BioSpectrum the business of Bi
24 years of leveraging the business of Bio
www.biospectrumindia.co

8th International Bioprocessing India Conference takes place at CSIR-NCL

13 January 2023 | News

Covering basic and applications of cutting edge research and development in both academia and industry



The International Bioprocessing India Conference, the 8th one in the series dedicated to the presentation and discussion of the latest scientific developments, was held at CSIR-National Chemical Laboratory (NCL) between December 16-18, 2022 at Pune. The scientific agenda highlighted the state-of-the-art in Bioprocessing for Biosimilars, Vaccines and Bioenergy.

Programme highlights

The event started with an insightful inaugural talk by Dr Cyrus Karkaria, President of the Biotechnology division of Lupin Pharma, who discussed advances in fundamental research to fast-track development of recombinant proteins and vaccines. This was followed by the first plenary lecture titled “Crossing the Valley of Death: Fundamental Research in the Service of Biomanufacturing” by Prof. Abraham Lenhoff, the Allan P. Colburn Professor of Chemical Engineering at University of Delaware, USA. The talk discussed how to overcome that "valley of death" that is generally a barrier to innovation in industrial practice. This would allow efficient translation into applications in process development, design and manufacturing in bioprocessing**.**

To wrap up the inaugural session, the last fascinating talk was delivered by Dr Umesh Shaligram, Executive Director & Board Member of Serum Institute of India. He outlined the journey of Serum Institute during COVID-19 pandemic including their detection, treatment and prevention strategies for disease burden reduction and elimination.

A Complete Package

The 2.5 days meeting with 70 invited talks from academia and industry, student talks, posters, exciting startup stories and numerous workshop covered basic and applications of cutting edge research and development in both academia and industry. The areas covered included classical themes and modern advancements in biopharma industry.

Some key areas discussed by speakers from industry spanned upstream and downstream processing for recombinant protein therapeutics, scale up, and biomanufacturing along with biophysical and analytical characterisation.

Another major focus was biocatalysis, biotransformation, metabolic engineering for bioenergy. Many academic talks discussed fundamental concepts of protein folding, refolding, aggregation that shape protein engineering. In-silico and mechanistic modelling chromatographic processes in downstream was also discussed. Other exciting talks were on biosensing and diagnostics, nutraceuticals and natural product chemistry. Some fundamentals and applications of state-of-the-art synthetic biology approaches, stem cell technology, gene therapy and drug delivery were also part of the deliberations

The talks emphasised that the integrity of a bioprocess is multifactorial and ultimately determines the quality of the biotherapeutic. Bioprocessing starts from design and development of cell lines and continues until the product is manufactured. The methods and strategies discussed formed essential learnings for every scientist, engineer or manager in the biopharma industry and academia.