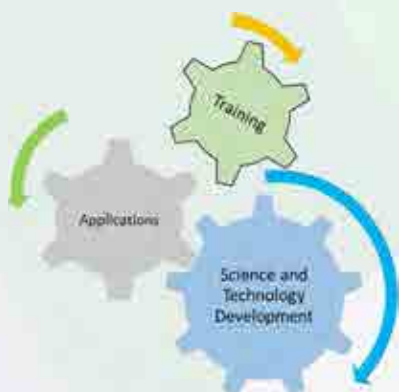


A warm welcome to Centre of Excellence for Biopharmaceutical Technology!!

The **Center of Excellence for Biopharmaceutical Technology (CBT)** was established at IIT Delhi in 2015 by the Department of Biotechnology, Government of India, in recognition of the importance of Biotechnology for India, particularly that of producing **affordable biotech therapeutics**.



The vision of CBT is to deliver innovation in biopharmaceutical technology to effectively address the challenges faced by the Indian biotech industry and thereby assist in the “**Make in India**” initiative by making India the **global hub** of manufacturing economical, safe and efficacious therapeutics.



CBT aspires to achieve this tall objective by providing a foundation of scientific and technology development to create **novel technologies**, engage with the biotech industry to **translate** these into applications, and finally to offer short term training courses to industry, academia, and regulatory agencies to facilitate **creation of an ecosystem** that delivers **affordable biotech therapeutics** to India and to the world.

Together with the Biotechnology Industry Research Assistance Council (BIRAC), CBT is bringing forth a

world class training program that brings together leaders from across the world to come together and share the best practices and cutting edge technologies on a diverse set of topics:

QbD for Upstream Processing

Electron Microscopy for Characterizing Biotherapeutics

Viral Safety for Bioprocessing

Multivariate Data Analysis

Regulatory Submissions in US

Analytical Characterization of Biotherapeutics

Surface Plasmon Resonance

Continuous Processing

Hands On Course in Downstream Processing

Design of Experiments



Prof. Anurag S. Rathore
Coordinator, CBT, IIT Delhi



Prof. James Gomes
Co-Coordinator, CBT, IIT Delhi



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Center of Excellence
Biopharmaceutical
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QbD IMPLEMENTATION FOR UPSTREAM PROCESSING: SCALE UP AND PROCESS CONTROL (6th December 2017)

DESCRIPTION:

Biopharmaceutical companies are increasingly adopting a QbD approach to reach the market faster, compare batches more effectively and solve bioprocessing challenges. Having stated this, one of the biggest challenges in bioprocess development is to implement QbD efficiently, quickly and cost-effectively. However, advances in upstream technology will make it easier for these companies to understand the link between their product critical quality attributes (CQAs) and critical process parameters (CPPs). This course will help participants to understand how to reduce upstream processing scale-up risks using QbD-enabling platforms and PAT tools. Participants will gain knowledge on latest upstream innovations that can shorten development timelines with reasonable efforts and reduce costs.

OUTLINE:

- 8:30-9:00: Breakfast
- 9:00-10:00: Scale-up Considerations and Challenges in Bioreactors
(*Dr. Henry Weichert, Sartorius Stedim*)
- 10:00-10:30: QbD and Upstream Process Development (*Prof. Anurag S. Rathore, IITD*)
- 10:30-11:00: Break
- 11:00-12:30: Process Control of Bioreactors (*Prof. James Gomes, IITD*)
- 12:30-13:30: Lunch
- 13:30-14:30: Exercises in Scale-up of Bioreactors (*Dr. Henry Weichert, Sartorius Stedim*)
- Working with the Scale Conversion tool
 - A mAb case study in bioprocess development
- 14:30-15:00: **Case Study 1:** Advanced controls of a bioreactor
(*Prof. James Gomes, IITD*)
- 15:00-15:30: Break
- 15:30-16:30: QbD Implementation (*Dr. Henry Weichert, Sartorius Stedim*)
- Seamless scalability and integration of process data and controls
 - Tools for measuring and controlling Critical Process Parameters (CPPs)
 - Introduction into SCADA-System BioPAT® MFCS/win
- 16:30-17:30: Hands on exercises: Process control software solution
(*Dr. Henry Weichert, Sartorius Stedim*)
- Introduction into SCADA-System BioPAT® MFCS/win
 - BioPAT® MFCS: Batch-Management, Sample-Management, Plots
- 17:30-18:00: Discussion and Wrap-up



Dr. Henry Weichert



Prof. Anurag S. Rathore



Prof. James Gomes

REGULATORY SUBMISSION FOR DRUG APPROVAL IN THE US

(6th December 2017)

DESCRIPTION: Regulatory approval is the desired end point of all development and commercialization activities in the pharmaceutical industry. On an average, a drug takes 12-14 years for development. One of the most important aspects of drug development is the preparation of a comprehensive regulatory submission package that leads to new drug approval. This program would describe the US legal framework including various steps of FDA review and their significance through approval. In addition, salient features of important clinical documents will also be discussed. Important medical affairs topics, such as preparation and use of marketing/promotional materials and publications planning, which are an integral part of drug development will also be discussed. Interactive sessions to hear the issues faced by the participants during their regulatory submissions and during the development of their medical affairs programs have also been planned.

OUTLINE:

- 8.30-9.00: Breakfast
- 9.00-10.30: US Filing - Review and Approval Process
(*Dr. Preeta Tyagi, ASAP Medical Communications Incorporated*)
- 10.30-11.00: Break
- 11.00-11.30: Clinical Regulatory documents – Salient Features
(*Dr. Preeta Tyagi, ASAP Medical Communications Incorporated*)
- 11.30-12.00: Regulatory Requirements in India and Comparison with Other Major Regulatory Agencies (*Prof. Anurag S. Rathore, IITD*)
- 12.00-13.00: Lunch
- 13.00-14.00: Issues Faced during Regulatory Submissions (Interactive)
(*Dr. Preeta Tyagi, ASAP Medical Communications Incorporated*)
- 14.00-15.00: Medical Affairs – Going beyond the Journals (Interactive)
(*Dr. Preeta Tyagi, ASAP Medical Communications Incorporated*)
- 15.00-15.30: Break
- 15.30-17.00: Lessons learned from filings in EU and US
(*Dr. Jyoti Iyer, Biocon*)
- 17.00-17.30: Discussion and Wrap-up



Dr. Preeta Tyagi



Prof. Anurag S. Rathore



Dr. Jyoti Iyer



ELECTRON MICROSCOPY FOR ANALYTICAL CHARACTERIZATION OF BIOTHERAPEUTICS (6th December 2017)

DESCRIPTION:

Rapid advances in cryoelectron microscopy have revolutionized the field of protein structure determination over the last three years. Key technical developments such as direct electron detectors, phase plates and in-column filters, in conjunction with microscopes with accelerating voltage of 300 KV, has made it possible to routinely solve structures of proteins of size 100 - 150 KDa, at resolutions 2 – 3 Å. This is a huge improvement over predominant structure determination techniques such as X-ray crystallography and NMR, which require large amounts of starting material and several years to generate a detailed 3D structure. It is hoped that cryoelectron microscopy can now be utilized to solve 3D structures of therapeutic proteins, which will generate a plethora of information regarding secondary and tertiary structures, oligomerization status, sequence or structure specific alterations, and even allow direct structure comparison between biotherapeutic formulations. At this point, it requires more than 10 different techniques to obtain a similar level of information, which can be superseded by the utilization of this high-value, analytical technique.

OUTLINE:

- 8.30-9.00: Breakfast
- 9.00-10.00: Introduction to electron microscopy
(*Dr. Manidipa Banerjee, IITD*)
- 10.00-10.45: Introduction to Cryoelectron microscopy, its application in structural Biology and cellular Biology (*Dr. Max Maletta, Thermo Fisher Scientific*)
- 10.45-11.00: Break
- 11.00-11.45: What's new in the SPA workflow-Introducing the new Krios G3i and Glacios Cryo EM. Their significance for pharmaceutical applications
(*Dr. Marc M.H. Storms, Thermo Fisher Scientific, Netherlands*)
- 11.45-12.30: Application of Cryo Transmission Electron Microscopy in determination of 3D structures of protein macromolecules.(Insight for the application in the field of Pharma) (*Dr. Anindito Sen, ICON, Analytical, India*)
- 12.30-13.30: Lunch
- 13.30-14.30: Introduction to the microscope and accessory equipment.
(*Dr. Max Maletta, Thermo Fisher Scientific and Dr. Riti Rawat, IITD*)
- 14.30-16.00: Hands-on training for freezing grids (in 2 groups of 6)
(*Dr. Max Maletta, Thermo Fisher Scientific and Dr. Riti Rawat, IITD*)
- 16.00- 16:30: Break
- 16:30- 17:00: Workflow of cryo electron microscopy and data collection
(*Ms. Kimi Azad, IITD*)
- 17.00-17.30: Workflow of data processing and 3D reconstruction
(*Dr. Mohit Kumar, IITD*)
- 17:30-18:00 Discussion and Wrap-up



Dr. Manidipa Banerjee



Dr. Max Maletta



Dr. Marc M. H. Storms



Dr. Anindito Sen



ANALYTICAL CHARACTERIZATION OF BIOSIMILARS: CONCEPTS AND CASE STUDIES (6th and 7th December, 2017)

DESCRIPTION:

Analytical characterization is the backbone of establishing comparability, arguably the most critical step in development and commercialization of biosimilars. Major advancements have occurred in the past few years with respect to both development of novel, high resolution analytical tools as well as of novel approaches. In this course, novel technologies that can facilitate analytical characterization will be presented together with case studies that highlight novel approaches towards characterization.

OUTLINE:

Day 1:

- 8.30-9.00: Breakfast
- 9.00-9.30: Introduction to biopharmaceutical analysis
(*Prof. Anurag S. Rathore, IITD*)
- 9.30-10.30: Regulatory expectations for analytical characterization
(*Dr. Jyoti Iyer, Biocon*)
- 10.30-10.45: Break
- 10.45-11.45: Utilizing Workflow Solutions for analysis of Biopharmaceutical from Discovery to Manufacture
(*Dr. Donna Potts, Agilent Technologies, EMEA North*)
- 11.45-12.30: Challenges in intact protein & peptide mapping analysis
(*Dr. Ashish Pargaonkar, Agilent*)
- 12.30-13.30: Lunch
- 13.30-14.15: Pitfalls in peptide mapping of Biopharmaceuticals.
(*Mr. Saurabh Nagpal, Agilent*)
- 14.15-14.45: Challenges in analysis of post translational modifications and host cell proteins (*Dr. Ashish Pargaonkar, Agilent*)
- 14.45-15.15: Break
- 15.15-16.15: Validation of analytical methods
(*Prof. E. K. Lee, Hanyang University, Korea*)
- 16.15-16.45: **Case Study 1:** Analytical comparability of Rituximab biosimilars
(*Ms. Neh Nupur, IITD*)
- 16.45-17.15: **Case Study 2:** Role of biological assays in establishing analytical comparability (*Dr. Rozaleen Dash, IITD*)
- 17.15-18.00: Discussion and Wrap-up



Prof. Anurag S. Rathore



Dr. Jyoti Iyer



Dr. Donna Potts



Mr. Saurabh Nagpal



Dr. Ashish Pargaonkar



Prof. E. K. Lee



Day 2:

8.30-9.00: Breakfast

9.00-10.30: Alternative Approaches for Enhancing your Bioseparations

(Dr. Donna Potts, Agilent Technologies , EMEA North)

10.30-11.00: Break

11.00-11.30: Use of molecular modeling in identifying CQA of biotherapeutic

(Dr. Gaurav Goel, IITD)

11.30-12.00: TEM for analysis of biotherapeutic molecules

(Dr. Manidipa Banerjee, IITD)

12.00-13.00: Challenges in analysis of CQA of biotherapeutic products.

(Dr. Debdip Ghosh , Agilent)

13.00-14.00: Lunch

14.00-15.00: Recent approaches in risk assessment by two – dimensional chromatography *(Ms. Paramjeet Khandpur, Agilent)*

15.00-15.30: Understanding dynamics & solutions of leachables and extractables in bioprocess *(Dr. Syed S. Lateef, Agilent)*

15.30-16.00: Break

16.00-16.30: **Case Study 3:** ITC as an analytical tool for analysis of stability of biotherapeutic molecules *(Dr. Sudip Pattanayek, IITD)*

16.30-17.00: **Case Study 4:** Relating charge variants to glycosylation *(Ms. Neh Nupur, IITD)*

17.00-17.30: **Case Study 5:** Role of charge variants in mAb safety and efficacy *(Mr. Sumit Kumar Singh, IITD)*

17.30-18.00: Discussion and Wrap-up



Dr. Manidipa Banerjee



Dr. Gaurav Goel



Dr. Debdip Ghosh



Dr. Sudip Pattanayek



Dr. Syed S. Lateef



Ms. Paramjeet Khandpur



MULTIVARIATE DATA ANALYSIS FOR BIOPROCESSING DATA: CONCEPTS AND CASE STUDIES (7th December, 2017)

DESCRIPTION:

Biopharma and biotech manufacturing today involves larger and larger masses of data. Correct management of these data can give us valuable insights to process development as well as production, help us understand the progress of a batch and also point us in the right direction to troubleshoot. By applying state-of-the art data analysis technologies in the biopharma production the time for fault detection and diagnosis in production can be significantly reduced. In one recent example, a company identified the cause of a cell culture problem about a month earlier than it otherwise might have. For that biologic product, making the fix early and not losing that month saved \$2.4 million. The course will present fundamental theory and practice of Multivariate Data Analysis (MVDA) within the framework of PAT to improve quality and throughput, as well as hands-on exercises on how MVDA should be used in process development and production.

OUTLINE:

8.30-9.00: Breakfast

9.00-10.30: Introduction to MVDA (*Dr. David Wang, Sartorius Stedim*)
Principal Component Analysis (PCA)

- Explanation
- Score plot & Loading plot
- Diagnosis of observations, variables and model

10.30-10.45: Break

10.45-11.30: Role of MVDA in Biopharmaceutical Development
(*Prof. Anurag S. Rathore, IITD*)

11.30-12.30: Hands on exercises (*Dr. David Wang, Sartorius Stedim*)

- Main Steps of data analysis with SIMCA
- **Case study:** European foods pattern
- **Case study:** Raw materials characterization

12.30-13.15: Lunch

13.15-13.45: **Case Study:** Analysis of cell culture data (*Sumit Singh, IITD*)

13.45-15.00: Partial least squares (PLS) and orthogonal partial least squares (OPLS)
(*Dr. David Wang, Sartorius Stedim*)

- **Case study:** Developing Calibration Model in Spectroscopy

15.00-15.30: Break

15.30-17.00: How to build batch models (*Dr. David Wang, Sartorius Stedim*)

- Batch evolution model & batch level model
- **Case study:** Modelling Baker's Yeast Fermentation for Process Monitoring

17.00-17.30: **Case Study:** Analysis of manufacturing data (*Vishwanath Hebhi, IITD*)

17.30-18.00: Discussion and Wrap-up



Dr. David Wang



Prof. Anurag S. Rathore



CONTINUOUS PROCESSING FOR PRODUCTION OF BIOPHARMACEUTICALS: CONCEPTS AND CASE STUDIES

(7TH DECEMBER, 2017)

DESCRIPTION:

The merits of continuous processing over batch processing are well known in the manufacturing industry. Continuous operation results in shorter process times due to omission of hold steps, higher productivity due to reduced shut down costs and lowers labor requirement. Over the past decade, there has been an increasing interest in continuous processing within the bioprocessing community, specifically those involved in production of bio-therapeutics. This course will address the topic of continuous processing with a focus on production of biotech therapeutics. Basic concepts that provide a foundation for this exercise will be presented together with a few case studies that demonstrate process integration.

OUTLINE:

- 8.30-9.00: Breakfast
- 9.00-9.30: Continuous Processing (*Prof. Anurag S. Rathore, IITD*)
- 9.30-10.30: An Update on Significant Technology Advances Enabling Integrated Continuous Bioprocessing. (*Dr. Rick Morris, Pall Corporation*)
- 10.30-11.00: Break
- 11.00-12.00: Enabling Technologies: Multicolumn chromatography & Case Studies (*Dr. Masilamani, Pall Corporation*)
- 12.00-12.45: Enabling Technologies: Continuous clarification & Case studies (*Mr. Mridul Bathula, Pall Corporation*)
- 12.45-13.30: Lunch
- 13.30-14.15: Enabling Technologies: Single pass TFF & case study
(*Mr. Venkat Ramana, Pall Corporation*)
- 14.15-14.45: PAT in Continuous Processing (*Mr. Vishwanath Hebhi, IITD*)
- 14.45-15.15: **Case Study 1:** Use of continuous flow inverted reactor for continuous Protein refolding and protein precipitation. (*Mr. Nikhil Kateja, IITD*)
- 15.15-15.45: Break
- 15.45-16.15: Case studies in Continuous downstream processing
(*Mr. Nikhil Kateja, IITD*)
- 16.15- 17.30: Demo on Continuous Technologies (*Team from Pall*)
- 17.30 – 18.00: Discussion and Wrap-up



Prof. Anurag S. Rathore



Dr. Masilamani



Dr. Rick Morris



Mr. Venkat Ramana



Mr. Mridul Bathula



HANDS ON COURSE IN DOWNSTREAM PROCESSING

(7th and 8th December, 2017)

DESCRIPTION:

Protein therapeutics, as a class of products, are required to meet high quality standards as per the regulations. When a therapeutic product is expressed *via* microbial fermentation or mammalian cell culture, it coexists in the bioreactor together with a myriad of species including product related variants, product related impurities, process related impurities, and host cell related impurities. This course will aim to provide a hands on tutorial to the attendees on the various downstream processing unit operations.

OUTLINE:

DAY 1:

- 8.30-9.00: Breakfast
- 9.00-10.30: Downstream Processing (*Prof. E. K. Lee, Hanyang University, Korea*)
- 10.30-11.00: Break
- 11.00-13.00: Hands on Training (4 groups in parallel): High throughput process development, DOE based process development, Buffer dilution, Filtration (*Mr. Dinesh Krishnan, GE Healthcare*)
- 13.00-14.00: Lunch
- 14.00-15.00: Process Hierarchy and Integration
(*Prof. E. K. Lee, Hanyang University, Korea*)
- 15.00-15.30: Break
- 15.30-17.30: Hands on Training (4 groups in parallel) (*Mr. Ashok G, GE Healthcare*)
- 17.30-18.00: Discussion and Wrap-up



Prof. E. K. Lee



Mr. Dinesh Krishnan



Mr. Ashok G

DAY 2:

- 8.30-9.00: Breakfast
- 9.00-10.30: Introduction to Filtration (*Prof. Anupam Shukla, IITD*)
- 10.30-11.00: Break
- 11.00-13.00: Hands on Training (4 groups in parallel)
(*Mr. Dinesh Krishnan, GE Healthcare*)
- 13.00-14.00: Lunch
- 14.00-15.00: Introduction of Process Chromatography (*Prof. Anurag S. Rathore, IITD*)
- 15.00-15.30: Break
- 15.30-17.30: Hands on Training (4 groups in parallel) (*Mr. Ashok G, GE Healthcare*)
- 17.30-18.00: Discussion and Wrap-up



Prof. Anupam Shukla



Prof. Anurag S. Rathore



DESCRIPTION:

Quality by Design (QbD) and Design Space estimation, initiated by ICH, are moving to the phase of establishing standardized procedures and definitions within biopharmaceutical companies. The challenge is to extract a mathematically useful description that matches the flexibility and risk control described in the ICH Q8 guidelines. Design of Experiments (DOE) is required for a good and reliable Design Space description. However, most of the set-points derived from DOE are overoptimistic and do not consider risk of failure. A design space can be an irregular multidimensional region or a strict Proven Acceptable Range (PAR) for Critical Process Parameters (CPP's). This course will present the fundamentals of DOE and illustrate how to derive a multidimensional Design Space. Hands-on exercise is an integrated part of the course which let you experience how DOE and Design space estimation are carried out.

OUTLINE:

8.30-9.00: Breakfast

9.00-10.15: Introduction to DOE (*Dr. David Wang, Sartorius Stedim*)

10.15-10.30: Break

10.30-11.00: Role of DOE in Biopharmaceutical Development
(*Prof. Anurag S. Rathore, IITD*)

11.00-12.30: DOE for screening and Hands-on exercises
(*Dr. David Wang, Sartorius Stedim*)

12.30-13.00: **Case Study 1:** DOE based Screening of Media Components
(*Dr. Deepak Kumar, IITD*)

13.00-13.45: Lunch

13.45-14.45: **Case Study 2:** Analysis and validation of statistical models during process characterization (*Mr. Solomon Alva, Biocon*)

14.45-16.15: DOE for optimization and Hands-on exercises
(*Dr. David Wang, Sartorius Stedim*)

16.15-16.30: Break

16.30-17.30: Find robust set-point for design space using DOE and Monte Carlo simulations and Hands-on exercises (*Dr. David Wang, Sartorius Stedim*)

17.30-18.00: Discussion and Wrap-up



Dr. David Wang



Prof. Anurag S. Rathore



Mr. Solomon Alva



VIRAL SAFETY FOR PROCESSING OF BIOPHARMACEUTICALS (8th December 2017)



DESCRIPTION:

Viral clearance studies are required for pharmaceuticals derived from human and/or animal sources, such as recombinant proteins produced in eukaryotic cell lines, human blood products and vaccines, and even for some critical class III medical devices. They are an integral part of drug development and are used to demonstrate that steps in the manufacturing process are capable of inactivation or removal of potential viral contaminants. This one-day course will focus on essentials of virus clearance study, regulatory framework & expectations for virus safety and know-how of virus filtration technology.

OUTLINE:

- 8.30-9.00: Breakfast
- 9.00-10.00: Virus clearance strategies for biological products
(*Dr. Horst Ruppach, Charles River, Germany*)
- 10.00-11.00: Basics of Viral Filtration (*Mr. Zarir Chowdhury, Asahi KASEI, Japan*)
- How does Virus Filtration work
 - Understanding Robustness of Virus Removal Filter
- 11.00-11.30: Break
- 11.30 – 12.00: **Case Study 1:** Modeling of viral filtration (*Prof. Anupam Shukla, IITD*)
- 12.00-13.00: Regulatory requirements and future trends for virus safety
(*Dr. Horst Ruppach, Charles River, Germany*)
- 13.00-14.00: Lunch
- 14.00-15.00: Scale-Up of Virus Filtration (*Mr. Ravinder Dabas, Asahi KASEI, India*)
- How to do Scale-Up
 - Issues during Scale-Up
 - Validation of Virus Filtration
- 15.00-15.30: Asahi Gold Particle (AGP) Filtration Demonstration
- 15.30-16.00: Break
- 16.00-17.00: Establishing design space for viral filtration –best practices and lessons learned (*Mr. Solomon Alva, Biocon*)
- 17.00-17.30: Discussion and Wrap-up



Dr. Horst Ruppach



Mr. Zarir Chowdhury



Mr. Ravinder Dabas



Prof. Anupam Shukla



Mr. Solomon Alva



SURFACE PLASMON RESONANCE TECHNOLOGY: THEORY AND PRACTICE (8th December, 2017)

DESCRIPTION:

Surface Plasmon Resonance Technology (SPR) is a label free and real time technique for detection of biomolecular interactions. It generates high quality data on interactions between proteins and other molecules. These data give useful insights into molecular function and disease mechanisms and play a key role in taking critical decisions needed for efficient development and production of biotherapeutics. This course will aim to provide classroom and hands-on tutorial to attendees on various aspects like principles of the technology, assay development techniques, basic kinetic analysis, hands-on experience on setting up Biacore assay followed by data analysis and interpretation using software.

OUTLINE:

- 8.30-9.00: Breakfast
- 9.00-10.00: Basic Introduction to Biacore
(*Dr. Likhesh Sharma, GE Healthcare*)
- 10.00-11.00: Assay designing in Biacore
(*Dr. Uma Sinha Datta, GE Healthcare*)
- 11.00-11.30: Break
- 11.30-12.00: Role of SPR in Biopharmaceutical Development
(*Prof. Anurag S. Rathore, IITD*)
- 12.00-13.00: Basic Kinetics using Biacore
(*Dr. Abhishek Kaushik, GE Healthcare*)
- 13.00-14.00: Lunch
- 14.00-15.00: Immobilization & Kinetic assay set up
(*Dr. Likhesh Sharma & Dr. Abhishek Kaushik, GE Healthcare*)
- 15.00-15.30: **Case Study 1:** Use of SPR for Establishing Comparability of Biosimilars
(*Dr. Rozaleen Dash, IITD*)
- 15.30-16.00: Break
- 16.00-17.00: Analysis Software Demonstration
(*Dr. Shubhendu Seal, GE Healthcare*)
- 17.00-17.30: **Case Study 2:** Comparison of SPR to Other Approaches
(*Dr. Rozaleen Dash, IITD*)
- 17.30-18.00: Discussion and Wrap-up



Dr. Likhesh Sharma



Dr. Uma Sinha Datta



Prof. Anurag S. Rathore



Dr. Shubhendu Seal



Dr. Abhishek Kaushik



REGISTRATION DETAILS & FORM

No. of Days	Indian Academic	Indian Industry Participant	Foreign Academic	Foreign Industry Participant
One Day or Two Days	5000 INR+ 18% GST	7000 INR+ 18% GST	100 USD +18% GST	200 USD + 18% GST
Three Days	13000 INR+ 18% GST	18000 INR + 18% GST	250 USD +18% GST	500 USD+18% GST

Discounts: Additional discount (10%) for those who register before 15th November 2017. 30% discount will be given to BIRAC incubates (both for Indian academia and Indian industry).

Note : These rates are not applicable for DOE & MVDA courses.

For DOE and MVDA Courses:

No. of days	Indian Academic	Indian Industry Participant	Foreign Academic	Foreign Industry participant
One Day	8000 INR+ 18% GST	10000 INR + 18% GST	100 USD +18% GST	200 USD +18% GST

Discounts: Additional discount (10%) available before 15th November 2017. 30% discount will be given to BIRAC incubates (both for Indian academia and Indian industry).

LODGING AND BOARDING: Accommodation can be booked in nearby hotels directly. For information please see **Annexure A . (Please refer page no.16 of the Brochure)**

MODE OF PAYMENT FOR REGISTRATION: The registration fee should be paid only by NEFT transfer to the following account details mentioned below. The scanned registration form along with registration fee receipt should be sent by e-mail to Course Coordinator Prof. Anurag S. Rathore (IIT Delhi), at coe.biopharma.course@gmail.com

Register before 15th November 2017 to avail of discounted fee.

Beneficiary Name: Foundation for Innovation and Technology

Bank Name: State Bank of India

Account #:10773571968

Branch Name: SBI, IIT Delhi Hauz Khas, New Delhi-110016

IFS Code: SBIN0001077

MICR: 110002156

Swift No. SBI NIN BB 547

Bank Code: 1077



REGISTRATION FORM

Name: Prof./Dr./Mr./Ms:

Designation:

Department:

University/Institute:

Address:

.....

.....

Email ID:

Mobile/Phone:.....

Name of the Course/ Courses opted for:

.....

Transaction ID (NEFT) :

Place :

Date :

Signature of the Applicant:

For further details, please contact coe.biopharma.course@gmail.com



ANNEXURE -A

DETAILS OF THE HOTELS NEAR TO IIT DELHI

Hotel Name	Distance from IITD	Room Type	Rate including GST (in Rs.)	Address	Contact Details
The Ashtan Sarovar Portico	3.5 Km	Single	5782	C-2, Green park Extension, New Delhi - 110016	Website : www.ashtanhotels.com Phone : 9650911667 , 011-46833333 Email : gppo@sarovarhotels.com
		Double	6490		
The JRD Luxury Boutique	3.8 Km	Single	4720	B-7/113A, Ch. Harsukh Marg, Safdarjung Enclave, New Delhi – 110029	Website: www.jrdhotels.com , Phone: 011-4090700 (100 line) , 9958799551 Email: jrdhotel@gmail.com
		Double	5310		
Hotel Park Residency	2.8 Km	Single	3000	D-1, Green Park, New Delhi- 110016	Website: www.theparkresidency.com Phone: 011-40670010 Email: info@parkresidency.com
		Double	4000		