



Hands-on Training

Fourier Transform Infrared Spectroscopy

July 1, 2013

IRCBM, COMSATS Institute of Information Technology, Lahore



Theme: Theoretical & Practical Applications of Infrared Spectroscopy (FTIR)

Introduction:

FTIR is a preferred method of infrared spectroscopy for materials analysis. It can be considered as a first hand tool to;

- (i) identify unknown materials
- (ii) analyze quality of a sample
- (iii) evaluate quantitative composition of a sample.

Key Features of Training:

- ❖ Theoretical Information
- ❖ Applications of FTIR
- ❖ Instrumentation Handling
- ❖ Sample Preparation
- ❖ Result Interpretation
- ❖ Biological Sample Testing
- ❖ Spectroscopy Based Publications

Participants will be able to learn both modes of FTIR

- ❖ **Attenuated Total Reflectance (ATR)**
- ❖ **Photo Acoustic Cell (PAC)**

ATR mode has been successfully used for analysis of liquid and semi-liquid materials and is well suited for both qualitative and quantitative applications.

PAC mode is ideal for the analysis of powders, layered polymers, fibers, and samples with varying surface roughness.

Who Should Attend:

- ❖ Graduate & Postgraduate Students
- ❖ Faculty Members & Academicians
- ❖ Researchers
- ❖ Scientific Officers
- ❖ Industry Persons

Advantages of Training:

- ❖ Live demonstrations of FTIR
- ❖ Hands-on training
- ❖ Certificates will be provided
- ❖ Material Identification

FTIR PAC Mode
Exclusively at IRCBM,
CIIT, Lahore

Resource Persons:

Dr. Ihtesham-Ur-Rehman

BSc, MSc. (London), PhD (London)
Reader in Biomedical Materials, The Kroto Research Institute, University of Sheffield, UK.

- ❖ Extensive expertise in instrumentation specially in utilizing IR spectroscopy for material sciences and biological tissues.
- ❖ Author of multiple books on spectroscopy & reviewer of peer-reviewed spectroscopic journals.

Dr. Abdul Samad Khan

BDS, MSc. (London), PhD (London)
Associate Professor, IRCBM

Organized by IRCBM Training Cell
at

IRCBM COMSATS IIT,
Defence Road, Off Raiwind Road, Lahore
Contact Person: Mr. Muhammad Usman

Tel: 03224430203 Email: usman@ciitlahore.edu.pk

Registration Fee:

For Faculty/Students: Rs. 3000/ participant

For Industry: Rs. 5,000/ participant

**Group discount is also available*

Registration Deadline: June 25, 2013

Hands On Training on Fourier Transform Infrared Spectroscopy (FTIR) held on July 01, 2013



