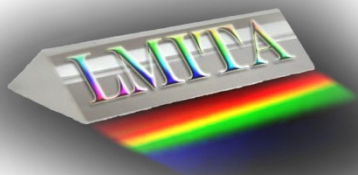


PREM - LMITA Series



INTRODUCTION TO BASIC SPECTROSCOPIC TECHNIQUES

4 Weeks of spectroscopic studies
Starts From May 11th, 2010

1st Week: Introduction; 2nd Week: UV-Vis;
3rd Week: Infrared; 4th Week: Fluorescence

Instructor:

Dr. David Sammeth

Tuesday & Thursday
10:00 AM to 11:00 AM – Theory
1:30 PM to 3:00 PM – Hands-on
On 05/11/10 class begins at 1:00 PM

1st Week: Introduction to spectroscopy:

•Theory

- absorption
- luminescence (fluorescence & phosphorescence)
- scattering (Raman)

•General Instrument design

- gratings
- detectors
- light sources

•Data collection

- A/D boards
- computer interface

•Applications

3rd Week: Infrared spectroscopy:

•Theory

- Design of instrument
- Operation of instrument
- Sample preparation
- Data Analysis

2nd Week: UV-Vis spectroscopy:

•Theory

- Design of instrument
- Operation of instrument
- Sample preparation
- Data Analysis

4th Week: Fluorescence spectroscopy:

•Theory

- Design of instrument
- Operation of instrument
- Sample preparation
- Data Analysis