

## Are you ready for a career boost before a new year?

The **Chinese Institute of Engineers (CIE-USA) DFW Chapter** is hosting technical seminars from Microelectronics and Telecommunications sectors; both open to the general public and no registration required.



### *Seminars for Microelectronics and Telecommunications*

Time: **2:15 PM (Telecomm)** and **3:15 PM (Microelectronics)**

Date: **Saturday, December 5, 2009**

Place: **Plano Schimelpfenig Library, Program Room**

Address: 5024 Custer Rd, Plano, TX 75023

Cost: No charge

#### **Seminar One: Telecommunications Sector**

Topic: **3G Cellular Standard and LTE Technology**

Speaker: **Dr. Charlie Zhang**

Time: **2:15pm ~ 3:13 pm**

Contact: **Lingjia Liu** ([lingjialiu@gmail.com](mailto:lingjialiu@gmail.com), 972-322-2544)

Despite a relatively short 10 years of history, the 3GPP standard has established itself as the leader of the wireless technology and innovation. Today more than 4 billion people, or two thirds of the world population, use the wireless technology that was made possible by 3GPP standard. The latest version of the specification from 3GPP is called LTE (long-term evolution) technology, and is gaining support from most of the major operators around the world. LTE will achieve higher spectrum efficiency and better overall user experience, all at a lower per-bit cost to the operators. In this talk, we provide a brief introduction of 3GPP standard in terms of its history, organization, the specifications generated by 3GPP over the years, as well as the latest technologies that are being introduced in LTE and LTE-advanced standards.



**Dr. Charlie Zhang** is currently a senior manager with Samsung Telecom America (STA), and leads STA's 3GPP LTE/LTE-A standardization projects. In August 2009, he was elected as the vice chairman of 3GPP RAN (radio access network) working group1. Before he joined Samsung, he was a principal staff engineer with Motorola from March 2006 to March 2007 serving as the technical lead of the 3GPP HSPA standardization project. He was with Nokia Research Center from June 2001 to March 2006, where he was a senior research engineer and lead Nokia's physical layer contribution to the IEEE 802.16e standard. Dr. Zhang is also a senior member of IEEE.

Dr. Charlie Zhang received his B.S. degrees in both Electrical Engineering and Applied Physics from Tsinghua University, Beijing, China, M.S. degree in Electrical Engineering from Clemson University, and Ph. D degree in Electrical Engineering from University of Wisconsin at Madison.

#### **Seminar Two: Microelectronics Sector**

Topic: **Wireless Sensor Networks and Smart Energy Applications**

Speaker: **Dr. Moses Asom**

Time: **3:15 ~ 4:15pm**

Contact: **Bill Wu** ([bxwu2009@yahoo.com](mailto:bxwu2009@yahoo.com), 214-662-9517)

Recent developments on the smart grid driven by global governmental policies, regulations, and incentives has led to increased interest in the use of wireless sensor network technologies for demand response, energy management, and metering services. With the utility metering industry taking the lead, wireless sensors are migrating into the commercial and home area networks where they will enable efficient energy management by consumers. This talk will explore the numerous underlying wireless technologies and applications that could be utilized in the emerging smart grid networks. We will also discuss global activities encompassing standards, devices, use cases and SyChip's role in this emerging market.



**Dr. Moses Asom** is currently President and CEO of SyChip, Inc. In 2000 he co-founded SyChip which was acquired later by Murata Electronics at \$140M making it the 3rd best semiconductor M&A in the USA in 2006.

Dr. Moses Asom holds several patents and has co-authored numerous articles in respected journals. Previously he worked at Bell Labs as a research scientist and as a Director at Lucent New Ventures Group. He has also served as a partner at New Ventures Partners and an advisor to Hunt Ventures. His areas of expertise include wireless and optical communications. He has recently started an effort to employ wireless connectivity in energy (smart grid) and healthcare applications. Dr. Asom holds a Ph.D. in Electrical Engineering from Howard University and an MBA from The Wharton Business School of The University of Pennsylvania.

**Seminar Three: Microelectronics Sector**

Topic: *How about "Smart Power Grids - What Do They Mean for You?"*

Speaker: **Mr. Bill Muston**

Time: **4:15 ~ 5:15pm**

Contact: **Bill Wu** ([bxwu2009@yahoo.com](mailto:bxwu2009@yahoo.com), 214-662-9517)

"Smart Grid" is sweeping the electric utility industry. What is it? Your local electric utility, Oncor, is deploying a variety of smart grid technologies. These encompass monitoring and control of the high voltage power transmission grid to enable the import of wind power from west Texas as local natural gas generation is retired; automated fault isolation and reconfiguration for local neighborhood distribution lines; and advanced meters that will enable consumers to monitor their energy use more closely to take action to control their costs, and enable retail electric providers to offer incentives and control demand. These advances build upon evolutionary advances in technology that have reached thresholds for widespread deployment, thereby enabling new functionalities not previously economically justified.

**Mr. Bill Muston** is Manager, R&D, for Oncor Electric Delivery,



an electric utility serving three million customers .in Texas, including the Dallas-Fort Worth area. His career focus is R&D for electric utility needs, presently emphasizing the application of new technologies. Responsibilities include technology assessment; program management; external collaborations; and patent and licensing matters. He also supports legislative affairs and public communication. .

Bill is a member of the IEEE, AAAS, and the Licensing Executives Society, and is a registered professional engineer in Texas. He attended The University of Texas at Austin, where he received a B.S. in Electrical Engineering and an M.S. in Engineering. His primary study was power systems engineering.

**Webpages:** <http://www.cie-dfw.org/event/>