

EOS/ESD Manufacturing Symposium in Malaysia

Penang Skills Development Centre

1 Jalan Sultan Azlan Shah, 11900 Bayan Lepas, Pulau Pinang, Malaysia

October 14th-17th 2019

October 18th Program Manager Exam (optional)

Co-Sponsor



The EOS/ESD Association is organizing the EOS/ESD Manufacturing Symposium Malaysia. The EOS /ESD Manufacturing Symposium in Malaysia is focused on discussing issues and providing answers to electrostatic discharge in electronic production and assembly.



Call For Presentations

Abstract Submission Deadline July 12, 2019

Submission Instructions

Your presentation abstract (**two slides** including reasonably sized figures) must clearly present the data and the significance of the results. Please submit your presentation abstract online at <https://www.esda.org/events/abstract-submissions-for-eosesd-manufacturing-symposium/> by July 12, 2019 (Friday) deadline. Notification of acceptance will occur by July 29, 2019. Final, full presentations for EOS/ESD Manufacturing Symposium in MS PowerPoint® format must be received by **October 4, 2019**. These MS PowerPoint® slides will be included in the presentation handout that will be distributed during the Symposium. There will be no published proceedings of the Symposium. Technical papers that have been previously published may be considered.

<https://www.everfeed.com.sg/penang-2019>

<https://www.esda-asean.com/featured-news>

Please visit the web page at <https://www.esda.org/events/manufacturing-symposium-in-penang> for regular updates on the Symposium. As it becomes available, we will post information on the full technical program including tutorials, seminars, technical sessions, discussions, workshops, and exhibits.

EOS/ESD Manufacturing Symposium would like you to consider presentation abstract submission topics such as:

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.)

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

- Test Methods and Procedures
- Standards - Comparisons and Analysis
- ESD Control Program Development
- Case Studies
- Round-Robin Testing, Results, and Analysis

Management Chair:
Junjun Li, IBM Corporation

Local Chair:
Marcus Koh, Everfeed Technology Pte Ltd

Sponsored by:



Setting the Global Standards for Static Control!

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EOS/ESD Manufacturing Symposium in Malaysia

**Penang Skills Development Centre
October 14th-17th 2019
October 18th Program Manager Exam (optional)**



EOS/ESD Association, Inc. brings ESD Program Manager Certification to Asia!

Professional Program Manager Certification ensures the understanding of the standard practices and problem solving techniques used to create an ESD protection program in the workplace.

www.esda.org/certification/esda-professional-program-manager/

Attend 3 face to face courses

1. ESD Basics for the Program Manager
2. How To's of In-Plant ESD Auditing and Evaluation Measurements
3. ESD Program Development & Assessment (ANSI/ESD S20.20)

Courses are offered at annual EOS/ESD Association events in Asia

Attend 7 online courses

1. Cleanroom Considerations for the Program Manager
2. Ionization Issues and Answers for the Program Manager
3. System Level for the Program Manager
4. Packaging Principles for the Program Manager
5. ESD Association Standards Overview
6. Device Technology and Failure for the Program Manager
7. Electrostatic Calculations for the Program Manager

Attend online-anytime!

Pass ESD Professional Program Manager exam

**Offered for the 1st time in Malaysia!
October 14th~18th, 2019
www.esda.org**



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Day 1	Day 2	Day 3			Day 4			Day 5
ESD Basics	How to's in plant audit & measurement	S20.20 Day 1	Technical Presentation & Talk	Exhibition	S20.20 Day 2	Technical Presentation & Talk	Exhibition	PrM Exam
	5:30-7pm Calculation Review				5:30-7pm PrM Review			

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October 18th Program Manager Exam (optional)

FC100: ESD Basics for the Program Manager

OCTOBER 14, 2019 9:00 AM - 5:00 PM

Ron Gibson, Advanced Static Control Consulting

Certification: PrM

This tutorial provides the foundation material for understanding electrostatics and ESD and their role in the manufacturing and handling of ESD sensitive devices. The fundamental properties of charge, electric fields, voltage, capacitance, and current are discussed with a view towards understanding key electrostatic phenomena and electrical processes. These include charge generation and decay, material properties, and induction. An overview of device failure mechanisms is presented, including how these models impact ESD control programs. Finally, the course provides an overview of ESD control procedures during handling and manufacturing and an overview of ANSI/ESD S20.20 program requirements. This full day course is required for those in-plant auditors and program managers who are working toward professional ESD certification. The presentation includes many in-class demonstrations, videos, and animated slides. Some sample topics covered in this course are:

- Definitions and relationships among important electrical and mechanical properties
- Causes of charge generation and decay
- Field effects and voltages
- Role of capacitance in ESD ($Q=CV$)
- Overview of key measurements including common pitfalls of some measurements
- Review of ESD failure models
- Understanding and demonstrating electrostatic induction
- Utility and limitations of air ionization
- Basic goals of ESD controls
- Properties of effective ESD control products and materials
- Overview of ANSI/ESD S20.20 ESD program development requirements

FC101: How To's of In-Plant ESD Auditing and Evaluation Measurements

OCTOBER 15, 2019 9:00 AM - 5:00 PM

Ron Gibson, Advanced Static Control Consulting

Certification: PrM

This program reviews the evaluation and periodic verification (audit) measurement procedures for the technical requirements specified in the ANSI/ESD S20.20 ESD program development standard. Detailed explanation of instruments, fixtures, and accessories function and usage are provided. Then, the details of "How to" measure are explained and demonstrated. Measurements include those listed in Table 1: Grounding/Equipotential Bonding Requirements; Table 2: Personnel Grounding Requirements; and Table 3: EPA/ESD Control Items. These recommended measurement procedures confirm the proper operation and use of ESD control products and materials selected as part of a facility's S20.20 ESD control program.

Some sample topics covered in this course are:

- ANSI/ESD S20.20 Technical Control Requirements
- Program Manager's Approach to Instrumentation and Applications
- Testing Ground Circuits and Assessing Connections
- Essential Resistance Measurement Procedures and Concerns
- Electrostatic Field and Voltage Measurements
- Personnel Grounding Considerations vs. ESD Control Points
- Product Installation Baseline Measurements

Evaluation, Acceptance, and Audit Procedures for: Ground Systems, Floors, Worksurfaces, Equipment, Personnel Grounding, Garments, Materials, Production Aids, Packaging, and Ionization Devices

Electrostatic Analysis Measurements including Worksurface Suppression, Footwear/Flooring, and Ionization Decay

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October 18th Program Manager Exam (optional)

FC340: ESD Program Development and Assessment (ANSI/ESD S20.20)

OCTOBER 16-17, 2019 9:00 AM - 5:00 PM

John T. Kinnear, IBM Corporation; Ron Gibson, Advanced Static Control Consulting

Certification: PrM

This seminar 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 prepare for an ESD facility audit. This two-day course is an ESDA certification requirement for in-plant auditors and program managers who are working toward professional ESD certification.

The following topics are covered in this course:

- Overview of ANSI/ESD S20.20
- How to approach an assessment
- Administrative elements
- ESD program assessment
- ESD program techniques for different applications
- Technical elements
- Overview of the assessment process
- The audit checklist and follow-up questions

It is recommended that the ESD Program Development and Assessment (ANSI S20.20) be taken after the certification candidate has taken most of the other program manager related tutorials.

OCTOBER 18

Optional Program Manager Exam



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EOS/ESD Manufacturing Symposium in Malaysia

Penang Skills Development Centre October 14th-17th 2019 October 18th Program Manager Exam (optional)

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: _____ E-mail: _____

Tutorial Selection

- Day 1 ESD Basics for the Program Manager* \$510 USD/ non-member \$610 USD
- Day 2 How To's of In-Plant ESD Auditing and Evaluation Measurements* \$510 USD/
non-member \$610 USD
- Day 3 & 4 ESD Program Development & Assessment (ANSI/ESD S20.20)* \$1,510 USD/
non-member \$1,610USD
- Day 5 Professional Program Manager Certification Exam
(Optional October 18, 2019) \$80 USD

NOTE: You must initiate an official file in your name at EOS/ESD Association, Inc., pay the \$50 USD filing fee, and complete all pre-requisite courses to be eligible to take the exam.

Symposium

- Day 3 & 4 Symposium: Technical Presentation, Talk, and Exhibits* \$800 USD

The EOS/ESD Association, Inc. offers a fifty percent discount for full-time students. Proof of enrollment required. Student fees apply only to symposium or tutorial registration and do not apply to exclusive 10 course bundle for Malaysia event.

* Day 1, 2, 3, & 4, Eligible for HRDF claims under the Kim Bantuan Latihan (SBL) Scheme, subject to prior application to HRDF by the employers/companies.

Exclusive 10 course bundle for Malaysia event Certified Program Manger Certification*

For the exclusive bundle price, payment MUST be made before September 15th, 2019.

- 3 face to face courses: ESD Basics, How To's and S20.20 (Days 1, 2, & 3) \$5,000 USD
 - 7 Online courses: (Class links provided upon payment)
 - Cleanroom Considerations for the Program Manager
 - Ionization Issues and Answers for the Program Manager
 - System Level for the Program Manager
 - Packaging Principles for the Program Manager
 - ESD Association Standards Overview
 - Device Technology and FA Overview
 - Electrostatic Calculations for the Program Manager



Register Online at: <http://www.cvent.com/d/m6qjyt>

Alternative payment: contact Everfeed Phone: +65 6863 1488 E-Mail: info@everfeed.com.sg

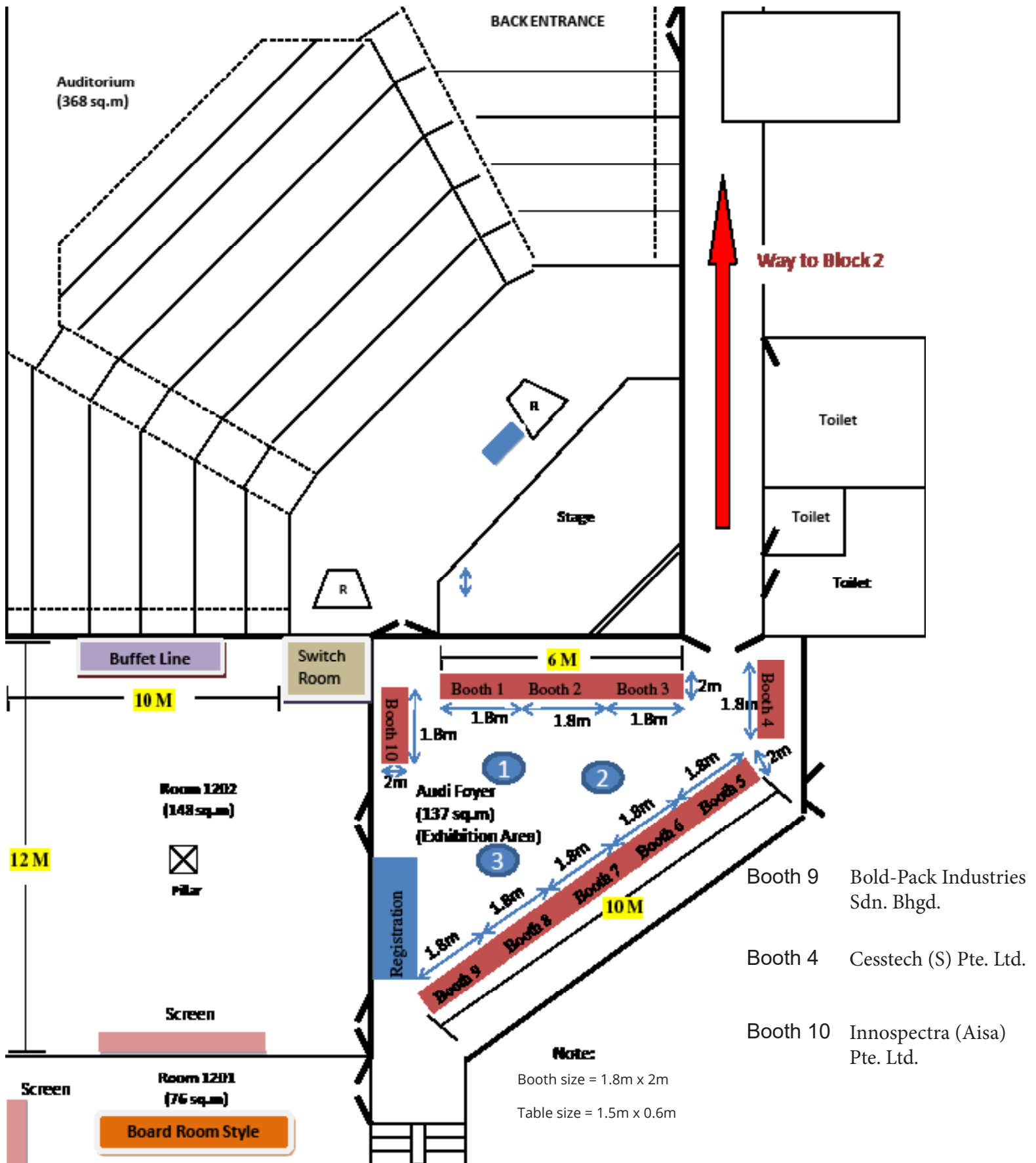
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EOS/ESD Manufacturing Symposium in Malaysia Exhibitor Registration Only

APPLICATION FOR EXHIBIT SPACE

Name of Company: _____

Street Address: _____

City, State, Postal Code: _____

Country: _____

Telephone: _____

Contact: _____ Email: _____

Please provide web address to be used for your link on ESDA website: _____

We will exhibit and demonstrate the following products or services: _____

We are _____ Manufacturers _____ Other (please specify) _____

**Exhibit Space Rental: \$1,000.00 USD
FULL PAYMENT DUE WITH REGISTRATION**

Requested Booth Space _____ Second choice _____ Third Choice _____

Amount enclosed \$ _____ Check Visa® MasterCard® American Express® Discover®

Credit card number: _____ Expiration date: _____

Name on card: _____ Security code: _____

Cardholder's signature: _____

Billing Address _____

City: _____ State: _____ Zip/Postal Code: _____

THE UNDERSIGNED HAS READ AND AGREES TO ABIDE BY THE TERMS ON BOTH SIDES OF THIS APPLICATION.

Application By: _____ Date: _____

(Signature)

NOTES:

1. Each exhibitor receives one (1) symposium registration package for each booth rented.
2. SPACE WILL BE ASSIGNED IN THE ORDER OF RECEIPT OF REGISTRATION
3. Management reserves the right to relocate exhibit space, as necessary, to conform to show regulations.

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