

EOS/ESD Symposium for Factory Issues



October 10-11, 2016

EOS/ESD Factory Symposium in Finland-Tutorials

Simonkentta Scandic Hotel, Helsinki, Finland

October 12-14, 2016

EOS/ESD Factory Symposium in Finland

Tallink Ferry (Roundtrip Helsinki - Stockholm) Helsinki, Finland

The EOS/ESD Association and STAHA, the Finish ESD Association, are organizing the 2nd European ESD Symposium for Factory Issues on the ferry between Helsinki (Finland) and Stockholm (Sweden). This is the first time that both organizations cooperate to hold a Symposium that is not touching the topics of on-chip protection or device testing problems but solely focusing on protection issues during handling, assembly, testing and transport. Since production people often have difficulties to get long distance travels approved this event is brought to the factories. To make it a European event, other independent ESD associations from Europe are helping to set this event up.

- The ESD Association developed, administers, and maintains the ESD Association Program Manager Professional Certification.



- ESD Association instructors developed the ANSI/ESDA and IEC Standards and bring you today's current information and developments.

<http://www.esda.org/events/eosesd-symposia/eosesd-factory-symposia/>

Co-Sponsored by:



IOP Institute of Physics



ESD FORUM e.V.



Setting the Global Standards for Static Control!

EOS/ESD Association, Inc. 7900 Turin Rd., Bldg. 3 Rome, NY 13440-2069, USA
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ESD Basics

OCT 10, 2016 • 9:00 AM - 12:30 PM

Instructor: Toni Viheriakoski, *Cascade Metrology*

This talk will discuss the Fundamental causes of ESD and its control. It includes how ESD impacts industry, with brief explanations of charge generation, field measurement, the role of capacitance and voltage, charge measurement, and charge decay. Device failure mechanisms, including the respective test models like Human Body Model or Charged Device Model, will also be explained. Will discuss how to protect ESD sensitive devices and assemblies, give definitions of an Electrostatic Protected Area (EPA), and show how to assess the risk in an automated production line.

Toni Viheriakoski began his electrostatic career while employed by Nokia Networks between 1986 and 2007. During this period, he established calibration and electrostatics laboratory services for Nokia. He completed his technical supervisor studies in information technology in 1994. He was a chair of measuring methods working group of Finnish STAHA Association technology program in 2001 and 2002. He received iNARTE ESD Engineer certification in 2004. Toni transferred to Nokia Siemens Networks in April 2007 where he continued his work as an electrostatics specialist and senior sourcing engineer until he moved on to his own company, Cascade Metrology, which was previously established in 2005. Currently, he is working in the field of electrostatics and ESD risk assessment for electronics, automotive and chemical industries. Toni has written more than 20 publications related to electrostatics or ESD. He has been a chair of Finnish STAHA Association since 2006. He is a member of Finnish Standardization Committee SK101 and WG5 of IEC TC101.



Process Assessment

OCT 10, 2016 • 1:30 PM - 5:00 PM

Instructor: Reinhold Gaertner, *Infineon Technologies*

This Tutorial describes the measurement techniques that are needed for elements of ESD control programs. This covers measurement methods for compliance verification, product qualification, and trouble-shooting. These techniques will be demonstrated by actual measurements on materials and products. The seminar ends with an overview of risk analysis and trouble-shooting methodologies applied to actual field problems.

Reinhold Gaertner received his diploma in physics from the Technical University of Munich in 1987. Then he joined the Federal Armed Forces University Munich, where he was working on measurement techniques for ESD protective packaging materials. After working as an independent ESD consultant, he joined Siemens Semiconductors in 1996; which is now Infineon Technologies. He is responsible for all problems regarding external ESD protection at Infineon worldwide and also for problems in customer production, as well as for ESD device testing for qualification. Since 1989, he has lectured on static control and since 1991, he has been an active member of the German ESD Association, where he has been acting as vice president for the last couple of years. Since 1995, he has worked in the ESD standardization of IEC TC101, where he is currently convener of two working groups (static decay and device testing). In 2009, he received the outstanding contribution award of the ESDA and in 2011 he joined the ESDA board of directors.



ANSI/ESD S20.20 - Process Design Overview

OCT 11, 2016 • 9:00 AM - 5:00 PM

Instructor: John Kinnear, *IBM*

This overview provides instruction on designing and implementing an ESD control program based on ANSI/ESD S20.20. The course provides participants with the tools and techniques to help with the selection of the ESD controls that are appropriate for the devices to be handled.

The following topics are covered

- ANSI/ESD S20.20 Administrative Requirements
- Grounding/Bonding Systems
- Personal Grounding
- ESD Controls for the EPA
- Packaging Requirements

John Kinnear is an IBM Senior Engineer specializing in process & system technology, and facility certification in accordance with ANSI/ESD S20.20. He has been the ESD Site Coordinator for the Poughkeepsie site since 1989 and is currently the ESD Coordinator for IBM. As a member of the ESD Association since 1990, John has served in several Standards Development Committees. John is the appointed Technical Adviser to the United States National Committee/IEC Technical Committee 101, where he represents the United States to the International Electrotechnical Commission (IEC). As Chair of the ESDA's Facility Certification (ANSI/ESD S20.20) development program, John coordinated the initial development of Lead Assessor training, ISO Registrar Certification and witness audits. John has served as ESD Association Vice President, Senior Vice President and President. He has also served as past General Chairman of the 2004 EOS/ESD Symposium. For his contributions to the ESD Association John was presented with the Joel Weidendorf Award for Standards in 2005, the Outstanding Contribution Award in 2006, and the President's Award in 2010. John has presented many papers both internal to IBM and at external conferences. He participates as an instructor for the Program Management series and has presented tutorials in North America and Asia. John also holds patents in the industry.

www.esda.org/events/eosesd-symposia/eosesd-factory-symposia/

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Maintain your ESD control program at the highest level.

Learn current ESD Controls and Procedures from leading industry professionals!

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Technical sessions include topics on:

I. EOS/ESD Factory Level and Materials Technology

- Packaging and Handling
- Case Studies, Reviews and Analysis
- Test Methods and Procedures
- Troubleshooting Techniques
- Air Ionization and Uses
- Facility Design
- ESD Shunting Packaging Technology
- ESD Control Materials
- ESD Detection and Measurement Techniques
- Management Issues (cost/benefit analysis etc.)
- ESD Process Risk Assessment
- EMI Controls
- AHE Issues and Controls

II. EOS/ESD Standards – Components, System, Factory & Materials

- Test Methods and Procedures
- Standards - Comparisons and Analysis
- Case Studies
- Round-Robin Testing, Results and Analysis

<input type="checkbox"/> ESD Tutorials October 10-11, 2016	\$ 680 USD
<input type="checkbox"/> Symposium Only October 12-14, 2016 Technical sessions, Invited Talks, and Workshops	\$ 800 USD
<input type="checkbox"/> Symposium Bundle October 10-14, 2016 Symposium plus two-day ESD Tutorial Program	\$1,480 USD

**Register Online at
www.esda.org**

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