







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

Cell line and cell culture processing are the most critical steps for antibody development since both can determine productivity, quality, and cost benefits. There is a wide range of monoclonal antibody based therapies developed using cell culture method. Cell line development starts with expression vector construction and transfection. Cell culture process development starts with cell line generation and selection, followed by process and media optimization in small-scale systems, including multiwell plates, shake tubes and shaker flasks, and bench-scale

bioreactors. The module will cover cell culture, transfection, cell line development, clone selection and upstream process development using theoretical and experimental strategy.

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	Speaker/Expert	Junior Expert	Location
		Day 1: 03.02.2020		
08:00 am – 09:00 am	Registration and Breakfast			Marble Hall/Pidilite Pavillion
09:00 am – 11:30 am	Inauguration, Welcome address, Introduction - 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, ICTMumbai		KV Auditorium
11:30 am – 12:00 pm	Tea Break			Pidilite Pavillion
12:00 pm – 12:45 pm	Keynote lecture: Current Trends in Cell line development for production of affordable recombinant Protein	Dr. Sanjeev Gupta, IPCA		KV Auditorium
12.45 pm – 01:30 pm	Keynote Lecture: Process Development for Biosimilars: A strategic perspective	Dr. Samir Kulkarni, Mumbai University		
01:30 pm – 02:30 pm	Lunch Break			Pidilite Pavillion
02:30 pm – 03:00 pm	Lecture: Basics of cell line development for biosimilars	Dr. Shardul Salunkhe, Intas		Oils/Textile Conference Room
03:00 pm – 06:00 pm	Cell culture training: Aseptic handling, cell counting, Q&A		Ms. Kritika Gupta, Ms.Tejal Pant, Mr. Ajit Kotkar and Mr. Ranjeet Desai	PBT, BPT (Lab/Classroom)
06:00 pm – 06:30 pm	Tea Break			

Time	Activity Details	Speaker/Expert	Junior Expert	Location		
		Day 2: 04.02.2020				
08:30 am – 09:00 am	Breakfast			Pidillite Pavillion		
9:00 am – 10:00 am	Intro lecture on Transfection					
0:00 am – 10:30 am	Tea Break					
10:30 am – 01:30 pm	Transfection practical: Lipofectamine-plasmid complex preparation, complex addition, Q&A		Ms. Kritika Gupta, Ms.Tejal Pant, Mr. Ajit Kotkar and Mr. Ranjeet Desai	PBT, BPT (Lab/Classroom)		
01:30 pm – 02:30 pm	Lunch Break					
02:30 pm – 03:00 pm	Lecture: Bioassay-Design and Development	Dr. Shubhrata Khedkar, USP		Oils/Textile Conference Room		
03:00 pm – 06:00 pm	Protein quantification using ELISA	Mr. Manish Singh, Bio-Techne	Ms. Kritika Gupta, Ms.Tejal Pant, Mr. Ajit Kotkar and Mr. Ranjeet Desai	Oils/Textile Conference Room		
06:00 pm – 06:30 pm	Tea Break					
		Day 3: 05.02.2020				
8:30 am – 09:00 am	Breakfast			Pedillite Pavillion		
09:00 am – 10:00 am	Transfection practical: Visualization of results using fluorescence microscopy		Ms. Kritika Gupta, Ms.Tejal Pant, Mr. Ajit Kotkar and Mr. Ranjeet Desai	PBT		
10:00 am – 10:30 am	Tea Break					
	Bioreactor training: Lecture and practical					
	Group 1	Mr. Abhishek Muley, Eppendorf	Ms. Tejal Pant	PBT		
10:30 am – 02:00 pm	Group 2	Dr. Janice Tan and Mr. Santosh Kumar Pandey, Merck	Ms. Kritika Gupta	DBT		
	Group 3	Mr. Reetesh Pradeep and Mr. Pravin Bhopi, Sartorius	Mr. Ajit Kotkar	DBT		
2:00 pm – 03:00 pm	Lunch Break					
03:00 pm – 06:00 pm	Bioreactor training: Lecture and practical					
	Group 1	Mr. Abhishek Muley, Eppendorf	Ms. Tejal Pant	PBT		
	Group 2	Dr. Janice Tan and Mr. Santosh Kumar Pandey, Merck	Ms. Kritika Gupta	DBT		
	Group 3	Mr. Reetesh Pradeep and Mr. Pravin Bhopi, Sartorius	Mr. Ajit Kotkar	DBT		
	Tea Break					

Time	Activity Details	Speaker/Expert	Junior Expert	Location		
		Day 4: 06.02.2020				
08:30 am – 09:00 am	Breakfast					
09:00 am – 12:00 pm	Filtration techniques: Lecture and demo on clarification and purification of media	Mr. Tiju Thomas, 3M		Oils/Textile Conference Room		
12:30 pm – 01:30 pm	Lecture on fed-batch culture and strategies	<b>Dr. Mugdha Gadgil</b> , NCL Pune	Ms. Kritika Gupta, Ms.Tejal Pant, Mr. Ajit Kotkar and Mr. Ranjeet Desai	Oils/Textile Conference Room		
01:30 pm – 02:30 pm	Lunch Break					
02:30 pm – 03:00 pm	Manufacturing Biosimilar : Challenges and opportunities	Dr. Sandeep Majumdar, Intas		KV Auditorium		
03:00 pm – 03:30 pm	Keynote Lecture: You get what you put in!! 5 essential elements for biosimilar development	Dr. Prateek Gupta, Intas		KV Auditorium		
03:30 pm – 06:00 pm	Automated process for clone selection: Lecture and demo	Dr. Annamma A., DBT and Dr. M.S. Ravindran, T.K. Paramasivam, PerkinElmer	Mr. Shaikh Khurshedakhtar, Ms. Kritika Gupta, Ms.Tejal Pant, Mr. Ajit Kotkar and Mr. Ranjeet Desai	Oils/Textile Conference Room and DBT		
		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		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 BiopharmaceuticalProduct Development	<b>Dr. Francis Crawley</b> , 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, Celltheon Corporation		KV Auditorium		
01:15 pm – 02:00 pm	Lunch Break					
02:00 pm – 02:30 pm	Inauguration of Job Mela	<b>Dr. Meenakshi Munshi</b> , DBT, Govt. of India		Pidilite Pavilion		
02:30 pm – 04:30 pm	HR Talks by Biopharmaceutical Industry			Pidilite Pavilion		