STANDARDS AND INTEROPERABILITY PLUGFEST (INTEROP)

Plus IEEE 1451 Standards

MARINA BAY SANDS EXPO AND CONVENTION CENTER SINGAPORE

Virtual Conference

IECON 2020

The 46th Annual Conference of the IEEE Industrial Electronics Society

Marina Bay Sands Expo and Convention Centre, Singapore

October 18-21, 2020

Sponsors: IES Standards TC
Co-sponsors: IES Industrial Agents TC, Industrial Informatics TC

WHAT

IES Standards *Interoperability and Plugfest*, *IEEE 1451 Sensor Networks Standards*, IES Standards Working Group Sessions

OBJECTIVES:

- Provide the IES standards community with verification and validation platforms for the standards so the community can test their development of their applications to these benchmarks, ensuring compliance and interoperability to their systems in IES Fields of Interest

- Encourage industry partners to participate in IEEE Standards by providing verification and validation platforms for standards compliance and interoperability in the industry context.

- Provide demonstrations and prototypes for interoperability and standards.

BENEFITS TO IECON, IES

Introduce IECON 2020 conference participants with exposure to standards development efforts in IES, in collaboration with other societies, show and propagate IES sponsored standards family's progress in industrial electronics and IoT/IIoT/CPS harmonization

Long Term objective: *Provide stable or permanent verification and compliance Centers of Expertise (COE) for industry and academia use, distributed globally under IES Standards support. (e.g. Europe, Asia, So. America, USA)*

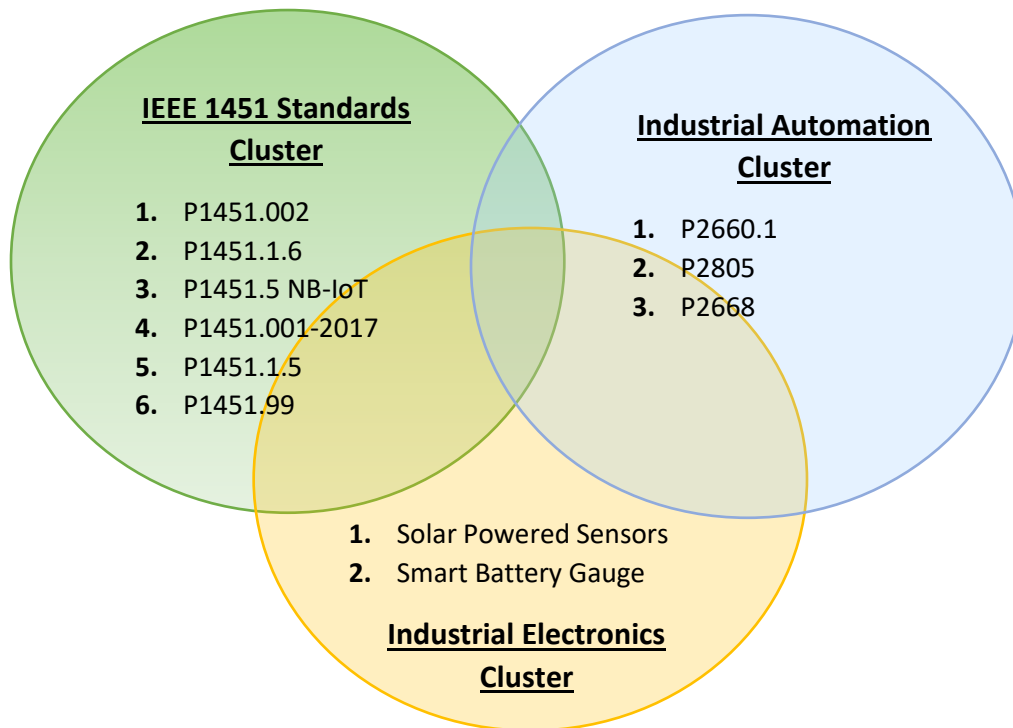|	
PROGRAM ORGANIZERS:	**ADVISORS:** (outside of Stds TC)
V. Huang	Kang Lee IMS Standards TC9
Allen Chen	Roberto Oboe VP TA - IES
Jing Bing Zhang	Khiang Wee Lim A*STAR Singapore
Dietmar Bruckner	
DEMO ORGANIZERS:	**STDS SESSION ORGANIZERS:**
Hiroaki Nishi	Eugene Song (NIST)
Antonio Espirito-Santo	Kim Fung Tsang
Patricia Wong	

PUBLICITY: A. Malinowski, Patricia Wong

REGISTRATION:

1. INTEROP Plugfest (Demos, F2F STDS sessions, conference): SGD $400 INTEROP Rate
2. Full IECON Conference (includes INTEROP Plugfest) : Full regular IECON fee

Register using the INTEROP registration section.

PROGRAM – VIRTUAL SESSIONS

INTEROP PLUGFEST : PARTICIPANTS

IEEE 1451 Standards Cluster

1. P1451.002
2. P1451.1.6
3. P1451.5 NB-IoT
4. P1451.001-2017
5. P1451.1.5
6. P1451.99

Industrial Automation Cluster

1. P2660.1
2. P2805
3. P2668

Industrial Electronics Cluster

1. Solar Powered Sensors
2. Smart Battery Gauge

PLUGFEST TECHNICAL SESSIONS (VIRTUAL):

All times set to IECON 2020 Singapore time

Monday October 19, 2020, 10:30 AM – 12 NOON

Session PF1 Chair: Victor Huang

1. P1451 Family — **E. Song/K. Lee**, NIST, USA *(10:30AM)*
2. Smart Battery Gauge — **B. Balagopal/M. Y. Chow,** NCSU, USA *(11AM)*
3. P1451.5 wireless – NB-IoT — **K. F. Tsang**, City University of Hong Kong *(11:30AM)*

Monday October 19, 2020, 2:30 PM – 4:30 PM

Session PF2 Chair: Dietmar Bruckner

4. P2805 Edge Computing Nodes — **W. Dai**, Shanghai Jiaotung Univ., China *(2:30PM)*
5. P1451.1.5 SNMP — **J. Wu** (IMS), Shanghai Jiaotung Univ, China *(3PM)*
6. P1451.99 Harmonization — **P. Waher/G. Kuppa**, Trust Anchor Group/IEEE India, Sweden/India *(3:30PM)*
7. P2660.1 Industrial Agents — **P. Leitao**, Polytechnic Institute of Braganca, Portugal *(4PM)*

Tuesday October 20, 2020, 10:30 AM – 12 NOON

Session PF3 Chair: Allen Chen

8. IEEE 1451-001-2017 Signal Treatment — **G. Monte**, U. Tecnological Nacional, Argentina
9. IEEE 1451 & IEC 61499 interoperability — **R. Abrishambaf**, U. Miami, Ohio, USA.
10. P2023 Digital Transformation — **Lee Stogner**, USA

Tuesday October 20, 2020, 2:30 PM – 4:30 PM

Session PF4 Chair; Victor Huang

11. P1451.1.6 MQTT — **H. Nishi**, Keio University, Japan
12. P2668 IDEX — **K. F. Tsang**, City University of Hong Kong
13. P1451.002 — **A. Espirito-Santo**, U. da Beira Interior, Portugal
14. Distributed Smart Transducers for Industrial Automation — **H-P. Bernhard**, J. Kepler U. Linz, Austria