



NEWSLETTER:



VISION OF THE INSTITUTION

To make the institution one of our nations great engineering schools recognized nationally and internationally for excellence in teaching, research and public service. We seek to be the preferred destination for students, practitioners seeking an engineering education, employers hiring engineering graduates and organizations seeking engineering knowledge.

MISSION OF THE INSTITUTION

To provide an encouraging environment to develop the intellectual capacity, critical thinking, creativity and problem-solving ability of the students



VISION OF THE DEPARTMENT

To cultivate scientific and technical manpower in Biotechnology to solve various problems and challenges faced by industry and academia for the betterment of society.

MISSION OF THE DEPARTMENT

- Provide an academic environment that emphasizes critical thinking.
 - Equip students with knowledge and practical skills required for the industry and academia
- Constitute Institute-Industry relationship via implant training programs and projects and establish a centre of excellence (COE) in the frontier areas of biotechnology

PROGRAMME OUTCOMES:

Engineering Graduates will be able to:

PO1	a	Engineering knowledge: Apply the knowledge of mathematics, science, engineering, fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	b	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	c	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	d	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	e	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an Understanding of the limitations.
PO6	f	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	g	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	h	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	i	Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	j	Communication: Communicate effectively on complex engineering activities with the engineering Community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	k	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	l	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OBJECTIVES (PSOs):

PSO1	Knowledge and hands on training to solve engineering and scientific problems.
PSO2	Ability to work in interdisciplinary areas of science and technology towards industrial and academic research applications.
PSO3	Infer the potentials and impact of biotechnological innovations for finding sustainable ethical solutions to issues pertaining to health, environment and agriculture

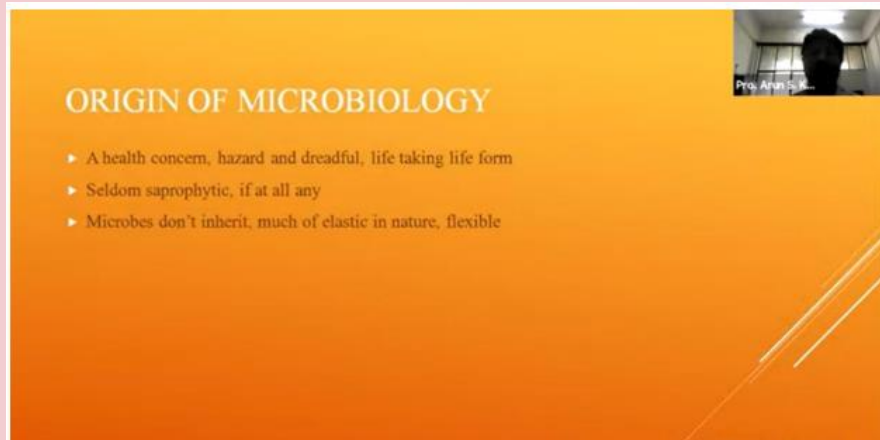


EVENTS:

✚ On 17.02.21, Prof. Arun. S. Kharat, Dept. of Biotechnology, JNU, New Delhi facilitates the e gathering. The event started with the welcome address by the Principal followed by the Guest Introduction. 70% of all Biotechnology Students has attended the Guest Lecture.

The speaker starts his speech with the introduction of Microbiology. He also explains about the origin of Microbiology. It was a very interactive session and most of the students got more useful information through this Lecture.

The session ended with the vote of Thanks by the Head of the Department followed by National Anthem.



✚ On 11.03.21, Prof. Daniel G. Bracewell, Department of Biochemical Engineering, UCL, London facilitates the gathering. The event started with the warm greetings and the welcome address by the HOD of the department of bio technology.90% of the students has been attended the Guest lecture. The speaker has been started his speech on webinar on overview of Bio chemical engineering Biochemical engineers are also critical for the development and commercialization of sustainable and economic processes to produce liquid transportation fuels from biomass, algae and waste streams from other manufacturing processes .Biochemical engineering, also known as bioprocess engineering, is a field of study with roots stemming from chemical engineering and biological engineering. Bioengineering's most visible branch is the development of medical innovations such as prosthetics and high-tech implants, but genetic, stem cell and tissue engineering are all set to become key fields in the medicine of the future. he told many useful things about bio

chemical engineering which had made the students to takes the notes and he told many techniques and growth of the bio chemical engineering and that session had ended with the vote of thanks by the staff members of department of bio technology followed by National anthem.

WEBINAR ON OVERVIEW OF BIOCHEMICAL ENGINEERING

It involves learning about all of this...

Chemistry

Physics

Mathematics

Biology

Medicine

Biochemistry

Business

Engineering

.... So it can't be easy! Expect to be challenged and work hard!

- ✚ On 21.04.21, Mr. Basile Gallet. Researcher, Université Paris-Saclay, Service de Physique de l'Etat Condensé (SPEC), CEA Saclay, France. The event started with the warm welcome the guest with honour of presenting a bouquet. And the welcome gathering was given by the principal. 80% of the students has been attended the Guest lecture. The speaker has been started his speech with the great quotes and he started his speech on Fluid mechanics : Fluid mechanics is the study of fluid behavior (liquids, gases, blood, and plasmas) at rest and in motion. Fluid mechanics has a wide range of applications in

mechanical and chemical engineering, in biological systems, and in astrophysics. Fluid mechanics is difficult indeed. The primary reason is there seems to be more exceptions than rules. This subject evolves from observing behaviour of fluids and trying to put them in the context of mathematical formulation. Many phenomena are still not accurately explained. and he told many things about Fluid mechanics and he told the difficulties face by the people and principals of Fluid mechanics which was more used to the students which made the session interactive .

The session was ended with quote by the speaker and the vote thanks was given by the staff members and the department of bio technology followed by National anthem.

Homogeneous baroclinic turbulence

- Base state: uniform temperature gradient + vertical shear

lighter,
= warm = fluid

heavier,
= cold = fluid

[N.A. Phillips (1954)]
[Salmon, Flierl, Pedlosky, Held, Thompson, Young...]

Basile Gallet

FACULTY PROFILE:

Dr. Shilpa Joy	M. Tech & PhD	Professor
Dr. J. Bindhu	M. Tech & PhD	Associate Professor
Dr. R. Kannan	M. Tech & PhD	Assistant Professor
Dr. K. Vasanthraj	M. Tech & PhD	Assistant Professor
Mrs. S. Lakshmi Prabha	M. Tech	Assistant Professor
Mr. S. Vishnu	M. Tech	Assistant Professor
Mrs. T. Chitra Devi	M. Tech	Assistant Professor
Mr. M. A. K. Kalirajan	M. Tech	Assistant Professor
Mr. S. Gabriel	M. Tech	Assistant Professor
Ms. Divya Nair	M. Tech	Assistant Professor

Ms. D. Anitha Shree	M. Tech	Assistant Professor
Mrs. M. Sujitha	M. Tech	Assistant Professor
Ms. Sri Thatchayani	M. Tech	Assistant Professor
Ms. Broony Maria Tency	M. Tech	Assistant Professor
Dr. S. Vignesh Raj	M. Tech & PhD	Associate Professor