IEEE オンライン講義（Webinar）開催のお知らせ

下記のとおり米国学会 IEEE（The Institute of Electrical and ElectronicsEngineers）にて
パワー半導体のオンライン講義（Webinar）を行います。

記

日　時：１２月２日（水）
２３：００～２４：００

オンライン講義名：Power Semiconductor Device Basics

http://eds.ieee.org/webinars.html

概　要：本学教員（工学府　大村教授）によるパワー半導体に関するウェブ講義
が IEEE、Electron Device Society の企画で行われます。
パワー半導体の歴史から、現状および周辺技術、応用、将来技術に関して
わかりやすく講義が行われます。視聴には、IEEE の ID が必要です。
詳しい内容は下記アブストラクトをご参照ください。

As part of our commitment to advancing the vision and mission of the Electron Devices Society, we are pleased to invite you to attend a special webinar entitled Power Semiconductor Device Basics. This event will be presented by Ichiro Omura, Kyushu Institute of Technology

Abstract: Power semiconductor device has been the key technology for controlling various kinds of electric equipment, energy flow management for power grid and power transmission such as HVDC and energy saving systems control including PVs, HEVs, wind turbines and batteries. Specially, recent increase in electric energy demand highlights power semiconductor device as the solution technology to meet the requirement for energy saving.

Power MOSFETs and insulated gate bipolar transistors (IGBT) have been the major power semiconductor devices in the today's market and these silicon devices show technology progress by breaking the limit with the superjunction structure, trench MOS gate, thin-wafer / field stop technologies. Emerging new material (SiC, GaN) devices have recently penetrates in some application segment by the extreme performance. Power IC technology, packaging and protection technology have become more important than ever with the high density integration of the power electronics system and devices.

In the lecture, the following topics will be explained.
1. History of power semiconductor devices 2. Power electronics circuit principle and major applications of power semiconductors 3. Power semiconductor device structures and physics
-Power MOSFET / Superjunction MOSFET
-IGBT
-Lateral devices (LD-MOS, LIGBT) for power integrated circuits 4.
Status and future possibility of SiC, GaN power devices 5. Other topics We sincerely hope that you can join us for this event. Register Now!