REGISTRATION FORM

2-DAYS WORKSHOP ON "ROBUST ENGINEERING"

03rd – 04th May 2017

Fax: 03-7957 7678 Email: shahrul@iem.org.my

Registration Fee (SUBJECT TO 6% GST)	
	ONLINE / NORMAL (RM)
IEM Members	750.00
Non-IEM Members	850.00
**GST is implemented effective from 1st April 2015*	

No	Name(s)	Membership No.	Grade	Fee (RM)*
			SUB TOTAL	
			ADD 6% GST	
			Total Payable	

PAYMENT DETAILS :

☐ Cash RM _____

☐ Cheque no._____for the amount of RM_____(non refundable) and made payable to "**THE INSTITUTION OF ENGINEERS, MALAYSIA**" and crossed '**A/C Payee Only**".

FULL PAYMENT must be settled before commencement of the seminar, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE the closing date**. If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

Contact Person: _____ Designation:_____

Name of Organization: _____

Address: _____

_____

Telephone No.: _____ (O) _____ (Fax)

_____ (H) _____ (HP)

Email: _____

_____ _____

Signature & Stamp Date

For further details, kindly contact:
The Institution of Engineers, Malaysia
Bangunan Ingenieur, Lots 60/62, Jalan 52/4, P.O. Box 223 (Jalan Sultan) 46720 Petaling Jaya.
Tel : 603-7968 4001/2 **Fax** : 603-7957 7678 **Email** : shahrul@iem.org.my

2-DAYS WORKSHOP ON "ROBUST ENGINEERING"

SPEAKER ;

Associate Prof. Dr. Khairur Rijal Jamaludin

Date : **03rd May 2017 – 04th May 2017 (Wednesday & Thursday)**

Venue : **2nd Floor Seminar Room, Faculty of Engineering Universiti Putra Malaysia (UPM) Serdang, Selangor**

Time : **8.30 a.m. – 5.00 p.m.**

BEM Approved CPD/PDP Hours: 15 Ref No: IEM17/HQ/177/W

Closing Date: 01 May 2017

NO online registration will be allowed after the closing date

Jointly Organized by:
Engineering Education Technical Division (E2TD), IEM
Universiti Putra Malaysia (UPM)

SYNOPSIS

The expectation of robust engineering is to minimize the influence of variation of energy in the products or processes. The robust engineering will focus on optimizing the energy function and it will result to the optimum ideal function which actually the outcome of the design or processes. By doing this, it will enhance the basic and performance need of customers and it will minimize the cost of failure in the market. This is inline with the philosophy of Dr Taguchi: "*The engineered quality of a product is assessed by estimating the loss imparted by the product to the society from the time the product is shipped*".

OBJECTIVE

1. To introduce the concepts of Robust Engineering and initiate the RE initiative
2. To initiate the awareness of RE in products development and manufacturing processes.

OUTCOME OF TRAINING

The outcome of the training is as follows:

1. Participant will understand the concept and philosophy of RE.
2. Participants will be able to initiate the RE projects by formulate 8 RE steps

   Define the Project Scope

   a. Identify Ideal Function
   b. Develop Signal and Noise Strategies
   c. Select Control Factors and Levels
   d. Conduct Experiment and Collect Data
   e. Conduct Data Analysis
   f. Conduct Confirmation Run and Predict
   g. Document

3. Participants know the relationship of the energy function, noise factor and control factor to the ideal function and know how to optimize it in order to minimize cost of failure in the market.

All Participants are Requested to Bring their own Laptop for "Hands on Activities"

ABOUT THE SPEAKER

Associate Prof. Dr. Khairur Rijal Jamaludin has a Ph. D in Manufacturing Engineering
from Universiti Kebangsaan Malaysia, Master degree from University of Warwick, United Kingdom and Bachelor degree from Universiti Teknologi Malaysia.

After graduation with Bachelor of Mechanical Engineering, he worked with Proton, National car maker in Malaysia, a place where he gained his Industrial Engineering experiences. In Proton, he was in charged at the Engine & Transmission Department.

In his department, he was responsible for the plant capacity upgrading and setting up a new production line for new engine models. He has been appointed as the academic member of staff in UTM since 1997.

He has published many research articles in International Journals in the field of Quality Engineering using Taguchi method for optimizing metal injection molding processes. He and his team is actively involved with industry research as well as fundamental research, particularly related with Taguchi method and Mahalanobis Taguchi System.

With the consent and encouragement given by the family of the late Dr. Genichi Taguchi, he and his team have founded a Genichi Taguchi Centre for Quality and Sustainability in UTM.

DAY 1 – 03 MAY 2017 (WEDNESDAY)

08:30 – 08:55	***Registration of Participants***
09:00 – 10:30	Introduction to Robust Engineering Robust Parameter Design for Nominal the Best Response
10:30 – 10:45	***Break for Morning Refreshment***
10:45 – 11:30	Hands on Activity
11:30 – 13:00	Dynamic Response and S/N
13:00 – 14:15	***Break for Lunch***
14:15 – 17:00	Hands on Activity Case: 1. Robust Optimization of Software Algorithm 2. Optimize Design using Computer Simulation

DAY 2 – 04 MAY 2017 (THURSDAY)

09:00 – 10:30	Non Dynamic Responses and S/N
10:30 – 10:45	***Break for Morning Refreshment***
10:45 – 11:30	Hands on Activity
11:30 – 13:00	Classified Attribute Response Operating Window Response
13:00 – 14:15	***Break for Lunch***
14:15 – 17:00	Introduction to the Mahalanobis Taguchi System Open Floor Discussions