

ISPCE2018

SAN JOSE, CALIFORNIA, USA
IEEE SYMPOSIUM ON
PRODUCT COMPLIANCE ENGINEERING
MAY 14-16, 2018



WHEN

MAY 14-16, 2018

WHERE

SAN JOSE, CALIFORNIA, USA

2018 ISPCE – recap

PSES SD Chapter – July 10,

By: Leszek M Langiewicz

ISPCE

IEEE Symposium on Product Compliance Engineering

- ❖ Symposium Overview
- ❖ Symposium Organizers
- ❖ Symposium – Keynote Speakers
- ❖ Technical Program Summary
- ❖ Best Paper
- ❖ Awards
- ❖ Sponsors
- ❖ 2018 ISPCE Program

ISPCE Symposium

Symposium Overview

- Fifteen Annual IEEE Symposium on Product Compliance Engineering

- May 14-16, 2018 in San Jose, California

- Mission Statement

The Mission of the ISPCE is to provide a forum for product safety engineers and design engineers to discuss and disseminate technical information related to product safety, to enhance personal product safety engineering skills, and to provide product safety engineering outreach to engineers, students and others with an interest in this field as well as the related fields of product safety regulatory compliance.

ISPCE Symposium

Symposium Organizers

- **General Chair**
Murlin Marks, *PSES*
- **Treasurer**
Lei Wang, *Amazon*
- **PSES President**
John Allen, *Product Safety Consulting, Inc.*
- **Technical Program Co-Chairs**
Leszek Langiewicz, *HP inc.*
Grant Schmidbauer, *Nemko USA*
- **Technical Program Secretary**
Ted Eckert, *Microsoft*
- **PSES VP Conferences**
Stefan Mozar, *Dynexsys*
- **Marketing Chair**
Elizabeth Perrier, *ORBIS Compliance*
- **Exhibits & Patrons Management**
Conference Catalysts, LLC
- **Conference Management**
Conference Catalysts, LLC

ISPCE Symposium

Symposium – Keynote Speakers (Monday May 14th)



❑ **Dr. Nancy Leveson** - Professor of Aeronautics and Astronautics at MIT. Dr. Leveson has been working in the field of system safety for 37 years and supervises research in system engineering, hazard analysis, accident analysis, human-automation interaction, management of safety-critical projects, and safety culture. Her latest book, *Engineering a Safer World*, was published in 2012.

❑ **Title:** Building Safety (and Security) into Your Products

❑ **Abstract:** To be cost-effective, safety must be built into products from the beginning. In this talk I will describe a new, more powerful approach to safety based on systems theory that can be used in the early product concept analysis. The analysis method, called STPA (System-Theoretic Process Analysis) is being used successfully on hundreds of products in most industries around the world.

STPA works for hardware, software, human-automation interaction, and management/operations aspects of safety. It also applies to cyber-security.

ISPCE Symposium

Symposium – Keynote Speakers (Tuesday May 15th)



- ❑ **Dr. Necia Werner** - Associate Teaching Professor of English at Carnegie Mellon University, Vice President of the IEEE Professional Communication Society (PCS), and the PCS Coordinator for IEEE Women in Engineering. Dr. Werner research interests include developing new methods for blending learning sciences and technology-enhanced learning tools in writing education for STEM students. At Carnegie Mellon, Werner directs the undergraduate writing programs in professional and technical communication, and teaches courses and workshops on proposal writing, oral presentation, technical writing, public communication of research, and engineering communication. Werner holds degrees in English and Psychology from the University of Wisconsin-Madison, and a PhD in Rhetoric from Carnegie Mellon University.

ISPCE Symposium

Symposium - Technical Program Summary

- Eleven Technical Tracks:
 - ❑ **Battery Track:** Jan Swart, Exponent Inc.
 - ❑ **Compliance 101 Track:** John Allen, Product Safety Consulting, Inc.
 - ❑ **EMC and Wireless Track:** Jim Bacher, JB Consulting
 - ❑ **Emerging Technologies Track:** Ted Eckert, Microsoft
 - ❑ **Environmental/Energy Track:** Rakesh Vazirani, TÜV Rheinland
 - ❑ **Forensics Track:** Daren Slee, CASE Forensics
 - ❑ **Global Hazardous Locations Track:** Paul Kelly, UL, LLC
 - ❑ **Global Market Access Track:** Banshi Patel, PSES
 - ❑ **HBSE/Safety Science Track:** Tom Lanzisero, UL, LLC
 - ❑ **Legal Track:** Kenneth Ross, Bowman and Brooke LLP; Susanne Wende, Noerr LLP
 - ❑ **Medical Track:** Rich Gardner, Baxter

- In total 68 presentations in 4 rooms simultaneously over 3 days plus IEC 62368-1 Panel Discussion

ISPCE Symposium Retrospectives & Learning's

Symposium Overview – Best Paper

Best Paper

"Experiments of DC Human Body Resistance I: Equipment, Setup, and Contact Materials“

-Dr. Hai Jiang (UL, USA) & Paul Brazis (UL, USA)

Abstract

Direct Current (DC) applications have become more prevalent in recent years, primarily due to the increased usage of renewable energy and energy storage systems. A review of the existing safety standards and other literature shows that there is limited experimental data on DC human body resistance. In particular, no information was found by the authors describing the repeatability of DC body impedance and the effect of contact material and other variables. The experimental work described here investigated DC human body resistance and the effects of electrode contact material, wet or dry conditions of the skin, and the repeatability of body impedance for a given set of test conditions. Three male adult volunteers participated in this study; each volunteer completed twenty sets of experiments, with each set including four different combinations of test conditions. The results show that the electrode material has an influence on the measured body impedance when the voltage was less than 15 V, supporting the supposition that the observed nonohmic behavior is attributable to Schottky effects. The variability of the tests (measured by the use of the coefficient of variance) is higher at lower voltage and drops as the voltage increases. Wet conditions were found to provide more consistent test results than dry conditions. Due to the improved measurement consistency and its lowered impedance relative to dry conditions, data under wet conditions are preferred for further analysis.

ISPCE

2018 IEEE PRODUCT SAFETY ENGINEERING SOCIETY AWARDS

26 Appreciation Awards

For Leadership in the IEEE PSES Board of Governors

- Bans Patel

For Leadership on the ISPCE Technical Committee

- Grant Schmidbauer
- Leszek M Langiewicz

For Leadership in the IEEE PSES San Diego Chapter

- Gabriel Alcala
- Leszek M Langiewicz

ISPCE

28 Vendors and 8 Patrons

- Platinum Patron



- Gold Patrons



- Bronze Patron



- Speaker Gift Patron



ISPCE Q&A

FYI; 2018 SAFETY SUMMIT SAN DIEGO



Program | Vendors & Sponsors | Accommodations | [Register Now](#) |  

IEEE PRODUCT SAFETY ENGINEERING SOCIETY
SAN DIEGO CHAPTER INVITES YOU TO



WHEN

October 9, 2018

[Call for Papers](#)



WHERE

Carlsbad, California, USA
@ Holiday Inn Carlsbad

The IEEE Product Safety Engineering Society San Diego Chapter hosts SSSD (Safety Summit San Diego), on all relevant topics for So-Cal professionals in area of product safety.

Join us in San Diego/Carlsbad for 1 day of technical sessions and exhibits.

TOPIC AREAS

The SSSD seeks original and unpublished tutorials on all aspects of product safety including, but not limited to:

- Medical Devices
- Safety of ITE, A/V, & ICT Equipment
- New Standards and Hazard Based Safety Engineering
- Functional Safety
- Batteries and Battery Systems

Presentation Submittal
August 15, 2018
Deadline

Acceptance Notification
August 31, 2018
Deadline

Final Presentation Submission
September 14, 2018
Deadline

Safety Summit San Diego
October 9, 2018

SSSD website sponsored by Advanced Test Equipment Rentals



Product Safety Engineering Society

