

To: **The Secretariat**  
Workshop on Rheology  
Polymer Research Center (PORCE)  
Faculty of Science and Technology  
Universiti Kebangsaan Malaysia (UKM)  
Bangi, Selangor  
(Attn: Assoc. Prof. Dr. Ishak Ahmad)

### Important Deadline

Registration by: 15<sup>th</sup> October 2012

### Registration Fees

Researchers and lecturers: RM 600.00  
Students : RM 350.00  
(The course fee includes comprehensive course notes and CD,  
lunch and refreshment).

Payment can be made via cheque or bank draft, made payable to  
**'Bendahari Universiti Kebangsaan Malaysia'** and send to:

The secretariat  
**Workshop on Rheology**  
Polymer Research Center (PORCE)  
Faculty of Science and Technology  
Universiti Kebangsaan Malaysia  
43600 Bangi, Selangor  
(Attn: Assoc. Prof. Dr. Ishak Ahmad)

For further inquiry, please contact:  
Assoc. Prof. Dr. Ishak Ahmad  
(Call: 03-89215431, e-mail: [gading@ukm.my](mailto:gading@ukm.my))  
Ms Azlin Mohmad Azman  
(Call: 017-6269886, e-mail: [azlin84@ukm.my](mailto:azlin84@ukm.my))  
Mdm. Norhayati Sulaiman  
(Call: 03-89215424, Fax: 03-89215410)  
Website: [www.ukm.my/porce](http://www.ukm.my/porce)

### Accommodation

Bookings can be made directly with the hotel:

+603-89213114	Rumah Tamu Ungku Omar, UKM
+603-89261900	NIOSH, Bangi
+603-82102222	Hotel Equatorial, Bangi
+603-89250900/1900	ESSET, Bangi

# Workshop on Rheology

**6 - 7 November 2012**

**School of Chemical Sciences and Food Technology  
Faculty of Science and Technology UKM, BANGI**

Organized by:

**Polymer Research Center (PORCE),  
School of Chemical Sciences and Food Technology  
Faculty of Science and Technology UKM &**

**Alpha Analytical (M) Sdn. Bhd.**



## Introduction

Rheology is principally concerned with extending continuum mechanics to characterize flow of materials that exhibits the combination of elastic, viscous and plastic behavior by properly combining elasticity and Newtonian fluid mechanics. It is also concerned with establishing prediction for mechanical behavior based on the micro- or nanostructure of the material.

Rheological characterization provides a precise means for measuring intrinsic material properties that can be related to its processing characteristics and performance. Theoretically, it is associating external forces and torques with internal stresses and internal strains gradient and velocities.

The workshop will cover both theoretical and practical aspects of rheology. Participants are free to interact with the instructors informally.

## Objectives

The main objectives of the workshop are:

- ✓ To disseminate the understanding of basic theory associated with rheology.
- ✓ To offer alternative to material characterization through rheological study.
- ✓ To highlight troubleshooting in measurement of material properties.
- ✓ Data interpretation.

## Target Participant

Scientists, engineers, technologists, researchers, technicians, post graduate students and all those interested in rheological study of materials.

## Scope of Workshop

The two-day workshop comprises of lectures and hands-on experience on Rheology. The topics of the lectures are as follow:

- Principles of rheology – elasticity, viscosity, viscoelasticity, shear rate, shear stress, Hooke’s law, temperature effects.
- Advanced topics of rheology – storage modulus, loss modulus, time dependency, linear viscoelasticity, gel time, curing behavior
- Understanding rheology testing – liquid, melt or solid form, rotational tests, measuring systems, instrument compliance.
- Slurry rheology, food rheology, polymer rheology.
- Rheology in Polymer Science and Technology
- Rheology in Food Science.

## Speakers and Facilitators

1. Assoc. Prof. Dr. Rusli Daik - Expert in polymer study.
2. Dr. Maarof Abd. Ghani– Expert in food processing technology.

## Organising committee

### Advisors

Assoc. Prof. Dr. Khairiah Hj. Badri  
Assoc. Prof. Dr. Rusli Daik

### Chairman

Assoc. Prof. Dr. Ishak Ahmad

### Secretary

Ms. Azlin Mohamad Azman

### Treasurer

Mdm. Nor Fauziana Abd. Aziz

## Committee members:

Dr. Suzeren Md Jamil  
Dr. Azizah Baharum  
Mr. Hasanuddin Saleh  
Mdm Norhayati Sulaiman  
Mr. Johar Puteh

## Reply form

Name : .....

Title : .....

Address :  
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Phone no. : .....

Fax no. : .....

E-mail : .....

Participation in workshop as:

Researchers

Students

Others  
.....

I/We hereby enclose payment for participant(s) amounting to RM..... in the form of cheque/bank draft no: ..... and made payable to: **Bendahari Universiti Kebangsaan Malaysia.**