

REGIONAL TUTORIAL

Dates: March 13-14, 2012, Austin, TX

3M Innovation Center, 6801 Riverplace Blvd., Austin, TX 78726

Lunch and refreshments provided

MARCH 13, 2012

8:30 a.m. - 12:00 p.m.

ESD Standards Overview for the Program Manager

David E. Swenson, Affinity Static Control Consulting, LLC

Program Manager
Certification
Course

iNARTE
Certification
Prep

Standards provide the foundation for building an ESD Control Program. Many of the individual tutorials within the Program Manager Certification curriculum discuss specific Standards, Standard Test Methods, and other standards related documents in depth. This Standards Tutorial provides an overview of all the ESD Association and other relevant industry and military Standards, grouped into common test types based on measurement probe and test instruments. A common methodology is used in this tutorial to cover the requirements, applications and specifications for each Standard and Standard Test Method. This course also helps prepare individuals who intend to take the iNARTE Engineering and Technician exams.

This class is part of the Program Manager Certification curriculum and recommended preparation for the iNARTE ESD certification Exam.

Details on Professional Certification offered by ESDA are on our website at www.esda.org/certification.html. Information on the requirements for iNARTE Certification may be found at www.narte.org/h/esd.asp.

MARCH 13, 2012

1:00 p.m. - 4:30 p.m.

Ionization Issues and Answers for the Program Manager

Kevin Duncan, Seagate Technology

Program Manager
Certification
Course

The first principle of ESD control is to bond all conductors together, preferably to ground. This technique works well for stationary conductive objects, but how do we control electrostatic charges on process essential insulators or conductive objects that cannot be grounded? This tutorial will explore the fundamental ESD control principles surrounding the use of ionization systems in an ESD control program plan. We will explore the benefits of ionization; discuss the different technology types and the pros and cons of each. Examples will be given demonstrating when and where ionization should be used, as well as how to measure ionizer performance. The criteria surrounding installation, safety, maintenance, and contamination concerns will be reviewed. Upon completion, you will be familiar with standardized product qualification, acceptance testing, and compliance verification test methods and practices.

This class is part of the Program Manager Certification curriculum. More details on the Professional Certification Programs offered by ESDA are on our website at www.esda.org/certification.html

Cosponsored by the Texas Chapter ESD Association <http://www.centxesdassoc.homestead.com>

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Program Manager
Certification
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Packaging Principles for the Program Manager

David E. Swenson, Affinity Static Control Consulting, LLC

Shipping electronic parts within a factory, to another factory, distributor, or to an end-user has always been an area of uncertainty within the manufacturing process. To provide clear-cut information on what type of controlled packaging should be used in any situation, the ESD Association released a comprehensive revision of the obsolete industry standard EIA 541-1988. The newer document, ANSI/ESD S541, is the focus of this inclusive session. It provides information and guidance, as well as material specifications, to assist in the design and implementation of a packaging plan for use within an ANSI/ESD S20.20 based ESD Control Program. Current and newly released test method standards suitable for packaging material evaluation will be described. Course credit applies to the ESD Program Manager Certification curriculum. Previous attendance at the "ESD Basics" and "How To's..." tutorials are highly recommended.

This class is part of The Program Manager Certification curriculum. More details on the Professional Certification Programs offered by ESDA are on our website at www.esda.org/certification.html

MARCH 14, 2012

1:00 p.m. - 4:30 p.m.

Program Manager
Certification
Course

Cleanroom Considerations for the Program Manager

Lawrence Levit, LBL Scientific

Cleanrooms and clean environments are enabling technologies required for the manufacture of many products that have exacting contamination control requirements in order to achieve defined yield and reliability targets. Clean manufacturing is required in the semiconductor, hard disk drive, flat panel display, and pharmaceutical industries, to name a few. Requirements of cleanroom/clean environments and tooling therein result in low humidity levels, low surface contamination levels, use of process-required insulators, and a lack of natural ions in the controlled environment. These factors can contribute to development of elevated static charge levels in close proximity to sensitive product, presenting both a contamination and electrostatic discharge exposure. This tutorial will provide a detailed review of the following concepts:

- Cleanroom/clean environment function
- Airborne particle classification standards
- Cleanroom compliance monitoring test methodologies
- Electrostatic attraction relation to airborne and surface contamination
- Electrostatic discharge concerns
- Cleanroom static charge generation challenges and control methodologies

In addition, several case studies of static charge control issues in clean environments will be presented.

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ABOUT THE INSTRUCTORS

Kevin Duncan is a Senior Staff Engineer in the Advanced Assembly Development Engineering department of Seagate Technology in Bloomington, MN, where he has been the Site ESD Coordinator since 2005. He is responsible for controlling factory level ESD in the ultra sensitive Slider and Head Gimbal Assembly (HGA) processes. Kevin has been a member of the ESD Association since 2000 and is currently an elected member of the Board of Directors, a member of the Standards Committee, Technical and Administrative Support (TAS) Committee, and Technical Program Committee. He serves as the Working Group Chairman for WG 3 – Ionization and participates in several other Working Groups. Kevin is Convenor of Maintenance, Team 9 - Flooring, a Technical Expert of the United States National Committee, where he represents the United States participating in International Electrotechnical Commission (IEC) Technical Committee 101 – Electrostatics. He is an ESD Certified Professional Program Manager and an iNARTE Certified ESD Engineer. Kevin graduated in 1998 from the University of Wisconsin – Stout where he received his Bachelor of Science Degree.

Lawrence Levit is the General Manager of LBL Scientific, a consulting firm specializing in static charge control. His practice has given him exposure to a variety of applications extending from semiconductor front and back end fabs, process tool manufacturers, LCD manufacturers, and electronics assembly facilities. Previously he was the Chief Scientist for MKS Ion Systems, Inc. He is a iNARTE certified ESD engineer. Levit holds 12 patents in the fields of ESD control and in electronics design. He has published nearly 50 papers in trade journals and scholarly journals in the field of electrostatic charge control. Before joining Ion Systems, Levit worked at LeCroy Corporation and Jandel Scientific Software. At LeCroy, he was deeply involved in specifying the operation of their digital oscilloscope line and contributed to the instrumentation designs for 6 experiments which produced Nobel prizes. Earlier, Levit was a university professor of physics at Louisiana State University. During his academic tenure, he conducted research in high energy physics at major accelerator laboratories throughout the world. Also, his research in cosmic ray physics was performed on a remote mountain top and in deep mine locations. He presently teaches physics at the Napa Valley College. Levit received a B.S. degree with honors in physics from the Case Institute of Technology in 1964. In 1970, he earned a Ph.D. in experimental high energy physics from Case Western Reserve University.

David E. Swenson retired from 3M in 2003 after 35 years of service. While at 3M, he had responsibility for new packaging material development and application, training of 3M personnel worldwide and providing application assistance to users of static control products globally with particular emphasis on Asia Pacific and Japan. Dave and his wife Geri established a new company, Affinity Static Control Consulting, L.L.C. in 2003. Dave has been a member of the ESD Association since 1984 and has served in many capacities including 1997 Symposium General Chair and president of the Association in 1998 and 1999. He was re-elected to the Association's Board of Directors for a 4th term running from 2006-2008 and was elected president for 2008 and 2009. Dave was presented with the highest award of the ESD Association, the "Outstanding Contributions Award" in 2002 and the Standards Committee "Joel P. Weidendorf Memorial Award" in 2004. He is a member of the Standards Committee serving on the Technology and Administrative Support Team and the ANSI/ESD S20.20 Standard Task Team. Dave is Chair of the Grounding Working Group. Dave also serves as Treasurer and Information Liaison of the Texas Chapter of the ESD Association.

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REGISTER ONLINE AT WWW.ESDA.ORG

First Name: _____ Last Name: _____

Company Name: _____

Street: _____ City: _____

State/Province: _____ Country _____ Zip/Postal Code: _____

Address is (please circle the one that applies) Home or Company

Phone: _____ Fax: _____ E-mail: _____

Course Selection

- March 13, 2012 ESD Standards Overview for the Program Manager
- March 13, 2012 Ionization Issues and Answers for the Program Manager
- March 14, 2012 Packaging Principles for the Program Manager
- March 14, 2012 Cleanroom Considerations for the Program Manager



	Cost on or before 1/17/12		Cost after 1/17/12	
	Members	Non-Members	Members	Non-Members
Each Half Day Course	\$295	\$395	\$495	\$495
1 Full Day (13th or 14th)	\$495	\$595	\$695	\$695
All 4 Tutorials	\$990	\$1190	\$1390	\$1390

Payment Information

Payment is required at time of registration. Only checks drawn in U.S. currency on a U.S. bank that is a member of the Federal Reserve will be accepted; make checks payable to ESD Association. Visa®, Mastercard®, and American Express® and Discover® are accepted.

Amount enclosed \$ _____ Check Credit Card

Credit card type: Visa® Mastercard® American Express® Discover®

Credit card number: _____ Expiration date: _____

Name on card: _____ Security code: _____

Cardholder's signature: _____

Accommodations

Homewood Suites by Hilton®
10925 Stonelake Blvd, Austin, Texas, 78759
Tel: 1-512-349-9966 Fax: 1-512-349-9995

Staybridge Suites
10201 Stonelake Blvd. Austin, TX 78759
Tel: 1-512-349-0888 Fax: 1-512-349-0809

For more information on accommodations visit: centxesdassoc.homestead.com/3MInnovationDirections.html.
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