



National Lecturers  
Program (NLP)

## An invitation to a **Technical Seminar** on “Power Electronics - The Enabling Discipline” & “Nanotechnology, the Technology of the Future”

**Date: 6<sup>th</sup> April 2007 (Friday)**

**Venue: Universiti Teknologi Mara (UiTM)  
Penang**

**FREE ADMISSION  
Refreshment Provided**

### **Organized by:**

**Power Electronics, Industrial Electronics and Industry Applications  
Societies (PELS/IES/IAS) Joint Chapter of IEEE Malaysia Section**

### **Co-organizers:**

- **UiTM Penang**

### **Seminar Overview**

#### Power Electronics - The Enabling Discipline

The main theme of the presentation is the need for more efficient usage of electricity and the impact that more efficient processes and products would have on conserving natural resources. Power Electronics Technology's conversion of the 'raw energy' from the public Utility to the form required by the load is the enabler of most industrial loads and equipment. The presentation highlights some of the application areas where Power Electronics increases the efficiency of the power conversion process to create savings of the world's energy.

The second aspect of the presentation is Electrical Power Quality as it plays such an integral part of our way of life, and without it the wheels of Industry grind to a halt and Business - Commerce are crippled. The presentation identifies some of the Power Electronics mitigation equipment that is the enabler to protect the customer from losing plant output due to power supply disturbances.

#### Nanotechnology : The Technology of the Future

This short lecture provides a brief overview on general areas of nanotechnology and the importance in the future together with roadmaps of research in the global perspective, its impact on industries, the Feyman Vision, the various industrial revolutions, industrial applications and impact on society. Selected key areas under development are also discussed.

### **Seminar Presenters**

#### **Robert T Kennedy**

Prof Kennedy has pursued a 'Power Electronics' career in industry & academia, starting in 1962 as a member of the Scientific Staff at the Hirst Research Centre (HRC), Wembley. Academic appointment have been world wide at UniMAP (KUKUM); The University of the South Pacific, Fiji; The University of Plymouth, UK; Nanyang University, Singapore; L'Institut National d'Electricite et d'Electronique (INELEC), Algeria; University of Calabar, Nigeria; The University of Khartoum, Sudan; Huddersfield University, UK; University of Science & Technology, Kumasi, Ghana. Prof Kennedy has been a Chartered Engineer (C Eng) since 1966, a Fellow of the IEE since 1982, a Senior Member of the IEEE since 1984 and recipient of the IEEE Millennium Medal (for service to Power Electronics and the IEEE).

### **Mustafar Kamal Hamzah**

A lecturer with the Faculty of Electrical Engineering, Universiti Teknologi Mara(UiTM), Shah Alam since 1985. Currently the vice-chair of the IEEE Malaysia PELS/IES/IAS joint chapter and was the Hon.Secretary IEE Malaysia(90/91). From 1983, he served as electrical engineer at Kuantan Port Authority. He was seconded to the Development Department of UiTM (86-87). Amongst other positions includes; Head of Power Engineering Dept UiTM, Special Officer Academic Affairs Division UiTM, Special Assistant to Vice Chancellor for implementation of new engineering complex with 160 engineering labs and 12 computer centres and was also the coordinator, SUN Microsystem Academic Initiatives (SAI). He has published or presented over 50 technical papers in various areas and conducted over 50 public lectures/workshops, served as a power quality consultants to a number of organisations, the Chief Examiner for the MLVK certification exams and served as chairmen of Applications Bioinformatics for the formulation of National Bioinformatics Technology Roadmap. His current area of interests includes; Matrix Converter, Active Filters, Modelling & Computer Simulation, Computer Applications, Bioinformatics, Robotic Applications and Power Electronics.

### **Program Schedule**

8.30 am to 8.45 am	- IEEE Welcoming Address
8.45 am to 9.45 am	- Talk by Mustafar "Nanotechnology, The Technology of the Future"
9.45 am to 10.00 am	- Break
10.00 am to 12.00 am	- Talk by Robert T. Kennedy "Power Electronics – The Enabling Discipline"

### **Fees and Registration**

This is a Free Technical Seminar. Please register in advance to book your seat. For more details, please contact :

**Mustafar Kamal Hamzah**  
**IEEE PELS/IAS/IES Seminar Secretariat**  
**UiTM Shah Alam,**  
**Selangor.**  
**Phone: 03 55436093 Fax: 03 55436093**  
**Handphone : 012-234 1546**  
Email: [mustafar@ieee.org](mailto:mustafar@ieee.org)

To know more about the PELS/IAS/IES Joint Chapter and activities, please visit

[http://ewh.ieee.org/r10/malaysia/ie\\_ia\\_pel/](http://ewh.ieee.org/r10/malaysia/ie_ia_pel/)

### **Location Information**

For more information on the location, please visit;

<http://www.penang.uitm.edu.my>

(Look for Peta Lokasi)

**Nofri Yenita Dahlan**  
**Faculty of Electrical Engineering**  
**Universiti Teknologi Mara**  
**Phone : 04-3822791**

Kindly fax this page back to the Seminar Secretariat latest by 4<sup>th</sup> April 2007.  
 Fax: 03 5543 6093 (Attn: Mustafar)/Email : top607@yahoo.com



**IEEE**



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<b>Name and Address of Organization:</b>			
<b>Name of Contact person:</b>			
<b>Telephone No:</b>		<b>Fax. No:</b>	
<b>Email address:</b>			
<b>Name of participants:</b>			<b>IEEE membership number (if any)</b>
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