

## Hands on Training on “Instrumentation methods and Phytochemical analysis” 19 - 20 September, 2019

Two days hands on training on Instrumentation methods and phytochemical analysis for students and research scholars was organised by Division of Chemistry and Bioprospecting, IFGTB, Coimbatore on 19<sup>th</sup> & 20<sup>th</sup> September, 2019. During the inaugural session a book on “Instrumentation methods and phytochemical analysis” was released. The book provides latest methodology and protocols of AOAC in easy and simplified manner which will be followed for analysis at laboratory. Although there are number of phytochemical procedures being followed in research and teaching, many of them are not available to students in a concise manner. The protocols are self explanatory and the user can easily follow the steps and do the experiments individually. This training is intended to provide some easy protocols to carry out the basic experiments in phytochemistry in a simple and accurate manner for Undergraduate Engineering, B.Sc., M.Sc., M.Phil, and Research Scholars. Twenty seven students from various academic institutions, Universities and colleges participated in the training.

The training module included various aspects of phytochemical evaluation and chromatographic techniques such as

1. Collection and process of samples; Extraction methods
2. Thin Layer Chromatography (TLC) to fractionate active compounds
3. Characterization and identification of bioactive compounds such as alkaloids, phenols, flavonoids, fatty acids, terpenoids, amino acids, sugars & vitamins using UV –vis spectrophotometer; HPLC (UV, Fluorescent and RID) and GCMSMS
4. Evaluation of bioactive principles for antioxidant, antimicrobial, (bio) pesticidal properties.

