

Techniques of Phytochemical Profiling and Characterization



CSIR Integrated Skill Initiative

Schedule

- Date of commencement- January 6, 2020
- Duration of the course- One month
- No. of seats- 15
- Course Fee- Rs. 10000/- and Rs.15000 for sponsored candidates



CSIR-NIIST

Objectives

- Understand the production of secondary metabolites in plants
- To familiarize with different phytochemicals and their classes.
- Understand the extraction techniques for secondary metabolites
- To familiarise with the isolation and purification techniques for secondary metabolites
- Hands on training on GCMS, Flash column chromatography and HPLC techniques
- Introduction to various biological techniques: Cell culture

Topics to be Covered

- An introduction to basics of phytochemistry with brief account of major classes of secondary metabolites with special reference to medicinal plant
- Training on Data Collection methods, Literature Review, Patent search and reference management in phytochemistry research.
- Hands on training in phytochemistry laboratory on Extraction techniques. Separation and Purification techniques- chromatography TLC, HPLC, HPTLC and GC-MS. And Characterization techniques- LC-MS, ID and 2D NMR experiments and introduction to Cell culture techniques

Job Opportunities

- R & D laboratories working in the area of phytopharmaceuticals
- Quality control laboratories in industries working on herbal drug development
- Ayurvedic and allied industries utilizing medicinal plants

Eligibility

Bachelor of Science

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