

ABOUT CSIO



Central Scientific Instruments Organisation (CSIO), a constituent unit of Council of Scientific & Industrial Research (CSIR), CSIO is a multi-disciplinary organization having well equipped laboratories manned by highly qualified and well trained staff with infrastructural facilities in the areas of Agrionics; Medical Instrumentation and Prosthetic Devices; Optics and Cockpit based Instrumentation; Fiber/Laser Optics based Sensors & Instrumentation; Analytical Instrumentation; Advanced Materials based Transducers etc. Large number of instruments ranging from simple to highly sophisticated ones, have been designed and developed by the Institute and their know-hows have been passed on to the industry for commercial exploitation.

How to Register Online?

The Candidates are required to fill form ([Click Here](#)) or in appended link below

<https://docs.google.com/forms/d/1VZ7kNUOdlzyDDvtAyZXO7-ljtR3RGrKyvy5Lg2le1s/edit>

INTRODUCTION

The course on “Spectroscopic and chromatographic Techniques” is an industry, students and faculty oriented short duration program, but intensive and packed with lectures and demonstrations. The proposed course is handled by faculty members having vast experience in specific areas of spectroscopic and chromatographic techniques. The demonstrations and practical classes will be conducted in the state-of-the-art laboratories of the institute. The participants will be benefitted with this course in understanding and utilizing these techniques effectively at their respective lab, industry, research work. The undergraduate student will have an edge for quality control jobs on having experience with industry specific techniques required for pharmaceutical and food products. The capsule program includes:

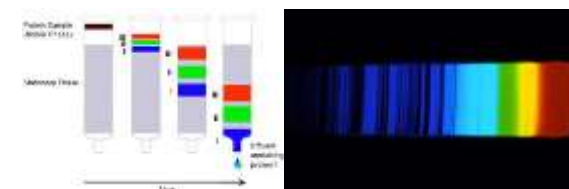
- ✚ Capsule program I: SPECTROMETRIC & SPECTROSCOPIC TECHNIQUES (AAS, UV-Vis, PL, AES, and FT-IR)
- ✚ Capsule program II: CHROMATOGRAPHIC TECHNIQUES (Adsorption (liquid/solid) Chromatographic Separation, HPLC, LC-MS, IC & GC)

IMPORTANT DATES

- ✚ Training Dates: 27th-30th November, 2017
- ✚ Last Date of Registration: November 5, 2017
- ✚ Registration Acceptance: November 10, 2017
- ✚ Registration Fee Payment: November 15, 2017



SHORT TERM HANDS ON TRAINING WORKSHOP ON “Spectroscopic and Chromatographic Techniques”



November 27th-30th, 2017



CSIR-CSIO, Chandigarh

Organized by:
Agrionics Division (V-1)
Central Scientific Instruments Organisation
Sector-30C, 160030

KEY PARTICIPANTS

- ✚ B. Tech (Instrumentation, Chemical Science, Biotechnology)
- ✚ M.Sc. / M. Tech (Instrumentation, Nanotechnology, etc.)
- ✚ PhDs
- ✚ Lab Technicians
- ✚ Industrialist (Pharma, Water, Food, etc.)
- ✚ Young scientist/faculty

TAKE AWAYS

- ✚ A certificate of participation after successful completion of the program.
- ✚ Industry oriented Hands on learning on sophisticated techniques.



Central Scientific Instruments Organisation
Sector-30C, 160030

Registration Fee

- Undergraduate and postgraduate Students (B. Tech/M. Tech/M.Sc./B.Sc.)/Research Scholars):
 - ✚ Single Capsule program: 5,000/participant
 - ✚ Complete program: 10, 000/participant
- Engineers/Personnel from Industries/Scientist/Faculty/ Teachers/Technical Staff:
 - ✚ Single Capsule program: 8,000/participant
 - ✚ Complete program: 12, 000/participant
- Training fee includes Registration kit, Course material, Certificate, hands on session, Working lunch & Session tea.
- Training fee may be paid in the form of NEFT/ DEMAND DRAFT after participation acceptance
- Accommodation on reasonable rate will be available on twin share basis on prior request

Contact Us

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Program Focus

- ✚ Chromatographic separation: Paper Chromatography, LC (TLC & Column)
- ✚ Theory, Practical, Operation and Maintenance of LC-MS, FT-IR and AAS and Auger Electron Spectroscopy (AES) Systems
- ✚ Theory, Practical, Operation and Maintenance of Gas chromatography (GC), Ion Chromatography (IC) and High Performance Liquid Chromatography (HPLC) Techniques.
- ✚ Sample Preparation for LC-MS, FT-IR, AAS, GC, IC and HPLC.
- ✚ Interpretation of AAS and FT-IR data
- ✚ Trouble shooting in AAS, FT-IR, HPLC, GC and LC/MS
- ✚ LC – MS / MS: Applications in Food Analysis.
- ✚ Heavy metals analysis using AAS
- ✚ FT-IR, AAS : Applications in material characterization, liquid and solid
- ✚ GC: Applications in volatile compounds analysis
- ✚ IC: Application in anions/cations analysis in water
- ✚ Maintenance tips for GC, HPLC, FT-IR, LC-MS, IC, PL, and HPLC