INSTITUTE & DEPARTMENT

Sinhgad College of Engineering (SCOE) is affiliated to Pune University and recognized by All India Council for Technical Education (AICTE), New Delhi. SCOE is accredited by National Board of Accreditation (NBA) of AICTE, New Delhi and has been awarded, “A” grade by the Directorate of Technical Education (DTE), Maharashtra.

The department of biotechnology is set in the area of 10,000 sq. ft. and has state-of-the-art laboratories like Microbiology, Molecular Biology, Cell Culture facility, Immunology, Bioinformatics and Fermentation. The departmental faculty is actively engaged in research and consultancies. The department can boast of research grants from Govt. of India, Department of Science & Technology (DST) and Indian Council of Medical Research (ICMR) worth ₹ 1 crore as well as from several private funds. The ongoing research projects are in collaboration with premier Indian institutions like IISc, CCMB, MAHE, ICT Mumbai, IITs as well as with Cornell University, USA.

Bachelor (B.Tech.) of Biotechnology course (duration 4 years), run by SCOE, is the first AICTE approved course in Pune University under Engineering faculty. The course is designed to give equal weightage to engineering & biology.
**MOTIVATION & OBJECTIVES**

Department of Biotechnology, Sinhgad College of Engineering, Pune is pleased to offer a five-day workshop on **Downstream Processing of Bioproducts** starting from 11th June 2012.

Industrial biotechnology is the emerging field of current era. Bioprocess development and downstream processing of bioproducts are the major aspects of industrial biotechnology. However, students and young researchers of both industrial biotechnology and chemical engineering are often not aware of the scope and practices needed in the area of downstream processing, and therefore, the dissemination of this knowledge to a wide range audience is essential which is the aim of the workshop.

The workshop includes state-of-the-art hands-on laboratory experience as well as comprehensive theoretical lectures on various bioproducts recovery and purification techniques. It will provide an insight into the fundamentals of various bioseparation and purification techniques required for biotechnologists, chemical engineers and pharmacists. Participants will integrate theory with practice in areas such as cell separation, cell disruption, protein separation and purification, *in vitro* assays and chromatographic systems. The main emphasis is on improving product purity considering the industrial aspects of scaling up and economics of the process.

**WORKSHOP DETAILS**

**Schedule:**
- **Day 1** – Introduction to downstream processing
- **Day 2** – Cell disruption & product isolation
- **Day 3** – Introduction to chromatographic systems
- **Day 4** – Product purification and polishing
- **Day 5** – Scale up and process economics

**Daily Activities:**
- **Morning session**
  - 10:00 am – 11:00 am: Lecture
  - 11:00 am – 11:15 am: Tea
  - 11:15 am – 12:15 am: Lecture
- **Lunch**
- **Afternoon session**
  - 01:00 pm – 03:00 pm: Laboratory
  - 03:00 pm – 03:15 pm: Tea
  - 03:15 pm – 05:15 pm: Laboratory

**Speakers & Practical Coordinators:**
- Dr. Pradip B. Dhamole, SCOE, Pune
- Dr. Sandeep Kale, DBT – CEB ICT, Mumbai
- Dr. Sriram Joshi, Praj Matrix, Pune
- Dr. Rashmi G. Patil, SCOE, Pune
- Ms. Shradhha S. Utpat, SCOE, Pune
- Mrs. Sailaja P., SCOE, Pune
- Ms. Shweta G. Kate, SCOE, Pune

**ORGANISING COMMITTEE**
- Dr. Pradip B. Dhamole. (Head, Dept. of Biotechnology)
- Ms. Shweta G. Kate. (Workshop Co-ordinator)
- Dr. Rashmi G. Patil.
- Dr. Sudha J. Kulkarni.
- Dr. Amol D. Raut.
- Dr. Sarita U. Mahajani.
- Ms. Shradha S. Utpat.
- Mrs. Sailaja P.
- Mr. Prashant D. Jolhe.
- Mr. Jitendra K. Rajput.
- Mrs. Manisha B. Bachchhav.
- Mr. S. Y. Deshmukh.
- Ms. Vijaya Mahadik.