



Biophysical Characterization of Biologics and Biosimilars

3-7 February 2020 | Institute of Chemical Technology, Mumbai

The characterization of molecular structure, the measurement of molecular properties, and the observation of molecular behaviour presents an enormous challenge to biopharmaceutical production. A wide range of biophysical techniques have been developed to study molecules in crystals, in solution, in cells, and in organisms. These biophysical techniques provide information about the electronic structure, size, shape, dynamics, polarity, and modes of interaction of biological molecules. Biophysical techniques play a very important role in understanding protein structure, formulation development and late stage formulation development of protein therapeutics. The module shall help increase your knowledge of the orthogonal technique, understand biophysical data analysis.

Turn page for Agenda

For detailed information, please visit:
nbmworkshops.com/programICT.htm

Please any queries:
nbmworkshop@biotech.co.in

Organising Partner



Management Partner



Time	Activity Details	In-charge/Experts	JR Expert	Location
Day 1: 03.02.2020				
08:00 am – 09:00 am	Breakfast and Registration			Marble Hall and Pidillite Pavillion
09:00 am – 11:30 am	Inauguration, Welcome address, Introduction to Participants	Prof. A.B. Pandit , Vice Chancellor, ICT Mumbai Dr. Ratnesh Jain , UGC Assistant Professor, ICT Mumbai Dr. Hardeep Vora , Program Manager, BIRAC Dr. Shreerang Joshi , HOD, Department of Pharmaceutical Sciences and Technology Dr. A.W. Patwardhan , HOD, Department of Chemical Engineering Dr. Purnima Sharma , Managing Director, BCIL Dr. Narendra Chirmule , CEO, Symphonytech Biologics Dr. Dhananjay Patankar , Vice-President, Syngene Dr. Prajakta Dandekar Jain , ICT UGC Assistant Professor, ICT Mumbai	–	KV Auditorium
11:30 am – 12:00 pm	Tea Break			Pidillite Pavillion
12:00 pm – 12:30 pm	Key note lecture: CQA in biologics	Dr. Jyoti Iyer , Biocon		CE conference room
12:30 pm – 01:00 pm	Keynote Lecture: Importance of “Critical Quality Attributes” in development of Therapeutic proteins	Dr. Venkat Yetaru , Lupin		
01:00 pm – 01:30 pm	Keynote lecture: Identification and Characterization of Critical Quality Attributes in Biologics: Biophysics to the rescue!	Dr. Amarnath Chatterjee , Wockhardt	–	
01:30 pm – 02:30 pm	Lunch Break			Pidillite Pavillion
02.30 pm – 06:00 pm	Protein aggregation and analysis by DLS	Dr. Anand Tadas , Malvern	Mr. Aditya Narvekar	CE conference room

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Day 2: 04.02.2020				
08:30 am – 09:00 am	Breakfast			Pidilite Pavillion
09:00 am – 10:00 am	Lecture: Characterization of Proteins- A biophysical approach	Dr. Satyanarayana Subrahmanyam, Dr. Reddy's		CE conference room
10:00 am – 11:00 am	AUC sample cell assembly	Mr. Paresh Gadekar & Mr. Kalpesh Patil , Beckman Coulter	Ms. Marianne Saldanha & Ms. Nanda Rohra	CE conference room
11:00 am – 11:15 am	High Tea			
11:15 am – 01:30 pm	Sample loading & Fitting in Rotor	Mr. Paresh Gadekar & Mr. Kalpesh Patil , Beckman Coulter	Ms. Marianne Saldanha & Ms. Nanda Rohra	CE conference room
01:30 pm – 02:30 pm	Lunch			Pidilite Pavillion
02:30 pm – 04:00 pm	Instrument operation & start of equilibration	Mr. Paresh Gadekar & Mr. Kalpesh Patil , Beckman Coulter	Ms. Marianne Saldanha & Ms. Nanda Rohra	Analytical nstruments Lab-I, CE
04:00 pm – 05:00 pm	Quiz & discussion with experts	Mr. Paresh Gadekar & Mr. Kalpesh Patil , Beckman Coulter	Ms. Marianne Saldanha & Ms. Nanda Rohra	
05:00 pm – 06:00 pm	Laser alignment and start of AUC run	Mr. Paresh Gadekar & Mr. Kalpesh Patil , Beckman Coulter	Ms. Marianne Saldanha & Ms. Nanda Rohra	Analytical nstruments Lab-I, CE
Day 3: 05.02.2020				
08:30 am – 09:00 am	Breakfast			Pidilite Pavillion
09:00 am – 11:00 am	Lecture: Understanding the protein structure, stability and biomolecular interactions	Dr. Sinjan Choudhary , Assistant Professor, Centre for Excellence in Basic Sciences, University of Mumbai	Mr. Aditya Narvekar	CE Conference Room
	Lecture: Understanding the thermodynamic properties of macromolecules using differential scanning calorimeter (DSC)	Dr. Pramod Madoori , Research Scientist, Wockhardt	Mr. Aditya Narvekar	CE Conference Room
	Lecture: Basics of DSC and ITC	Dr. Subhayu Roy , General Manager, Toshniwal Brothers PVT Ltd		
11:00 am – 11:15 am	Tea Break			
11:15 am – 01:30 pm	Thermal Methods: Data Analysis	Dr. Sinjan Choudhary , Assistant Professor, University of Mumbai and Dr. Pramod Madoori , Research Scientist, Wockhardt Dr. Subhayu Roy, Dr. Muraleedhara Reddy, Mr. Swapnil Gadhave Toshniwal Brothers Pvt Ltd	Mr. Aditya Narvekar	CE Conference Room
01:30 pm – 02:30 pm	Lunch Break			
02:00 pm – 06:00 pm	AUC: Data Analysis	Dr. Prasad Satyamurthy , Biocon	Ms. Marianne Saldanha & Ms. Nanda Rohra	IPC

Time	Activity Details	In-charge/Experts	JR Expert	Location
Day 4: 06.02.2020				
08:30 am – 09:00 am	Breakfast			Pidilite Pavillion
09:00 am – 11:00 am	Lecture: NMR in Biologics	Dr. Ashutosh Kumar , Associate Professor, IIT Bombay	Mr. Aditya Narvekar	CE Conference Room
	Lecture: Higher order Structure (HOS) characterization of biologics	Dr. Navartana Vajpai , Biocon Ltd		
11:00 am – 11:15 am	Tea Break			
11:15 am – 01:30 pm	NMR: Data Analysis	Dr. Ashutosh Kumar , Associate Professor, IIT Bombay and Dr. Navartana Vajpai , Biocon Ltd	Mr. Aditya Narvekar	CE Conference Room
01:30 pm – 02:30 pm	Lunch Break			
02:30 pm – 03:00 pm	Key note lecture: Biosimilar/ Biotherapeutic protein and peptide characterization by mass spectrometry	Prof. Utpal Tatu , IISC Bangalore		CE Conference Room
03:00 pm – 03:30 pm	Keynote lecture: Critical Quality Attributes for a therapeutic biologic	Dr. M.S. Ramakrishnan , Biocon		CE Conference Room
03:30 pm – 06:30 pm	CD Lecture and Data Analysis	Dr. Navaratna Vajpai , Biocon Ltd and Dr. Sankaranarayanan Srinivasan , Principal Scientist, Intas Pharmaceuticals Ltd	Mr. Aditya Narvekar	CE Conference Room
Day 5: 07.02.2020				
08:30 am – 09:00 am	Breakfast			
09:00 am – 11:30 am	Lecture: Impact and need of data analytics across lifecycle of biopharmaceuticals	Mr. Vaibhav Patil , Sartorius Stedim	–	KV Auditorium
	Lecture: Design of Experiments	Mr. Vinay Babu , Biocon		
11:30 am – 12:00 pm	Keynote Lecture: Impact and Importance of Standards on Biotherapeutic Development	Dr. Kevin Carrick , Director, USP-RKV	–	KV Auditorium
12:00 pm – 12:30 pm	Keynote Lecture: Data Integrity and Ethics for Biopharmaceutical Product Development	Dr. Francis Crawley , Executive Director, GCPA		KV Auditorium
12:30 pm – 01:15 pm	Keynote Lecture: Innovative technologies for the expression of next generation biotherapeutics	Dr. Amita Goel , CEO, Celltheon Corporation	–	KV Auditorium
01:15 pm – 02:00 pm	Lunch Break			
02:00 pm – 02:30 pm	Inauguration of Job Mela	Dr. Meenakshi Munshi , DBT, Gol	–	Pidilite Pavilion
02:30 pm – 04:30 pm	HR Talks: Biopharmaceutical Industry		–	Pidilite Pavilion