



# CERIES

Tohoku University Electro-Related Departments  
Global COE Program

Center of Education and Research for Information Electronics Systems

## GCOE Seminar on Smart Grid Network Technology

Date: **February 27th**, 2012

Place: **Lecture Room 207**, 2F, Research Building of Information Science,  
Graduate School of Information Science, Tohoku University

Sponsored by: Global COE Program

“Center of Education and Research for Information Electronics Systems”



**15:00 ~ 16:00**

Lecturer: **Dr. Abbas Jamalipour, Professor** (University of Sydney, Australia)

Title & abstract:

### **Security and Privacy Challenges in Smart Grid Networks**

#### **Summary**

Integration of electrical power grid and data communication in a smart grid network introduces various advantages such its greenness, two-way communications between energy suppliers and customers, real-time pricing, load shedding and consumption management. It also creates a wide area of research for the telecommunications and distributed computing researchers. As a result, Smart Grid has very recently become a critical research field within the power, telecommunications and computer engineer communities. Despite its popular naming these days, Smart Grid seems to be defined differently among researchers and developers. Besides its environment and technical benefits, such integration will also introduce some new threats to the security of the smart grid. In this talk, the topic of Smart Grid Network will be explained in a completely new way and after that one of the main challenging issues in such a network, that is the security and privacy of grid customers will be described. Security and privacy are considered as the decision-making issues on whether nations will adopt the intelligent grid in near future or leave it open to a distant future.

**16:00 ~**

#### **Biography**

**Abbas Jamalipour** is the Chair Professor of Ubiquitous Mobile Networking and leads the Wireless Networking Group (WiNG) at the University of Sydney, Australia. He is a Fellow of IEEE, IEICE, and Engineers Australia, a Professional Member of ACM, and an IEEE Distinguished Lecturer. He received his PhD in Electrical Engineering from Nagoya University, Japan. He is the author of six technical books, nine book chapters, and over 300 technical papers in scholarly journals and international conferences, all in the area of wireless networks. He was the Editor-in-Chief IEEE Wireless Communications and currently he is an editor for several scholarly journals. He is the elected Vice President – Conferences, IEEE Communications Society 2012-13. He was the Chair of the Communication Switching and Routing and the Satellite and Space Communications Technical Committees, and the Vice Director of the Asia Pacific Board, all of the IEEE Communications Society. He was the General Chair IEEE WCNC2010, and has been a technical chair for several IEEE ICC, GLOBECOM, WCNC and PIMRC conferences. He is the recipient of several prestigious awards such as the 2010 IEEE ComSoc Harold Sobol Award for Exemplary Service to Meetings & Conferences, the 2006 IEEE ComSoc Distinguished Contribution to Satellite Communications Award, and the 2006 IEEE ComSoc Best Tutorial Paper Award.