

## Seminar on "Power Module for Inverter Driven Appliance" 「應用於變頻驅動的功率模塊技術」研討會

Date 日期 : 15 / 10 / 2010 (Friday 星期五)

Time 時間 : 2pm – 3pm

Venue 地點 : Meeting Room S426-427, HKCEC 香港會議展覽中心 會議室 S426-427

Language 語言 : English 英語

### **About the Seminar 研討會簡介:**

In power electronics application fields, the power density factor related to system designs has improved remarkably in the past two decades. The main contribution in this growth came from using new power device components based on IGBT chip technologies, including different generations of Intelligent Power Modules (IPM). In the early days of its debut, IPMs were applied only in the specialized categories of industrial drive applications. In a few years time after that, triggered by introduction of the revolutionary Dual-In-line Package type IPM series (DIPIPM) in the late '90s, use of this unique product family expanded rapidly starting with the high volume application zone of inverter controlled home appliances. Such trends primarily included applications in air-conditioners, refrigerators and washing machines. The trend to apply an IPM in inverter designs was adopted by designers of many other systems and, from such demands, various new versions of IPMs evolved and were applied into different power electronics equipment covering industrial motor controls, traction drives and auxiliaries in hybrid vehicles and railway systems, windmill power generation systems, solar power generation systems etc.

From the wide spectrum of IGBT module and IPM applications, requirements from inverterized home appliances including PV electronics system will be taken up in this paper, and the major development trends in power chip and key module technologies, such as new Dual-In-Line IPMs (DIPIPM) and PV application oriented IPMs, that being followed to meet those needs will be discussed.

### **About the Speakers 講者簡介:**

**Gourab Majumdar** received Bachelor of Technology degree in electrical engineering from Indian Institute of Technology (IIT), Delhi, India in 1977 and Doctor of Engineering degree in information technology from Kyushu Institute of Technology (KIT), Fukuoka, Japan in 2005. Currently, he is working as Senior Chief Engineer of Power Device Works, Mitsubishi Electric Corporation, Japan. He has published many technical papers on advanced power devices such as IGBTs (Insulated Gate Bipolar Transistors) and IPMs (Intelligent Power Modules) and holds several patents in the related fields. He is a recipient of the prestigious National Invention Award in Japan in 2005 for invention of the IPM's fundamental concept and has also received several other awards for contribution in advancing and developing various generations of IPM technology.



Time 時間	Programme 程序表
1:30pm-2pm	Registration 登記
2pm-2:45pm	"Power Module for Inverter Driven Appliance" 「應用於變頻驅動的功率模塊技術」 Speaker: Gourab Majumdar, Ph D, Senior Chief Engineer, Mitsubishi Electric Corporation 講者: 三菱電機株式會社高級主管技師長 Gourab Majumdar 博士
2:45pm-3pm	Question & Answer 答問時段

### **Remarks 備註:**

- Free Admission. Seats are granted on a first-come-first-served basis. 免費入場。座位有限，先到先得。
- Trade only and persons under 18 will not be admitted. 只接待 18 歲或以上業內人士進場。
- The Organiser reserves the right to make any changes without prior notice. 主辦機構保留任何更改之權利而不作另行通告。