

CONSULTANCY ACTIVITIES

Department has been providing Testing & consultancy services to nearby industries such as MRPL, MCF, Hindustan Lever Ltd. BASF etc. in the following areas

- Enzymatic refining of edible oils
- Bioprocess development for novel molecules
- Novel separation methods for the purification of proteins
- Quality control in Wineries

OUR STRENGTHS

- Highly motivated GATE qualified students with scholarship from MHRD
- Hands on training with equipment's through industrial training and major project
- Research projects funded by DST, CSIR, FIST, TEQIP, TIFAC CORE, Ministry of Science and Technology, SERB, SERI, MHRD-NMEICT
- Basic knowledge on C, C++ and Bioinformatics tools
- Co- Curricular& Extra – Curricular Activities :
 - Skill development program sponsored by TEQIP and MHRD
 - TEQIP sponsored workshop on Nano technological basis for advanced sensors
 - ICACE-2015 : International Conference on Advances in Chemical Engineering
 - GIAN course (initiated by MHRD)
 - INCIDENT- Intercollegiate cultural fest held annually
 - ENGINEER-Intercollegiate Technical fest held annually

OUR ALUMNI

We have a vast and active network of alumni who are pursuing their jobs and higher studies in the following institutes and organizations.

Higher Studies

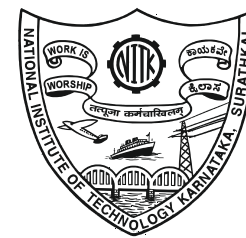
- CFTRI, Mysuru
- IISc-Bengaluru
- IIT Delhi
- IIT Bombay
- IIT Guwahati
- IIT Kanpur
- IIT Kharagpur
- IIT Madras
- IIT Roorkee
- IST Lisbon Portugal
- Monash University
- NCL-Pune
- University of Montpellier, France
- Virginia Tech University

Jobs

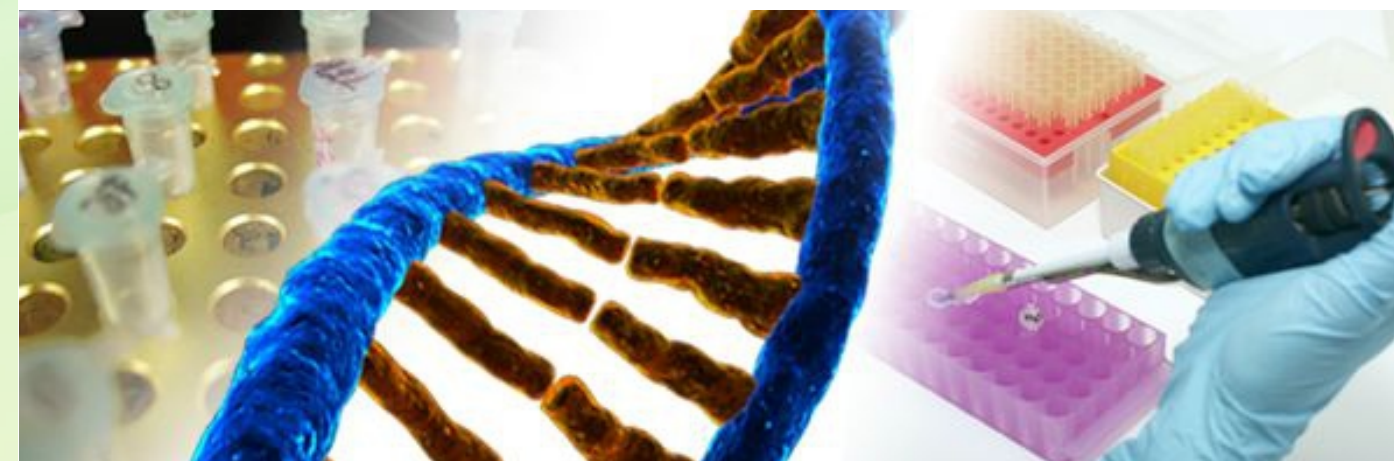
- 3M India Ltd.
- Biocon Ltd.
- Dr. Reddy's
- DuPont India Pvt. Ltd.
- Gennova biopharmaceutical
- Intas pharmaceutical
- Lupin Ltd.
- Merck Lifesciences Pvt. Ltd.
- Novartis India Ltd.
- Novozymes South Asia Pvt. Ltd.
- Richcore life science Pvt. Ltd.
- Serum institute of India
- Stellis Bio pharma Ltd.
- Syngene International Ltd.
- Theramyt novobiologics
- Unichem Laboratories Ltd.
- Zumutor Biologicals Inc.

CONTACT INFORMATION

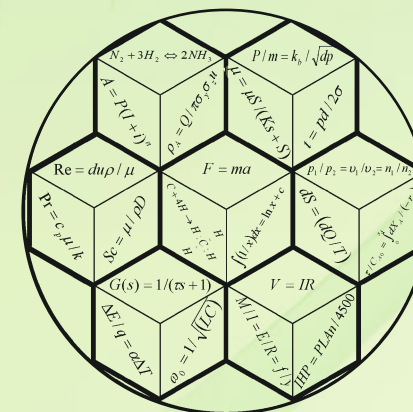
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INDUSTRIAL BIOTECHNOLOGY



DEPARTMENT OF CHEMICAL ENGINEERING

ABOUT THE DEPARTMENT

Department of Chemical Engineering was started in the year 1965. It is one of the leading chemical engineering department in the country and is known for its well-balanced curriculum having both theory and practical, good infrastructure and well qualified faculty. In order to keep pace with the changing needs, a lot of infrastructure in terms of additional space and modern instruments have been established utilizing funds available from MHRD, GOI, TEQIP, TIFAC-CORE, DST, DBT, CSIR, MOEF, FIST etc.

The Department offers an Under Graduate program in Chemical Engineering and three Post Graduate programs with specialization in Chemical Plant Design, Industrial Biotechnology and Industrial Pollution Control. In addition M.Tech (Research) and Doctoral programmes are also offered. The Department also offers product testing and industrial consultancy services.

FACULTY

Dr. B. Ashraf Ali	Dr. Hari Mahalingam	Dr. P. E. Jagadheesh Babu
Dr. C. Sankar Rao	Dr. Hari Prasad Dasari	Dr. Prasanna. B. D
Dr. D. V. R. Murthy	Dr. I. Regupathi	Dr. Raj Mohan. B (H.O.D.)
Dr. G. Srinikethan	Dr. Jagannathan. T. K	Dr. Ruben Sudhakar. D
Dr. Gangamma. S	Dr. Keyur Raval	Mr. S. Jithendra Pal (PhD.)
Dr. Gopal Mugeraya	Dr. M. B. Saidutta	Dr. Vidya Shetty. K

M.Tech - INDUSTRIAL BIOTECHNOLOGY

- **Established** : 2007
- **Students intake** : 27

PROGRAMME OBJECTIVES

1. Advance professionally in the practice of biotechnology, biochemical engineering or allied fields.
2. Advance professionally in their chosen career path, wherein they apply the communicative, logical, analytical, computational or problem solving skills developed during their graduate study to their professional practice, fulfilling the ethical and social responsibilities.
3. Successfully collaborate and work in multi-disciplinary teams to tackle complex multifaceted problems.
4. Pursue advanced studies and research in biochemical Engineering or biotechnology and management.
5. Assume leadership roles in industry or business in the context of societal needs.

CURRENT RESEARCH AREAS

1. Bioprocess development and optimization
2. Bioreactor Design for synthesis of bioactive molecules
3. Biosynthesis of QDs. for environmental applications
4. Downstream process technology
5. Drug delivery system
6. Environmental Biotechnology
7. Environmental Immunology
8. Molecular biology and Genetics
9. Nano Biotechnology



FACILITIES

- Atomic Absorption Spectrophotometer
- Autotitrator
- Cell culture facility
- Deep freezer
- Electro Spinning machine
- Fast Protein Liquid Chromatography
- Fermentors (2L, 3L,14L)
- Gas Chromatography
- Gel documentation system
- High Performance Liquid Chromatography
- High Speed Refrigerated Centrifuges
- Inductively Coupled Plasma – Optical Emission Spectrophotometer
- Ion Chromatography
- Liquid Chromatography – Mass Spectrophotometer
- Lyophilizer
- Nanodrop Spectrophotometer
- Particle Size and Zeta Potential Analyser
- Real time PCR
- Thermo-cycler
- UV Spectrophotometer



Conventional laboratories

- Chemical Reaction Engineering
- Heat Transfer
- Mass Transfer
- Mechanical Operations
- Momentum Transfer
- Process Control and Simulation

Specialised laboratories

- Advanced Instrumentation
- Bio-aerosol laboratory
- Environmental immunology
- Fermentation laboratory
- Industrial Biotechnology
- Quality testing laboratory

Computational Facilities

MATLAB, CHEMCAD, PHAST MICRO, CHARMS, UNISIM, ANSYS, AERMOD View.

CURRICULUM

Core Courses

- Bioreactor Theory and Design
- Downstream Process Technology
- Environmental Biotechnology
- Enzyme Engineering and Technology
- Fermentation Technology
- Transport Phenomena

Electives

- Biosensors
- Genetic Engineering and Recombinant DNA Technology
- Instrumental Methods of Analysis
- Industrial Waste Treatment and Management