**Hands on Training in Targeted Metabolomics: Applications of “LC-MS & HPLC” in Plant Metabolomics at TNAU**

Centre of Excellence in Biotechnology organised ‘**Hands on Training in Targeted Metabolomics: Applications of “LC-MS & HPLC” in Plant Metabolomics** on **November 28th& 29th, 2023’** at CPMB&B, TNAU, Coimbatore. The participants include research scholars and faculties from various colleges and research institutes from all over India attended this training programme.

In the inaugural function, Dr. E. Kokila devi, Professor & Head, Department of Plant Biotechnology, CPMB&B, TNAU welcomed the gathering and explained about the importance of advanced tools for plant metabolomics and the facility in CoEB can be availed by the researchers and students from TNAU and other institutes.

Dr. N. Senthil, Director (CPMB&B), TNAU in his inaugural address highlighted the importance of metabolomic and proteomics analysis in determining the novel compounds from plants and microbes. CPMB&B has well established bioinformatics platform for data analysis and other genomics work. These facilities can be effectively used by the students/ industries / start-ups he added.

Dr. P. Irene Vethamoni, Dean (Horticulture), Horticultural College and Research Institute, TNAU in her presidential address explained about applications of metabolomic analysis in horticultural crops. The important compounds like flavonoids, terpenoids, quercetin, flavanol in spices can be quantified by using GCMS/LCMS analysis.

Dr. S. Mohan Kumar, Professor and Project Director (CoEB) proposed the vote of thanks. He explained about the importance of proteomics and the establishment of metabolomic and proteomic facility in TNAU. The facility available in the Centre of excellence in Biotechnology can be used by the entrepreneurs, start-ups, Students and scholars.

In continuation, Mr. Venkatesh, Application support, Spinco Biotech has delivered a lecture on Basics of LC-MS/MS with the theoretical insights on triple quadrupole mass spectrometry and its advancements for Metabolomics characterization, followed by Mr. Saravanan, Field Application Specialist, Spinco Biotech on the Basics of HPLC and various methods for quantitative metabolomics. Dr. M. Sudha, Assistant Professor, Dr. A.R. Sakthi, Women scientist, Dr. R. Veeraranjani, PDF explained about the preparation of samples for LCMS analysis.

Later, the trainees were exposed to the hardware of LCMS/MS and data analysis if acquired data. Dr. N. Bharathi and Dr. N. Saranya Assistant professors, Department of Plant molecular Biology and Bioinformatics explained about the docking studies in metabolite analysis and its software used for data analysis.

At the end of training session in Valedictory function, the certificates were distributed to the participants and the training was concluded with the feedback of the participants.