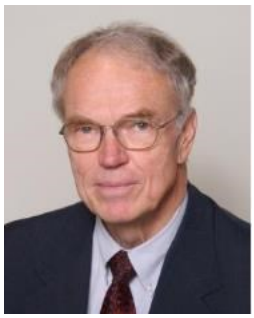
Hogeschool van Amsterdam

IEEE

De afdeling Elektrotechniek (E-Technology) nodigt u uit voor twee sprekers in het kader van de Distinguished Lecturers lezingen:



# John Norgard, Ph.D.

**Chief Engineer at NASA for**
**Electromagnetic Environmental Effects**

**Lyndon B. Johnson Space Center, Houston, USA**

and:

# Dale Becker, Ph.D.

**IBM Distinguished Engineer**
**Server and Technology Group**

**Poughkeepsie, NY, USA**

Students, faculty, and professionals from academia and industry interested in the latest trends of electromagnetic compatibility, signal integrity, and power integrity of electronic systems are cordially invited to attend their:

# IEEE EMC Society Distinguished Lectures

**Hogeschool van Amsterdam,**
**Weesperzijde 190 Amsterdam,**
**Auditorium D1.18 1ste verdieping.**

**15:00 – 17:00, 22 april, 2015**

Talk and Biography of John Norgaard:

## Space Exploration: EMI/EMC Problems and Solutions at NASA - Past, Present, and Future Missions

This presentation is about space exploration and presents an overview of NASA's past, present, and future missions, with an emphasis on EMI problems and EMC solutions. The past mission of NASA was to design and build the Space Shuttle (SS), which was used to build the International Space Station (ISS). The present mission of NASA is to support the ISS with new equipment, supplies, and crew changes. The future mission of NASA is to design and analyze a new blunt-body re-entry vehicle (Orion) to replace the decommissioned SS for a crew exploration vehicle to operate past the orbit of the ISS, and to eventually fly to the Moon and Mars.

John Norgard received the BSEE degree from Georgia Tech and MS and PhD degrees in Applied Physics from Caltech. Before coming to NASA/JSC as the Chief Engineer for Electromagnetic Environmental Effects (E3), Dr. Norgard was a Professor at the University of Colorado, and was the Chief Scientist at the Rome Research Site of the Air Force Research Lab. He was a Distinguished Visiting Professor at the US Air Force Academy and was also a Visiting Professor at the Tel-Aviv University and was a member of the Technical Staff of the Bell Telephone Laboratories. Prof Norgard was the Dean of the EAS College, Chair of the MAE Department, and Chair of the ECE Department at the University of Colorado. Before coming to the University, he was a Professor in the ECE Department at Georgia Tech and was a Post-Doctoral Fellow at the Norwegian Defense Research Establishment in Oslo, Norway. He has also served as an Adjunct Professor at Syracuse University and at the University of Houston. He worked at NASA/JPL while studying at Caltech, and was a Co-Op student at Georgia Tech while working at the Charleston Naval Shipyard and Polaris Submarine Base.
Dr Norgard is a Fellow of IEEE, on the Board of Directors of the EMC Society, on the Board of Directors for ACES, past member of the Board of Physics and Astronomy for NAS and NRC, Past Chairman for Commission A/Metrology of URSI, and an Associate Editor of the EMC Transactions in the area of antenna metrology. Dr Norgard has authored several hundred journal articles and conference papers and is the author of several chapters in four electromagnetic books.

Talk and Biography of Dale Becker:

## Considerations for Advancing Technology in Computer System Packaging

In this era of smart computing, big data and deep analytics define the architecture of computers and the software that runs on these systems. The hardware technology is evolving to support the needs of the systems under the constraints of decreasing cost per performance metric, increasing bandwidth per unit area and constant power per unit volume from one generation of systems to the next. To meet these constraints, the trade-offs of proposed solutions need to be evaluated. As a pair of examples, 3D integration provides the possibility of higher compute density and data bandwidth at the challenge of maintaining power density and cost constraints, and integrated voltage regulation provides the possibility of maintaining power density with the challenge of maintaining compute density and cost constraints. This presentation will discuss the application of new technology that address design challenges and the tradeoffs that are encountered.

Dale Becker received the B.E.E degree from the University of Minnesota, M.S.E.E. from Syracuse University and the Ph.D. from the University of Illinois at Urbana Champaign. He is a Distinguished Engineer in IBM Systems and Technology Group and a member of the IBM Academy of Technology. He is the System Electrical Architect for the IBM POWER and System Z Enterprise Systems. His responsibilities include designing the high-speed channels to enable the computer system performance and the power distribution networks for reliable operation of the integrated circuits that make up the processor subsystem.
Dr. Becker is the Chair of the IEEE EPEPS 2014 Conference and co-chair of the IEEE EMCS embedded conference on SIPI TPC. He has over 25 patents on electrical design of computer systems and has presented over 75 papers in refereed journals and international conferences covering many aspects of electrical computer system design including power distribution analysis and design and modeling of signal and power distribution networks. He is a Fellow of IEEE, an iNEMI Technical Committee member and a member of IMAPS and SWE.

Information on how to get to Hogeschool van Amsterdam:

http://www.hva.nl/over-de-hva/locaties/content/hva-locaties/leeuwenburg.html

Contact Information,

Ing. Cees Keyer
Hogeschool van Amsterdam,
Domein Techniek afd Elektrotechniek
Weesperzijde 190
1097 DZ Amsterdam
T 06 2115 8866
E c.h.a.keyer@hva.nl, cees@ieee.org

Gaarne van te voren aanmelden, parkeren kan op beperkte schaal mits aangemeld 3 dagen van de voor de lezingen. Deze lezingen worden samen met de Nederlandse EMC ESD vereniging georganiseerd.