Registration Form

Short Course Characterization of Advanced Materials

Name.

Designation:
Organization:
Address:
Tel: Fax:
Email:
REGISTERATION FEE
LOCAL: RM 1000 per person
• •
INTERNATIONAL: USD 1000 per person
(Inclusive notes and refreshments)
METHOD OF PAYMENT
Cheque/Money Order/Postal Order made
payable to "BENDAHARI UNIMAP".
payable to beltballati dittivial .
Signature Date

Please complete the form and send it by email/mail to our secretariat at

The Secretariat
Short Course Characterization Advanced Materials
c/o Centre of Excellence Geopolymer Research Group,
Universiti Malaysia Perlis (UniMAP)
Kompleks Pusat Pengajian Jejawi 2
Jejawi, 02600 Arau
Perlis, MALAYSIA

Further information please contacts:

Mrs. Liyana Jamaludin
Email: liyanajamaludin@unimap.edu.my
Tel: 012 9275510

Speaker Information

Dr Ghazali Omar is the Principal Consultant of EFGO Scientific Sdn. Bhd. Prior to that, he was the Head and Senior Manager at Failure Analysis Lab at Infineon Technologies, Kulim.

Education backgrounds:

- B. Eng. Mechanical Engineering (1990) at Victoria University of Technology, Australia.
- Master of Tech (Material Science) (1997) at University of Malaya.
- PhD Science Physics (2005) at University of Malaya.

Expertise and achievements:

- Material science field including material characterization and analysis.
- Experience in analytical tools such as XRD, TEM, SEM, FTIR.
- Consultant for many industries to help characterizing material issues.
- Published more than 30 research papers in national and international journals.
- Presented more than 40 papers at various international conferences.
- His published works accumulated more than 100 self-excluded citations from independent sources.
- In 2002, he won the Malaysian Best Employee of the year awarded by Malaysian Prime Minister.



SHORT COURSE CHARACTERIZATION OF ADVANCED MATERIALS

27th – 28th OCTOBER 2011 SPEAKER: Dr. Ghazali Omar

Venue:

Centre of Excellence
Geopolymer Research Group
School of Material Engineering
Universiti Malaysia Perlis (UniMAP)
Kompleks Pusat Pengajian Jejawi 2
Jejawi, 02600 Arau
Perlis, MALAYSIA



Closing Date: 20 October 2011

Organised by:
Centre of Excellence
Geopolymer Research Group
School of Material Engineering
Universiti Malaysia Perlis (UniMAP)

The aim is to introduce the principles of the

materials analysis characterization methods

based on microscopy, chemical, physical and

Consideration will also be given to the analysis

structural analysis and thermal techniques.

Learning Modules

Accomodation

Day 1 (27th October 2011)

- Introduction of the Materials Science
- Basic Characteristics of Materials
- Scanning Electron Microscope (SEM)/ Energy Dispersive X-Ray (EDX)
- Universal Testing Machine (UTM)

Day 2 (28th October 2011)

- Fourier Transform Infrared Spectroscopy (FTIR)
- X-ray Diffraction (XRD)/X-ray Fluorescent (XRF)
- Thermogravimetric analysis (TGA)/Differential Thermal Analysis (DTA)
- Differential Scanning Calorimetry (DSC)
- Critical review of strength and weaknesses of each technique
- Case Study Session

Who Should Attend

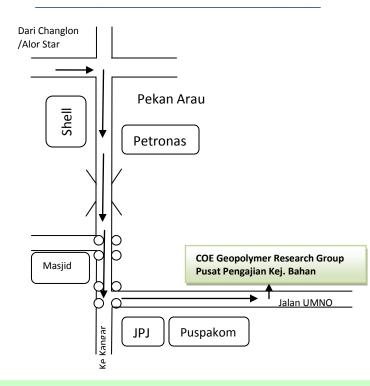
The course is directed at engineers, researchers and student who require a thorough grounding in the characterization methods described above. They are applicable to a wide range of industrial scenarios including "trouble-shooting" investigations, quality assurance and longer term research projects. As the field of materials characterization is developing very rapidly, the course provides an ideal opportunity to review the scope and applicability of the more specialist methods of microscopy and surface analysis.

There are several hotels near short course venue that participant can choose to stay in

List of hotels:

- Hotel Putra Palace (04 9767755)
- Hotel Sri Malaysia (04 9771777)
- Sooguan Villa (04 9772250)
- Federal Hotel (04 9766288)
- Hotel Sri Garden (04 9773702)

Location



of particulate materials and coatings. The basic principles used for the physical characterization of materials will be outlined; microscopy by light, electrons and scanned probes will be introduced; and the readily available bulk

characterization methods such as diffraction, X-ray analysis will be described.

What You Will Learn

The fundamentals of each analytical technique:

- Comparative review of the instrumentation options with emphasis on differences in resolution, sensitivity, sample requirements.
- Data acquisition strategies and data interpretation methods.
- Expert tips on how to avoid measurement artifacts.
- Critical review of strength and weaknesses of each technique: how to combine techniques to extract the best possible complementary information.