit Daga, Vikram Bhat, Vineet Khurana, Jainesh Jain, S. S. Sandesh, Vijay Vikranth.

Batch of 1995 A



Sitting (L-R): Poonam Kejriwal, Avinanda Panda, Monica Gupta, Mr. B. N. Reddy, Mr. P. K Muniswaran, Dr. Jayadeva Bhat (H.O.D), Prof. (Dr.) Alladi Prabhakar (Principal), Mr. P.S. Murty, Mr. V. R. C Murthy, Mr. Balakrishna Prabhu, Mr. S. Sivasankaran, Kamal Jain, Jithesh B. Parekh, Lalljee Faizaan Faroukh.

Standing 1strow (L-R): M. Sarkar, G. Srinivas Kalyan Chakravarthy, Michael Noronha, Mehdi Akhtar S., Vivek Sharma, Navneet Agarwal, Prashant Sharma, Ram kiran, Ravin Sharma, P. Kiran Babu, Ajay Kumar Aggarwal, Amit Rastogi, Jajgeet Singh, Ashish Muttha

Standing 2ndrow (L-R): Sanjay Jain, Navin P. Shukla

Standing 3rdRow (L-R): Rajat Mehta, Chandrahasa Shetty, Manish Vohra, Venkata Rajendra, Pankaj Oswal, Hari Krishna Reddy, Praveen Reddy, Praveen Ahlawat, Ashish Ajmani, Amar Pahuja, P. Bhatacharjee, Maloy Dikshit, Rithesh Kumar, Anurag Uppal, K. Shiva Kumar, Anirban Das.

Batch of 1995 B



Sitting (L-R): Sachin Bhatia, Vinay Mathur, Vivek Gupta, Mr. B. N. Reddy, Mr. P. K. Muniswaran, Dr. Jayadeva Bhat (H.O.D), Prof. (Dr.) Alladi Prabhakar (Principal), Mr. P. S. Murty, Mr. V. R. C Murthy, Mr. Balakrishna Prabhu, Mr. S. Sivasankaran, Manoj Alavathi, J. Sathish Kumar

Standing 1strow (L-R): Tilak Raj Hegde, Saurin Vora, M. Sathish Kumar, Salil Shetty, Roy Abraham Mathew, Sarfaraz Khan, Dhruv Jalan, Dheeraj Jain, Suprash Patni, Sanjay Singh, Vikram Rana, Shailender Choudhary

Standing 2ndrow (L-R): Sumanth D. Bijoor, K. Kothivesh, Vaibhav Gupta, Ranbir Singh Thukral, Adhar Seth, P. Venugopal, Ashish Madan, Parveen Juneja, Prabudh Sagar Jain, Ashutosh Shukla, Madhu N, G. Arvind, K. Vikram



Batch of 1996

Sitting (L-R): Deepa Mary Mathew, Anuj Gupta, Mr. Sivasankaran, Mr. V. R. C Murthy, Mr. Harish Kumar, Prof. (Dr.) Alladi Prabhakar (Director, International Programmes (Engg)), Prof P. V. Bhandary (Principal) Prof. Dr. Jayadeva Bhat (H.O.D), Mr. B, N Reddy, Nigel Pereira, Komal Khurana

Standing 1strow (L-R): Madhav Reddy, Rishi Mittal, Alok Gautam, Sameer Nandoliya, Harish Kumar B., Rohit Sharma, Ashish Gupta, Varun R., Varun Sabarwal, Vikas Agarwal

Standing 2ndrow (L-R): Debasis De, Prashanth Shetty, Amardeep Gupta, Amit Sethi, Vinay C. Babu, Saurabh Mehrotra, Girish B., M. Mallikarjun, Palash Roy Choudhary, Gopal Sharma, Anshul Jindal

Standing 3rdRow (L-R): M. Bisani, Pravin Patel, Himanshu Trivedi, Siddharth Thakur, Sanjay Sandhi, S. Sarkar, Rithuraj Sinha, Sanjay Nadkarni, Rishi Arora, Rahil Shah.

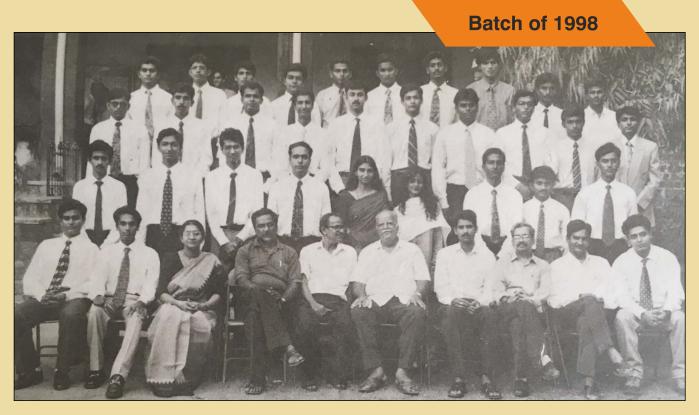
Standing 4thRow (L-R): Rahul Guha, N, Khanna, C.K., R, Bharath, Vineet Lohla. Jaywant Kumar Agarwal, Ajay Kumar D., Prashant Jumar Jaiswal, Anand Kumar, Karthik Subramaniam, Akshay Pal Sharma, Pankaj, Devash Sharma.



Sitting (L-R): Sudhir Nayak, Kavitha N, Mr. Subramaniam, Mr. Balakrishna Prabhu, Prof. Jayadeva Bhat (H.O.D), Prof P. V. Bhandary (Principal), Mr. B, N Reddy, Mr. A, K, Saha, Meghna Sharma, Preethi M. D'souza, Vivek Chachra Standing 1strow (L-R): Pradipto K. Bhattacharya, Sudipto Saha, Rajshekhar K. S., Ajay Singhi, Rakesh Jayanthilal Jain, Vineet Jain, Keshav Kumar, Madhav Kamath, Vikram Kaul, S. Alegappan

Standing 2ndrow (L-R): Mallikarjun, Pravin P. Pinto, Yunus Najmuddin, Vikram Sethi, Parthasarthy Panda, Adithya Jain, Nakul Bhatia, Uday Bhaskar, Arjun Venkatraman.

Standing 3rdRow (L-R): Vishal Sharma, Godseth Menezes, Nachit Shetty, Alluri Bhanuprasad, Sanjay E. Nayak, Raghupathi Rao K., Venkateshwar Prabhu, Pradeep K., Amish Yodha



Sitting (L-R): Bhanu Pratap Singh, Abhishek Modi, Mrs Sushma Nair, Prof. P K A Muniswaran, Prof. Jayadeva Bhat, Prof. P V Bhandary(Principal), Mr V R C Murthy, Mr. S Sivasankaran, Mr. B N Reddy, Zulqadr Arsalan Standing 1st row(L-R): Sunil Baliga, Prashant Seshadri, Prashant A S, Salendra Nagpal, Annapoorna T G, Madhurima Jampala

Standing 2nd row (L-R): Maheshwar J M, Jyoti Kapoor, Venkatraman Pai, Vineet Vaid, Rajanand, Rohit Kamath, Sunil Kumar, Anurag Maheshwari, Vijay Victor, Praveen Patel

Standing 3rd row (L-R): Vikrant Tonse, Abhijeet Mukherjee, Naveen Quadras, Puneet Tandon, Dinesh D Costa, S. Prasanna, Seshu Babu, Srikanth

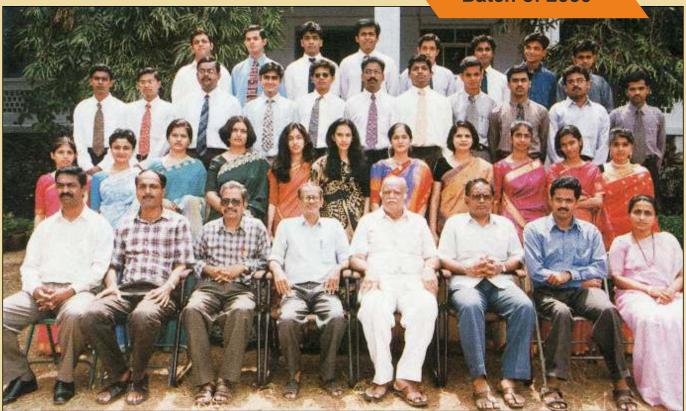


Sitting (L-R): Ms. Jyothi Halakatti, Ms. Delma Leena Suares, Ronald Dominic, Prof. Dr. Jayadeva Bhat (HOD), Prof. P. V. Bhandary (Principal), Mr. V. Ramachandra Murthy, Ms. Vidyalaxmi, Ms. Vinaya Pai.

Standing 1strow(L-R): Sachin Chawla, Tukaram Prabhu, Raghuvendra Naik, Rakhi Bhaduri, Vaishali Shenoy, Kuldeep, Ketan Joshi, Sujit Kumar Maroli.

Standing 2ndrow (L-R): Anil Kumar, Pradeep Kumar, Qasim Qayoom Tanga, M. R. Durairaj, Prasad Bhat, Saurab Sharma, Vinay Inamdar, Raja Babu, Syed Parvez.

Standing 3rdrow (L-R): Mukund Vasudevan, Vijaya Bhaskar. K., Avinash Shenoy, Sachin A., Arijit Roy, Vivek V., Bashrie Dias, Praveen Halappanavar, Nishant Martin.



Sitting (L-R): S. Harish Kumar, K. Balakrishna Prabhu, S. Sivasankaran, Jayadeva Bhat (HOD), Prof. P. V. Bhandary (Principal), P. S. Murty, Bharat Raj Guru, Vidya Shetty

Standing 1strow(L-R): Sheela Prabhu, Madhuri J, Pallavi Shenoy, Tanvi Pota, Rashmi Rao, Suma K., Shyamala K., Lakshmi Shetty, Lavina, Ashalata, Poornima.

Standing 2ndrow (L-R): Nitin Gopal, Dhrub Jyoti, Vinodvenkataraman, Mahesh Damani, Gururaj Hegde, Sridhar G., Avil Saldanha, Nagaraj Kini, Ananthakrishna, Monthu Lakhani, Kailash K.

Standing 3rdrow (L-R): Ganesh Kamath, Ganesh Bhat, Kishore B.K., Krishnmaraju, Chandrashekhar, Akshay K., Vishnuvardhan, Jagannath.





Sitting (L-R): Mr. P. S. Murty, Mr. Sivasankaran S, Dr. (Prof.) P. K. A. Muniswaran, Dr. (Prof.) M.N.Shetty (Director), Dr. (Prof.) Jayadeva Bhat, Mr. K. Balakrishna Prabhu, Mr. V. R. C. Murthy, Mr. Srinivas Kini.

Standing 1strow (L-R): Vishal, Raj, Madhav, Geetha, Dena, Nisha, Roweena, Sonal, Ranjitha, Ashwin, Raghavendra, Sudharshan.

Standing 2ndrow (L-R): Sashikanth, Nagraj, Upendra, Lester, Praveen Raj, Harish, Prakash, Ancil, Shabrinath, Mahesh.





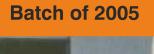
Sitting (L-R): Prithvi, Preema, Tara, Dr. (Prof.) B.S.Prabhu (Director), Dr. (Prof.) P. K. A. Muniswaran (HOD), Havisha, Jyothi, Chandni.

Standing 1strow (L-R): Naveen, Ajith, Gayathri, Divya, Asha, N. Shubha, Cynthia, Laxmi, Archana, Sunil, Vaman. Standing 2ndrow (L-R): Rilford, Arnab, Diana, Lavanya, Radhika, Smeetha, Poorvi, Purva, Shyni, Deepa, Ajay, Sadananda.



Sitting (L-R): Ranjeetha, Iona, Priya, Dr. (Prof.) P.K.A. Muniswaran (HOD), Dr. (Prof.) B. S. Prabhu (Director), Diana, Saritha, Jyothi

Standing 1strow (L-R): Kirana, Jafar, Sumathi, Chintan, Jyothi, Swetha, Supriya, Prahllad, Manjunath, Sumit. Standing 2ndrow (L-R): Syam, Prateek, Sudhin, Yathish, Christopher, Sriprasad.





Sitting (L-R): Cieyon, Sumit, Nikhil, Dr. P. S. Murty (HOD), Dr. B. S. Prabhu, Arpit, Sharji, Sandeep, Ranjeet. Standing 1strow (L-R): Kishore, Shayri, Padmini, Sakshi, Richa, Divya, Savitha, Silky, Morrit, Pallavi, Prema, Karishma, Abhijeet.

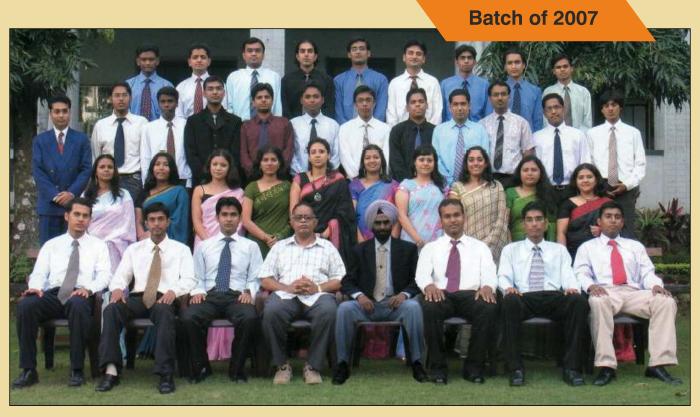
Standing 2ndrow (L-R): Sudeep, Karan, Prashanth, Vipin, Mayesh, Sumit, Abhishek, Abdul.



Sitting (L-R): Brajesh Kumar Singh, Sumit Bajpai, Ravi Shankar Kumar, Dr. B. S. Prabhu, Madhur Sarin, Nikhil Manohar, Abhinav Prakash.

Standing 1strow (L-R): Samarth Malhotra, Arin Prakash, Vrishali, Richa Sharma, Akshita R. K, Aanchal Kapoor, Ruchika Singh, Francis Joel Pareira, Gaurav Dutta.

Standing 2ndrow (L-R): Apoorva Rajendra, Madhav Kumar Jha, Raghavendra Mishra, Kumar Anshal, Vipin Pawar, Rahul Daga, Shankar Dayal Tiwari, Kishan Damani, Rajeev Ranjan.



Sitting(L-R): Nishant Dhawan, V. Sri Sai Siva Kumar, Atul A. Anand, Dr. P. S. Murty (H.O.D), Dr. (Brig.) S. S. Pabla (Director), Rohit Sinha, Jatin Chaudhary, Ank Kumar

Standing 1strow(L-R): Karan Gupta, Salleen Ranjan, Sailesh Lakhotia, Naman Sharma, Ritu Raj, Nishant Kapoor, Atul Pansari, Sumeet Thakur, Ujjwal Deo

Standing 2ndrow(L-R): Divaker Prakash, Abhishek Mohan, Prem Ranjan, Sai Kishor Reddy, Vaibhav Kumar, Pallav Verma, Rahul Dhyani, Snehesh S. Ali, Pranay Kumar, Ajeyo Bhattacharya, Julius Patrick D'Zouza, Pankaj Singh

Standing 3rdrow(L-R): Nuzhat Jahan, Sayani Mukherjee, Shraddha Dhakwa, Sushmita G., Hina Singh, Akanksha Singh, Basabdatta Roychoudhuri, Jhelum Bagchi, Adireddi Purnima, Shika Rustagi.





Sitting(L-R): Varun Batra, Deep Shankar Bannerjee, Shreeram V. G., Dr. B. N. Reddy (H.O.D), Dr.(Brig.) S. S. Pabla (Director), Udayan, Ankit Singh, R. Raghav

Standing 1strow (L-R): Ankita, Insha Haider Rizvi, Aditi Swarup, Merwah Shahid Zubair, Supriya Ranjan, Parvati, Swati Kumari, Abeera Sharma.

Standing 2ndrow (L-R): Veidhes Basrur, Ratnesh Ravi S., Ravi Teja, Pratyush Kumar, Atul Kumar, Arwin M. Nair, Panduranga Nayak, Rahul Bhushan

Standing 3rdrow (L-R): Ajit Rajiva, Tushar Vatsa, Vininder Singh Baweja, Suhas Shenoy, Sushant Kumar Singh, Nikhil Vallabhan, Priyadarshi Bhattacharya

Standing 4throw (L-R): Jaswinder Singh Randhawa, Sanchit Mathur, Neeraj Jindal, Abhishek Anand, Akash Narani, Ashesh Kumar, Mohammed Riza



Sitting (L-R): Mr. S. Harish Kumar, Mr. Srinivas Kini, Prof. Sivasankaran S. (H.O.D), Dr.(Brig.) S. S. Pabla, Mr. K. Balakrishna Prabhu, Mr. Sriprasad Acharya

Standing 1strow (L-R): Ankita Priyadarshini, Amita Sinha, Rashmi, Richa Priyadarshee, Swati Krishna, Harsha Kamath K. Standing 2ndrow (L-R): Ashwin Sankaran, Gaurav J. Vora, Arijit Chakraborty, Vidit Gupta, Arun Uthaman Naidu, Piyush Jha Standing 3ndrow (L-R): Prashant Shekar, Inderjit Singh, Nitesh Kumar, Subhankar Bagchi, Raikar Tushar Suresh, Arjun Mohan Spolia.





Standing (L-R): Romesh Singh, Amit Kumar, Aarsh, Grig.(Dr.) S. N. Mishra (Director), Dr Jayadeva Bhat (H.O.D), Manibhushan Thakur, Ritankar Nandy, Pranav.

Standing (L-R) (1strow): Palak Vasudeva, Peeksi Pinus, Pahuni Jain, Kajoree Daw, Nikita Maheswari, Shiny Shetty, Kritika Gopalan, Tata Amulya, Rishika Kundu, Jilu Lizy Stephen, Anuradha Choudhary.

Standing (L-R) (2ndrow): Bhargava Ranganath, Abhijith Anand, Kumar Gaurav, Pranil Mittal, Lakshata Prashar, Pallavi Bishnoi, Amitesh Agrahari, Abhishek Ganguly, Barun Raj Vivek.

Standing (L-R) (3rdrow): Abhishek Shivakumar, Ashwin Mittal, Ravi Ranjan Verma, Deepankar Joshi, Bhaskar Varun Prasad K, Ritesh Singh, Abhilekh Chetia, Junaid Ahamad Z Saiyed, Abhimanyu Dhingra.



Sitting (L-R): Saurav Ganguli, Abhishek Joshi, Ankur C Chauhan, Dr. Kumkum Garg (Director), Dr Jayadeva Bhat (H.O.D), Abhishek Kumar Jha, Vidt Malhotra, Sachin Batra.

Standing (L-R)1strow: Manoj Selvaraj, Richa, Bidhisha Kundu, Kajol Srivastava, Tilottama Dey, Vasvi Saran, Nabanita Ghosh, Jha Richa Chandra Bhushan, Aanchal Ahuja, Mohammedi Khokhawala Insiya, Mohammed Syed Subhani. Standing (L-R) 2ndrow: Arjun Goyal, Bharataram Muralidharan, Ekam Mundhra, Arthy Sathish C, Anindita Chakraborthy, Jasanpreet Kaur, Antara Priyadarshini, Oishi Sanyal, Nishtha Manocha, Utsav Mahendra, Rahul Sinha.

Standing (L-R) 3rdrow: Ankit Mittal, Vatsayan Vijay, Hariom Gupta, Rishi Ranjan, Shobhit Kumar, Tarun Georgie Alex, Ritesh Shanker, Sumit kumar Jha, Bhattacharji Jesse Kumar Sanu, L Jeevan Madhusudhan Rao.

Standing (L-R) 4throw: Piyush Kumar, Sheshank, Bilal Akhtar, Kshitij Manish Shah, Suraj G Borkar, Anup Singh, Nishant Paliwal, Aabhas Mago, Arpit Narang, Darpan Kapoor.

Standing (L-R) 5throw: Arjun Rikhya, Sumit Aggarwal, Aritra Ganguly, Avikal Joshi, Paran Jyoti Sarma, Lakshay Luthra, Aditya Bhattacharjee, Anirudh Balan, Riaz ahmed Shanaz



Sitting (L-R): Dhulipala Surya Venkatesh, Bhavish Naik, Mukund Madhav, Dr. Jayadeva Bhat (H.O.D), Abhijeet Chakraverthy, Gudibandi Raj Sekhar, Anupam Bhattacharya.

Standing (L-R) 1strow: Sakshi Singhania, Mahak Samar, Anukriti Sethi, Yashfa Muzaffar Samad, Padmini T, Shalini, Deepali Gadwe, Shalu Balagopal, Manita Malhotra, Rupa Padhy, Sandhya Sheshadri, Yashica Sadashiv Shetty.

Standing (L-R) 2ndrow: Kumar Shubham, Manish Ratna, Madhuwanthi buddhadas, Purima Chaudhary, Roopam Bhardwaj, Tania Mukhopadhya, Kanneganti, Vajrateji, Ravipati Niyatee, Chirasmita S Amin, M S Karthik, Shyam Lalji Bhanderi.

Standing (L-R) 3rdrow: Pusparaj Mishra, Nishant Bhagchandani, Kushagra Saumya Garg, Vivek Joshi, Sudip Dutta, Shashwat Shekhar, P Nishant, Yashraj.

Standing (L-R) 4throw: Subrato Bhattarcharjee, Amit Singh Tomar, Nitish Sharma, Mohammed Bilal, Shivangi Sah, Siddharth Bishnoi, Pranav Bajaj, Akshat Nagpal, B. Anurag.

Standing (L-R) 5throw: Abhishek Jah, Rahul Shrivastav, Md Danish Samad, Arun Kumar, Kevin Paul Monis, Parth Snehal Basu, Rajeev Kalyan M, Ashley Zachariah



Sitting (L-R): Kamath Amol Dinesh, Siddhant Das Swain, Ashwin Chakrapani, Dr. Harish Kumar, Dr. Vinod Thomas, Fernandes Meissner Ciriaco, Pratik Chawrekar, Sarawagi Anshuman Rajkumar
Standing 1strow(L-R): Apoorva Valli Shankar, Ankita Roy, Arpita Das, Aditi Gupta, Pooja Talukdar, Jaya Shekhar, Riya Gangopadhyay, Medha U, Chandreyee Saha Roy, Geetika Gupta, Aishwarya Tambe, Tanvi Sawhney, Juhi Singh Standing 2ndrow (L-R): Vivek C K, Swarit Srivastava, Abhimanyu Reddy, Susan Mishra, Vaishnavi Kodaganti, Ananya Das, Nishita Prasad, Ansuya Shashidharan Paleri, Shrishti Shrivastava, Kushagra Mehrotra, Pavneet Singh Ahluwalia Standing 3ndrow: Anand Agrawal, Aditya Keshri, Ankur Pandey, Shaunak Kulhalli, Aniruddha Dutta, Talwar Manpreet Singh Harjit Singh, Saurav Bhattacharjee, Chaitanya Kalyan, Kesari Nava Teja Reddy, Siddharth Mehta Standing 4throw (L-R): Rajesh Kumar Gurjar, Khan Ismail Abdullah, Ambrish Ratna, Rishi Ramesh, Soham Das, Gaurav Bhattacharjee, Ayush Lodha, Saurabh Sharma, Nishant Parulbhai Patel, Ruchir Sahai, Piyush Ranjan Standing 5throw (L-R): Shubham Mishra, Nikhil Rao Susaria, Shashank Gupta, Himanshu Chouksey, Mohammed Abdul Rafe, Prattyush Roy, Rangaraju Shounak, Sahil Mahlan



Sitting (L-R): Shantanu Chattopadhyay, Abhishek Pramanik, Arusharka Basu, Dr. S Harish Kumar, Dr Vinod V Thomas, Sarvesh Jagga, Vishu Chadha, Neelam Lalwani

Standing 1strow(L-R): Prerna Gokarn, Namrata Debroy, Tavishi Priya, Anjuman Arora, Saumya Kumari, Shreeya Paul, Taniya Mondal, Preetika Rastogi, Kritika Talwar, Pranathi Gangavarapu, Ujjyani Sambhunath Banerjee, Shagun Dwivedi, B Sai Chandra Teja

Standing 2ndrow (L-R): Harshit Davra, Shamik Pushkar, Devika Udayan, Aishwarya Hariharan, Chandrima Chanda, Shrinwanti Dasgupta, Mitra Shruti, Bhaswatee Hazarika, Diksha Hegde, Rachana Kumari, Anupam Abha, Jalan Akshat Praveen, Sahil Saeed

Standing 3rdrow (L-R): Indranil Sarkar, Avinash Mahapatra, Iyer Srinath Ganesh, Ashwin Mathur, Mehta Yash Viral, Ranjith R Chiplunkar, Harshvardhan Golani, Shiv Pratap Singh, Venugopal Hegde, Tripathi Chirag Deepak, Ujjwal Kumar, Abhishek Jain

Standing 4throw (L-R): Vishnu Kiran D S Tirumalasetty, Mukul Anand, Rakesh Singh, Daniel Kumar, Aseem Duggal, Utkarsh Garg, Gururaj Shenoy B, Anant Chandrashekhar Sharma, Sagar Sharma, Navneet Agarwal, Shubham Gupta, Ranveer Katyal

Standing 5throw (L-R): Utkarsh Maheshwari, Karthik Hariharan, Kedar Raghunath Kelkar, Vagrecha Pranjal Popatlal, Ashish Kumar, Rahul Patidar, Anurag Pan, Toshit Verma, Ayush Mantri, Ankit Gundecha, Abhinav Katwal



Sitting (L-R): Jagminder Pal Singh Matharu, K S Sivaraman, Pushkar Nath Keshri, Dr Harish Kumar, Dr Vinod V Thomas, Virag Hiten Jasani, Shanit, Arun Pai

Standing 1strow (L-R): Nair Malvika, Harshitha Harish Kumble, Ghosh Shombrita, Monalisha Ray, Versha Rani, Barnita Mishra, Astha Mahajan, Vidisha Sinha, Desireddy Neha Reddy, Diksha, Kritika Taneja

Standing 2ndrow (L-R): Kaushika S, Priyanka Parashuraman, Varsha Sudheer, Ruthu D, Megha Ranjan Mappilaparambil, Alakananda Roy, Dishari Basu, Tanwi Chatterjee, Srinidhi Kishor, Naireeta Biwas, P Shivaprasad Standing 3rdrow (L-R): Shubankar Kapoor, Shobhit Sharma, Nakul Rampal, Mikhil Pradhan, Abhinav Kumar Bansal, Rishabh Pushkarna, Champak Gogoi, Mukul Shrivastava, Kishan Prasad, Pragya Sikka, Harish Chandrasekaran Standing 4throw (L-R): Varghese Sam Eralil, Ankit A Kumar, Akshay Sharma, Arjun Bhat Y, Achin Jain, Vedant Hamirwasia, Aniruddha Deshpande, Rohit Umesh Joshi, Sahasrangshu Ghosh

Standing 5throw (L-R): Amear Suhail, Jishnu Subrata Sarkar, Gaurav Vilas Nikam, Anvith Rao, Abhishek Jain, Vinay Nayak, Nikhil Rampal, Pravek Singh, Kulkarni Kartik Sandeep, Nischay Mall



Sitting Row(L-R): Anand Vakil, Arunabh Borkataky, Sachet Agarwal, Dr Harish Kumar, Dr G K Prabhu, Akshat Gupta, Aparajith Bhaskar, Roushan Kumar

Standing 1st row(L-R): Shivani Bansal, Aparna Balanarayana, Disha Dwivedi, Chayanika Das, Karunya Keshav, Jufna Kunnumal, Arunima Lahiri, Nidhi Nalin, Sneha Reddy, Ranu Rawat, Kavitha Verma

Standing 2nd row (L-R): Maitreyee Dey, Debanjana Banerjee, Shipra Mathur, Suthara Ramachandran, K Manasa, Pritha Sinha, Teena Abraham, Nikita Kheterpal, Ipshita Ranjana, Ankita Priya, Jyotsna Pandey

Standing 3rd row (L-R): Arjun Padmanabhan, Narayan Dilip, Yash Sunil, Siddharth Saraswati, Sachin Kumar, Parth Sarthi, Vishal Sharma, Varun Chandur, Dhananjay Chandrashekhar, Shivy Mangal, Vedang Agarwal, Souvik Kumar Standing 4th row (L-R): Harshit Mishra, Prakhar Srivastav, Abhishek Acharya, Saurav Lahon, Aakash Chakraborty, Atul Kumar, Prateek Arora, Hemanth Bajaj, Varun Vasani, Anubhav Khanna



Sitting(L-R): Akash Sachar, Deboleena Dhara, Anusha Keshav Mehendale, Dr. G K Prabhu, Dr. SVSR Krishna Bandaru, Akshat Kasliwal, Nisha Modi, Siddharth Prashanth Shetty.

Standing 1st Row (L-R): Suchorita Gupta, Lakshmi N Kamath V, Sankita Balakrishna Hatwalkar, Mukta Priyadarshini Tripathy, Tanisha Chatterjee, Kammammettu Sanjula, Nupoordurga Milind Dhume, Raya Mukherjee, Sophia Saldanha, Aspha Mohanty, Soumili Kole, Swara Jevalikar, Aakanksha Bose.

Standing 2nd row (L-R): Shikhi Vats, Osheen Dabas, Vaishnavi Kale, Sanober Wadhwania, Debamita Chowdhuri, Divya Joslin Mathias, Priyadarshini B, Sowmya Ramakrishnan, Palak Kaur, Upasana Mallick, Malika Pahlajani.

Standing 3rd row (L-R): Deshmukh Tejus Dhananjay, B Sai Tejas, Shubh Patodi, Bharatesh Kumar, Bharath Krishna, Mrigank Raj Kanchan, Abheesh Nair, Parijat Jha, Himanshu Shah, Karan Ahuja

Standing 4th row (L-R): Mihir Mahesh Gambhir, Purushottam Singh, Sriharsh Patnaik, Nithish S Kaushik, Ashish Kumar Goyal, Sethuraj Rajendran, Mohamed Hamdi Rauf V, Sanket Sandeep Motarwar, Abhishek Shetty,

Standing 5th row (L-R): Suhasa Adiga, Himanshu Goyal, Devendra Pande, Ansh Nandanwar, Harsh Mehta, Kadivetti Sandeep, Deon Vas, Abhishek

Standing 6th row (L-R): Amitraj Ashok, Palash Maske, Amey Murur, Anirudh Mathur, Chinmay, Sonu John Kuriakose, Jigar Mehta, Nikhil Shetty



Sitting (L-R): Varun Harnathka, Soumya Mishra, Sohan Ahmed, Dr. S V S R Krishna Bandaru, Dr. Gopalkrishna Prabhu, Rashika Mittal, Darshan, Sushmita Shenoy.

Standing 1st row (L-R): Akanksha Bapna, Mehta Shivani Sharad, Azeen Shahna Khan, Pattanayak Sanjana Bijayanand, Gunjal Paresh Karania, Harkirat Kaur, Pritha Mitra, Navya Miriam Itty, Sulagna Roy, Suvarna Verma, Natasha Lydia Lewis, Nidhi Kamath, Samyukta Pingali.

Standing 2ndrow (L-R): Vatsal Mathur, Rhythm Pawar, Namit Verma, Vignesh Kalidas, Fatehi Adnan Ashraf Husein, Sneha Jonnalagadda, Paridhi, Shivakumar U, S Siddharth, Shashank Sanjaya Srivastava, Abhinav Srijan, Kartikeya Rastogi.

Standing 3rdrow (L-R): Mayank Rangwani, Shantanu Pandey, Poorvang Agrawal, Arjun Anilkumar, Prayag Chandra Chandragiri, Rao Harshal Sadashiv, Vaibhav Kamath, Chandramouli Mukherjee, Swapnil Tandon, Shresht Navneetha Shetty, Debanjan Pathak, Vaibhav V Mada.

Standing 4throw (L-R): Amevardhan Singh Patyal, Abhilash Dev, Gaurav Kumar Gaggar, Parth Ramachandra Gosavi, Manu Janardan Madhav Naik, Uddipta Nandi, Tanmay Sunil Mogre, Anurag Prakash Dubey, Ritwaj Shukla, Andrew Wilson, Bharat Moondhra.



Sitting (L-R): Kalyani Kanpillevar, Suvaleena Paul, Prutha Dave, Rajpreet Kaur

Standing 1strow(L-R): Aishwarya, Sakshi Marda, Sheen Shaina Ahmed, Juhi Barik, Shilpa Bharadwaj, Poojasree Maniga, Parul Soni, Srishti Mendhekar, Kuhu Choudhary, Sheetal Mohta, Naveesha Bharadwaj, Deepti Udayan Standing 2ndrow (L-R): Karan Kanjiya, Anand Ranjan, Chandan Pandey, Rohit Shanbag, Amitabh Roy, Nithin S. John, Anish S. Salian, Vatsal Jaipuria, Anant Upadhyay, Siddhanth V. Pradhan, Kshitij Kumar

Standing 3rdrow: Anston Dsouza, Nikhil Kumar Thota, Nithish R. Sontakke, Mriganka Phukon, Prakhar Gupta, Pavitra Patel, Kevin N. Lobo, Siddharth Mitra, Suru Sai Tarun, Devamrit Mohanty

Standing 4throw (L-R): Omkar R. Kegde, Satsahib Singh Bhatia, Amogh A. Kolvankar, James Parthiban, Jayanth Sai Pasuparthy, Sukrit Sharma, Sayed Raza Mehdi, Rajdeep Mamtani, Armaan P. Feroz, Sarvotham Patil



Sitting (L-R): Bagalkot Sameer Shrirang, Puneeth K L, Dr. Kumkum Garg (Director), Dr. Jeyadev Bhat (HOD), Shashank Dwivedi, Rahul Bharadwaj.

Standing (L-R),1st Row: Aishwarya M Shetty, Archana Danawade, Maithali, Rosalin Ray, Anusha Mairpadi, Katyayini Prabhu K, Geethu K Kurup, Ashima Gupta, Sherein Eappen

Standing (L-R), 2^{ND} Row: Mudit Chowdhary, Sandeep Kumar Mohanta, Ujjal Mondal, Kadoli Sandip Vishwanath, Krishna Murthy TP

Batch of 2013

Sitting (L-R), Niranjan M, Suralikinimath, Venkatesh H S, Dr. Jayadeva Bhat, Dr. Kumkum Garg, Uday Sood, Anup Sarovar. Standing 1st Row (L-R), Suraj Sharma, Varsha Khatri, Pandit Amogh Shashikant, Sonal Sharma, Priyanka S, Varude, Pooja Jain, Robin Yadav.

Standing 2nd Row (L-R), Kakadiya Umesh Ghanshyam Bhai, Shanu S, Amit Anand, V Harsha Vardhan Reddy, Umair Mahadi.



Sitting (L-R), Rashmi Deshpande, Dr. S Harish Kumar, Dr. Vinod V Thomas, Chaitra Nayak. Standing Row (L-R), Swaroop M Shajahan, Sarvesht Dhingra, Mrinal Ranjan.

Batch of 2015



Sitting (L-R), Anurag P Hegde, Dr. S Harish Kumar, Dr. Vinod V Thomas, Abbhilash Chandran. Standing 1st Row (L-R), Ranjay Kumar, Manish Kumar, Swarnabh Mandal.

Batch of 2016

Sitting (L-R), Velega Bharath, Girish Kamath, DR. S Harish Kumar (HOD), DR. Vinod V Thomas (Director), Gururaj Shenoy B, Palaparthi Neehar.

Standing 1st Row (L-R), Shaik Nawaz Bahamani, Geoju M George, Rajarashmi T Shetty, Krithika Talwar, Ashwathi R, K Sucharitha Kamath, Jayesh H Nair, Panaskar Sourabh Sunil Rao.

Standing 2nd Row (L-R), Sharath R, Naveen Kumar Ashok Yaranal.

Batch of 2017

Sitting (L-R), Shikha, Dr. Harish Kumar, Dr G K Prabhu, Apeksha Tiwari. Standing Row (L-R), Rahul K Ravindran, Ashwin Y, Kiran Kumar M S.

Batch of 2018

Sitting (L-R): Nithya R, Dr. G K Prabhu (Dir), Dr. S V S R Krishna Bandaru, Sneha Reddy Standing (L-R): P Dayakar Reddy, Jayalal

Batch of 2019

Sitting (L-R), Prathiksha P Prabhu, Dr. SVSR Krishna Bandaru, Dr. G K Prabhu, Nikita Chrishel Corda Standing Row 1, Challa Ramakoti Reddy, Linisha Biswal, Aishwarya Girish Kulkarni, Ramyashree M S, Althaf C.

Master of Technology - Industrial Pollution Control



Sitting (L-R): Rohan Sunny Kilikunnel, Sunny Kumar, Dr. Harish Kumar(HOD), Dr. Vinod V Thomas(Dir), Aishwarya B, Mohammad Hashif Iqbal

Master of Technology - Industrial Pollution Control



Sitting (L-R): Pallavi Koodur, Dr. Harish Kumar (HOD), Dr. Vinod V Thomas (Dir), Deepti, Mohnish Aiyappa K. R.

Master of Technology - Industrial Pollution Control



Sitting (L-R): Kingsley Anand, Dr. Harish Kumar (HOD), Dr. G K Prabhu (Dir), Abhishek Y S, Reenu Narayan



