Executive Hands-on Training Program for NMR Data Analysis and Interpretation of Peptide Structure
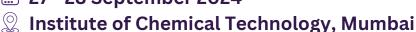
📅 **27 - 28 September 2024**

📍 **Institute of Chemical Technology, Mumbai**

Hands-on training program focusing on data processing, analysis, assigning, and interpretation of **high resolution nuclear magnetic resonance (NMR) spectroscopy data** for understanding the peptide higher order structure, characterizing aggregation and impurities in peptide drug products. The analyses can be employed for establishing sameness between peptide test products and reference listed drugs.

Training Outcomes

At the end of the training program, the trainees would be able to:

- Understand **NMR data interpretation** & **demonstration of biosimilarity** between peptide drug product & RLD.
- **Identify & characterize different impurities** in peptide drug substance or drug product using NMR Spectroscopy.
- **Perform sequence-specific peak assignments** to obtain a detailed **understanding of peptide HOS** and impurities in drug substances & drug products.

Software & Techniques

- NMR data processing of **1D, 2D, and 2D-DOSY spectra**
- **Principal Component Analysis (PCA)** for demonstrating similarity between drug product & RLD
- **Sequence specific peak assignments** for detailed understanding HoS and impurities

ELIGIBILITY

Industry personnel working in analytical development of peptide injectables.

Registration Fees

INR 50,000/-

(Food & Accommodation included)

Become an expert with intensive training. 15 seats only! Register Now!

CLICK HERE TO REGISTER

(or Scan the QR code)

Uncover limitless possibilities for your research with the Biologics Workshop and accelerate your research journey with us!
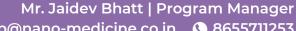
IN ASSOCIATION WITH

BRUKER & **NOVA**

PROGRAMME SCHEDULE

27 September 2024	Friday	
08:00 - 9:00	Registration and Breakfast
9:00 - 9:45	Inaugural session and visit to the NMR Instrument | NMR Facility
10:00 - 10:25	**Talk Session: Dr. Aswani Kancherla, ICT, Mumbai** Solution NMR Methods for Higher Order Structure Assessment of Peptide Therapeutics | IPC
10:25 - 10:50	**Talk Session: Ms. Mamata Joshi, TIFR, Mumbai** Practical aspects of NMR data acquisition for therapeutic peptides | IPC
11:00 - 11:30	**Talk Session: Bruker** Latest developments in NMR hardware for analysis of biological drug products | IPC
11:30 - 13:00	**Hands-on session: Bruker** NMR data processing of 1D and 2D spectra | TopSpin HoT | IPC
13:00 - 13:45	Lunch
14:00 - 14:45	**Hands-on session: Bruker** Processing of 2D-DOSY data | TopSpin HoT | IPC
15:00 - 17:30	**Hands-on session: MestreNova** HoT | Chemometric analysis of NMR spectra using BioHOS plug-in | IPC
17:30 - 18:00	**Doubt solving session | IPC**

28 September 2024	Saturday	
08:00 - 9:00	Breakfast
9:00 - 10:30	**Hands-on session** Assignment | Module 1 | Setting up CcpNmr analysis software project for NMR spectra visualization and assignment | IPC
10:45 - 12:30	**Hands-on session** Assignment | Module 2 | Sequence-specific peak assignment for peptides using 2D-COSY, TOCSY, NOESY/ROESY | IPC
12:45 - 13:45	Lunch
14:00 - 16:00	**Hands-on session** Assignment | Module 3 | Case study on parallel and anti-parallel dimer impurities using NOESY assignments | IPC
16:00 - 16:30	**Doubt-solving and Feedback session | IPC**
16:30	Certificate distribution / End of Workshop