



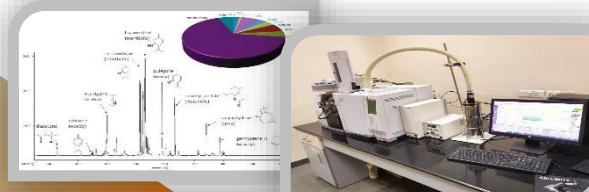
# BITS Pilani

Pilani Campus



## Pre-screening Workshop on Gas Chromatography-Mass Spectrometry (GC-MS)-based Metabolomics

Organized by: Central Instrumentation Facility, BITS Pilani, Pilani Campus & SPARC, BITS Pilani, Goa Campus



 28<sup>th</sup> -30<sup>th</sup> August, 2024

 BITS Pilani, Pilani Campus

### About the training program

The proposed training program aims to enhance research skills for modern researchers through a workshop organized by the Central Instrumentation Facility at BITS Pilani, Pilani campus, and SPARC at BITS Pilani, Goa Campus. This workshop will provide participants with a comprehensive understanding of GC-MS (Gas Chromatography-Mass Spectrometry) technology and its application in metabolomics, a powerful analytical technique for studying chemical processes involving metabolites. **The training will cover two primary analysis strategies: untargeted metabolites and targeted metabolites**, aligned with the program's objectives. Over three days, attendees will gain in-depth knowledge of the followings:

- **Fundamentals of Gas Chromatography-Mass Spectrometry**
- **Details on instrument hardware**
- **Various GC-MS analysis modes**
- **Basics of GC-MS solutions software**
- **Sample preparation or extraction of metabolites**
- **Method development for metabolites analysis**
- **Data acquisition**
- **Data interpretation using the NIST library**

Participants will also have the opportunity to engage with experts in the field. The workshop aims to equip researchers, students, and professionals with the necessary skills to enhance their research capabilities and contribute to advancements in metabolomics.

### About CIF, BITS Pilani

The Central Instrumentation Facility (CIF) houses multiple high-end analytical instruments to facilitate research and teaching. The facility is mainly used for research and training purposes. The facility has two components: Sophisticated Instrument Facility (SIF) and Central Analytical Laboratory (CAL), which houses high-end instruments used for research purposes in the field of Science and Engineering. The SIF provides services to both internal and external users on a payment basis. The details of instruments housed under SIF can be accessed at: <https://www.bits-pilani.ac.in/pilani/central-instrumentation-facility/> Services are booked online by both internal and external users.

### About SPARC, BITS Pilani, Goa Campus

The **Scheme for Promotion of Academic and Research Collaboration (SPARC)**, an initiative of Ministry of Human Resource Development, Government of India, aims at improving the research ecosystem of India's higher educational institutions by facilitating academic and research collaborations between top ranked Indian Institutions and globally ranked Foreign Institutions, through Joint Research Projects involving mobility of students and faculty. This scheme is expected to have a major impact in providing the best international expertise to address major national problems, expose Indian academicians to the best collaborators abroad, enable international faculty to stay in India for a longer duration, provide Indian students an opportunity to work in the world class laboratories, to develop strong bilateral relationships in research, and improve the international ranking of Indian Institutions.

### Registration

**Only a limited number of seats are available. Registration will be closed after the available number is reached.**

**Registration Charges:** Rs. 2500/- (Registration charges include a registration kit, lunch, breakfast and dinner)

**Registration link:** <https://forms.gle/zY8rL2qM1BWJ1kKx8>

**Last date of registration:** 15<sup>th</sup> August, 2024

**Accommodation:** For accommodation inside campus, please access <https://forms.gle/YJd229R48rmq16cc6>

For any further query, please write to: [cifservices@pilani.bits-pilani.ac.in](mailto:cifservices@pilani.bits-pilani.ac.in)

### Organizing committee

**Convener:** Prof. Prabhat Nath Jha & Prof. Rajesh Mehrotra

**Co-convener:** Prof. Sandhya Mehrotra

**Organizing committee:** Prof. S. Murugesan, Prof. Surojit Pande & Prof. Srinivas Appari

**Organizing team:** Mr. Sandip Ruidas, Mr. Abhishek Kr. Gautam, Mr. Suman Kumar, Ms. Kusum Saini, Ms. Harshita Maheswari, Mr. Anil Sarwan, Mr. Rohit Saini