



PROGRAMME

September 5, 2018 (WEDNESDAY)

Event	Time (Hours)
Registration	09:00 – 09:15
Recitation from The Holy Quran	09:15 – 09:20
Opening Remarks	09:20 – 09:25
Infrared Spectroscopy, Scope, Basic Mechanism	09:30 – 10:45
Tea Break	10:45 – 11:15
Advance Applications and uses of infrared spectroscopy	11:15 – 12:15
Case Studies	12:15 – 12:30
Lunch/Prayer Break	12:30 – 13:30
Raman Spectroscopy, Basic difference with IR spectroscopy	13:30 – 14:45
Applications and Case Studies	14:45 - 15:30
Closing	15:30 – 16:00
Award of Certificates	15:30 - 16:00

VENUE

Conference Room, Metallurgical & Materials Engg. Dept., UET, Lahore

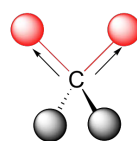
University of Engineering and Technology,
Lahore, Pakistan.

Continuing Professional Development
(CPD)

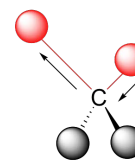
A Workshop on

IR and Raman Spectroscopy of Advanced Ceramics

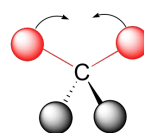
(One CPD Credit Point)



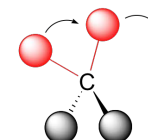
symmetric stretching



asymmetric stretching



scissoring



rocking

September 5, 2018

at

**Department of
Metallurgical and Materials Engg.**

Resource Persons

Dr. Muhammad Asif Rafiq

Associate Professor

MME Department UET Lahore.

Dr. Ehsan Ul Haq

Assistant Professor

MME Department UET Lahore.

PURPOSE AND BACKGROUND

All working professionals including engineers require continuous up-gradation of their knowledge and skills to improve working competency and efficiency. University of Engineering and Technology Lahore has conceived a Continuing Professional Development Program for its growing community of professional engineers. A series of short courses and workshops, in addition to many other academic and professional activities, are now offered by UET on regular basis.

This workshop has been designed to enhance the knowledge of young professional and researchers about "Modern Characterization Techniques i.e. IR and Raman Spectroscopies." In this course, graduates can learn about latest trends in various research areas of advance Materials. Furthermore, information evaluated from these methods can be helpful for explanation of various bond structures and types. Materials, Civil, Chemical, Manufacturing, Mechanical and Electrical Engineering graduates can be benefited from this course.

The course contents will include:

- Introduction to IR Spectroscopy
- Advance Applications of the tool
- Important parameters for various applications
- Different Case Studies
- Introduction to Raman Spectroscopy
- Basic Difference between Raman and IR
- Modern Lab scale and Industrial Applications
- Various Case Studies

SPECIAL FEATURE

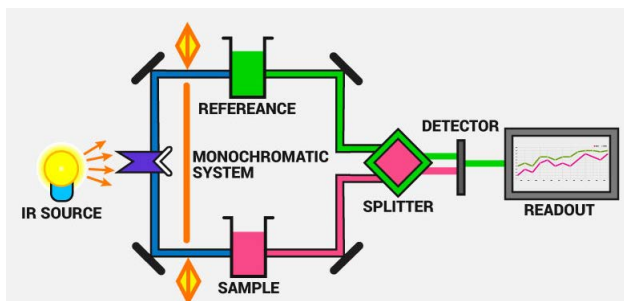
- ❖ A certificate of one CPD point will be awarded to the participants.

WHO SHOULD ATTEND?

- Materials Engineers, Civil Engineers, Manufacturing Engineers, Chemical Engineers, Mechanical Engineers, Electrical Engineers
- Full time M.Sc. and PhD Students

COURSE DETAILS

Course Fee: Rs 3000/- (For Professional Engineers)
Rs 1500/- (For Faculty Members)
Rs 1000/- (For full time M.Sc. and Ph.D. Students)



REGISTRATION PROCESS

Application Form dully filled along with required documents and Fee in the form of Pay Order/ Bank Draft in favour of "PEB Coordinator" or payment through bank deposit slip or online payment to Habib Bank Limited, UET Branch, **A/C No. 01287902267903** should reach on or before **05-09-2018**.

To: Dr. Mohammad Ilyas Anjum
Continuing Engineering Education Center,
UET, Lahore.
Phone Office: 042-99250221, 99029497
Cell no. 0303-0550949
Email: directorceec@uet.edu.pk

The related information can also be found on the website
<http://www.ceec.uet.edu.pk>

You can also contact:

Dr. Furqan Ahmed (Assoc. Prof., MME Department)
Cell No. 0320 9439045
Email: furqan.ahmed@uet.edu.pk

RESOURCE PERSONS PROFILE

Dr. Muhammad Asif Rafiq is serving as Associate Professor and Director of Ceramics Engineering Lab. at the Department of Metallurgical and Materials Engineering, UET Lahore. He completed his PhD. (Piezoelectric Ceramics) from University of Aveiro, Portugal in 2014. His research interests include Synthesis and characterization of bulk and nano-ceramics, piezoelectrics, ferroelectrics, dielectric, magnetic materials, engineering of thermoelectric oxide and adding value to traditional ceramics.

Dr. Ehsan Ul Haq is serving as Assistance Professor at the Department of Metallurgical and Materials Engineering, UET Lahore since July 2015. He completed his PhD (Silica based Innovative Construction Materials, Geopolymers and Aerogels) from University of Salento, Lecce-Italy in 2014. His research interest includes biomaterials, catalytic ceramics, nano-ceramics.

