## Title: Hands-on-training program on DSP, Purification and Formulation

Venue: Institute of Chemical Technology, Mumbai

Dates: 3<sup>rd</sup> Feb - 7<sup>th</sup> Feb, 2020

Key Note Speaker
Dr.Sanjay Tiwari , Director, R&D,Lupin
Dr.Tushar Joglekar, General Manager, Head R&D , Cadila Pharmaceuticals\*
Dr. Anuj Goel, Biocon

Speakers (Senior Expert)
Dr.Sachin Joshi, Managing Director, PharmNXTBiotech
Dr.Rahul Bhambure, NCL -Pune\*
Dr. Sandip Kadam, Bio Rad, Mumbai
Dr. Sandeep Somani, Principal Scientist, Lupin\*
Mr.Gaurav Nagar, Senior Manager, Serum Institute of India
Dr.Sarat Bimanadham, Technical Specialist SEA, PALL
\*Invited

Junior Expert Nazima Shahzad, Intas Mahesh Tambe, Intas Akshita Angirishi, ICT Shailesh Bharti, ICT

Day-1: 3 <sup>rd</sup> Feb, 2020			
Sr. No.	Time	Activity	
1	09:30 – 11:00Am	Classroom Session: Introduction to Principles and techniques in DSP (focus on protein A)	
2	11:15Am – 1:00 pm	Lab Session: Introduction to Hardware & brief overview of AKTA system, column packing demo and mobile phase preparation	
3	2:00 pm – 6:00 pm	Lab Session: column performance evaluation and sample purification by Protein A demo	
Day-2: 4 <sup>th</sup> Feb, 2020			
1	9:30Am - 11:00 Am	Classroom session: Introduction to CEX chromatography for purification	
2	11:15 Am - 1:00 pm	Lab Session: Protein A purification evaluation by Protein-A HPLC	
3	2:00 – 6:00 pm	Lab Session: Demo on column un-packing and re-packing with CEX resin, mobile phase preparation and column performance evaluation	

Day-3: 5 <sup>th</sup> Feb, 2020			
1	09:30Am - 11:00 Am	Classroom Session: Role of HCPs and evaluation of removal of HCP by ELISA	
2	11:15Am- 6:00 pm	Lab Session: HCP ELISA	
Day-4: 6 <sup>th</sup> Feb			
1	9:30Am - 11:00 Am	Classroom Session: Introduction to viral clearance by filtration	
2	11:15Am - 1:00pm	Lab Session: Filter handling demo – handling of syringe filters, membrane filters etc.	
3	2:00pm – 6:00 pm	Lab + Classroom Session: Role of TFF in conc. diafiltration and demo	
Day-5: 7 <sup>th</sup> Feb			
1	9:30 Am– 11:00Am	Classroom Session: Summary of all purification techniques performed and evaluation of purification	
2	11:15Am – 1:00Pm	Classroom Session: Advances in continuous bioprocessing	
3	2:00pm - 4:30pm	Lab/Demo Session: Demo and scale up	