

Analysis of Biological Samples by GC-MS/MS

MKU-RUSA Supported Skill Workshop, Mar 4 - 7, 2026

Dept. of Genetics, School of Biological Sciences, MKU

This MKU-RUSA Supported Skill workshop is designed as a preparative training for the Biologists, to get the skills of designing GC-MS/MS based experiments, and applications including metabolomics, environmental analysis, nutritional analysis, impact of molecules and drugs on the cells and large scale metabolomics in biomedical conditions. The focus also includes the associated data analysis and interpretation and the basics of instrumentation. MKU-School of Biological Sciences has Shimadzu's GC-MS/MS TQ8040 NX.

Register Before 26th Feb 2026: Registration Link:
<https://forms.gle/UGbZ513eB7Gk6BSM9>

- Introduction to GC-MS - Principles of Mass Spectrometry - Injection & Ionization Techniques
- Instrumentation - Pre-Acquisition – Column Conditioning, Tuning & Calibration - Selection of Column - Maintenance & Trouble shooting
- GC-MS Analysis of Metabolomics
- Sample Preparation & Analysis of Metabolites from Plant extracts – Cell Lines – Tissues – Drugs – Drug Formulations – Pottery – Food Stuffs.
- Qualitative and Quantitative Analysis - Library Search & Report Generation

Course Coordinator: Prof.G.Kumaresan
 Dept. of Genetics, School of Biological Sciences,
 Madurai Kamaraj University
kumaresan@mkuniversity.ac.in

*** Students from Govt. colleges & Institutions are encouraged to apply.**

