

## Hands on Training on Basics of Mass Spectroscopy based Metabolomics

**C-CAMP**  
Centre for Cellular and Molecular Platforms

**INTRODUCING  
METABOLOMICS  
BY MASS SPECTROMETRY**  
**A COMPREHENSIVE COURSE**

**Venue:**  
C-CAMP, Bangalore

**Dates:**  
27<sup>th</sup> to 31<sup>st</sup> January, 2020

**Last Date For Applying:**  
January 15<sup>th</sup> 2020

The course will include an overview of liquid chromatography, gas chromatography & mass spectrometry (LC-MS) and their applications in the field of Metabolomics (small molecules). The course will also provide hands-on training and introduce data analysis routines for targeted and untargeted metabolomics.

For Application, Write to 'metab2019@ccamp.res.in' with the subject line "Metabolomics course January 2020"  
For more information, visit: [www.ccamp.res.in/technology-training](http://www.ccamp.res.in/technology-training)

The Centre for Cellular and Molecular Platforms (C-CAMP), Bengaluru is an Department of Biotechnology, Ministry of Science and Technology, Govt. of India, initiative that acts as an enabler of cutting edge life science research and innovation. The C-CAMP member of the Bangalore Life Sciences Cluster (BLiSC) and facilitate bioscience research and entrepreneurship by providing research, development, training and services in state-of-the-art technology platforms. The institute has created and fostered an entrepreneur-friendly culture in country. It offers seed funding schemes for start ups, entrepreneur mentorship program and bio-incubation facility for upcoming entrepreneurs.

The C-CAMP has given a call for a **'Basic Workshop in MS-based Metabolomics'** on 27-31 January, 2020 at C-CAMP, GKVK Campus, Bellary Rd, Bangalore (<http://www.ccamp.res.in/basic-workshop-ms-based-metabolomics>).

The metabolomics is a study of biological molecules with masses typically less than 1500Da. The workshop will focus on training researchers in basic principles of mass spectrometry as well as liquid and gas chromatography and their application to Metabolomics workflows. The

comprehensive course will provide an insight into the two main approaches, namely targeted and untargeted metabolomics.

**The following topics will be covered:**

- Introduction to basic chromatography and mass spectrometry techniques,
- Quantitative metabolomics using stable-isotope dilution,
- Metabolite Profiling and comparative metabolomics using high-resolution mass spectrometry,
- Hands-on training on sample preparation for LC-MS, method development and data acquisition from LC-MS,
- Data Analysis for quantitative and profiling workflows,
- Introduction to fragmentation library search for compound identification, multivariate analysis, and headspace analysis in GC-MS

**The deadline for application is 15th January 2020.**

Dr. Bilqeesa Bhat  
Project Scientist,  
[bhat.bilqeesa3000@gmail.com](mailto:bhat.bilqeesa3000@gmail.com)