## **Training Programme for LC-MS based Proteomics**

CCMB proposes a training course in LC-MS based Proteomics designed for beginners as well as experienced researchers/technicians who want to expand their knowledge and understanding on LC-MS based proteomics. We cover the theory and practical aspects of mass spectrometry based proteomics to the extent necessary to understand operation of instruments to make the attendees confident to use LC/MS on a daily basis. Researchers, practitioners, technicians, and others who are currently using LC, LC/MS, or plan to use LC/MS in the future, and those dealing with data produced by LC/MS are encouraged to apply.

Duration: 2 weeksNo. of seats: 12 No.s

Minimum Education : M.Sc., B.Tech., M.V.Sc., MBBS, M.Pharma,

Qualifications

Age group : 21-45 years (relaxation for SC/ST/OBC as per GOI

rules

Date of Commencement : 3<sup>rd</sup> October 2018

Venue of the Course : CSIR-CCMB, Main campus

Course Fee : Rs. 25,000/- for basic course (self/sponsored)

Residential/non-residential : Residential (accommodation provided)

Sponsorship: Established public/private sectors are welcomed to sponsor candidates of their interest.

## **Training Curriculum for Basic Course:**

- Basic operational fundamentals of liquid chromatography, mass spectrometry, and LC/MS interface
- •An overview of LC/MS applications in pharmaceutical, chemical, and biotechnology industries plus information on forensic and toxicological applications
- •Introduction to mass spectrometry instrumentation; Introduction to data analysis
- •Qualitative and quantitative aspects of LC-MS: from simple molecular weight determination to large scale proteome analysis: Sample preparation of LC-MS, SDS PAGE, staining/distaining, processing of gel pieces towards in-gel trypsin digestion, extraction of peptides, desalting, LC-MS run & data analysis of MS data
- Discussion and trouble-shooting

## **Salient Features of the Training:**

- 30% theory and 70% practical sessions are per the course curriculum.
- Hand-out information on teaching modules
- Tutorials (personal attention)
- Lectures are assisted with multimedia aids.
- Case studies
- Group discussions
- Central facility visits within the laboratory
- Assessments –theory & practicals
- A certificate will be issued to the successful candidates