

**SRM Institute of Science and Technology
School of Bioengineering
Department of Biotechnology**

Professional Development Program on “Advances in Biochemical Engineering” (ABChE’2025)-February 24th to March 1st, 2025.

PDP REPORT

A total of 22 participants, including Ph.D. scholars and postgraduate (PG) students, attended the program. Among them, five external participants were from Kalasalingam Academy of Research and Education and Dr. M.G.R. Educational and Research Institute, while the remaining 17 participants were Ph.D. scholars and PG students from the Biotechnology and Chemical Engineering departments of SRMIST.

Program Schedule & Highlights:

The program commenced on February 24, 2025 (Monday), with an insightful presidential talk by Mr. C.P. Maniraj, President of Scigenics India (P) Ltd., who provided an industry perspective on advancements in biochemical engineering. This was followed by hands-on training on fermenter operations, giving participants practical exposure to upstream bioprocess techniques.

On February 25, 2025 (Tuesday), the program featured an expert talk by Dr. T.S. Ganesh from BIOCON Biologics (P) Ltd., who shared valuable insights on bioproduct purification and scaling-up strategies. He has also shared about the internship opportunities available in Biocon. In the afternoon session, hands-on training continued on fermenter operation and laboratory analyses.

The third day, February 26, 2025 (Wednesday), focused on exclusive hands-on-training on downstream processing techniques such as microfiltration, high-pressure homogenization, extraction, precipitation, and lyophilization.

On February 27, 2025 (Thursday), the program continued with an expert talk by Dr. S. Senthil Kumar, Professor at IIT Guwahati, who discussed recent advancements in biochemical engineering through Process Analytical Technology. In the afternoon, Dr. N. Selvaraju, Associate Professor at IIT Guwahati, delivered another expert talk on Water Purification Technologies Using Biomaterials. The delegates from IIT Guwahati also shared valuable information on fellowship programs and other opportunities for aspiring biotech graduates.

On February 28, 2025 (Friday), participants went on a field visit to the Wastewater Treatment Plant at Koyambedu, where they gained first-hand exposure to real-time wastewater treatment operations and membrane filtration techniques.

On the final day, March 01, 2025 (Saturday), the program concluded with two hands-on sessions on modeling and simulation in bioprocess engineering, conducted by Dr. M. Venkatesh Prabhu, SRMIST. Participants were trained in coding exercises relevant to bioprocess simulations, enhancing their computational skills.

We hope that the participants have gained exposure to advanced techniques and industry trends, equipping them with enhanced skills for future academic and professional endeavours.

PHOTOS:

