

IECON 2021

47th Annual Conference of the
IEEE Industrial Electronics Society
OCTOBER 13 - 16, 2021 | TORONTO, CANADA

STANDARDS AND INTEROPERABILITY PLUGFEST (INTEROP)

Plus IEEE 1451 Standards & Automotive Cluster



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. A *New Automotive Cluster* has been introduced this edition.

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 2021 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:

V. Huang
Allen Chen
Dietmar Bruckner

ADVISORS: (outside of Stds TC)

Roberto Oboe VP TA - IES
Sheldon Williamson Gen. Chair IECON

DEMO ORGANIZERS:

Antonio Espirito-Santo
Akshay Rathore (IECON rep)
Fei Gao (IECON rep)

STDS SESSION ORGANIZERS:

Eugene Song (NIST)
Kim Fung Tsang

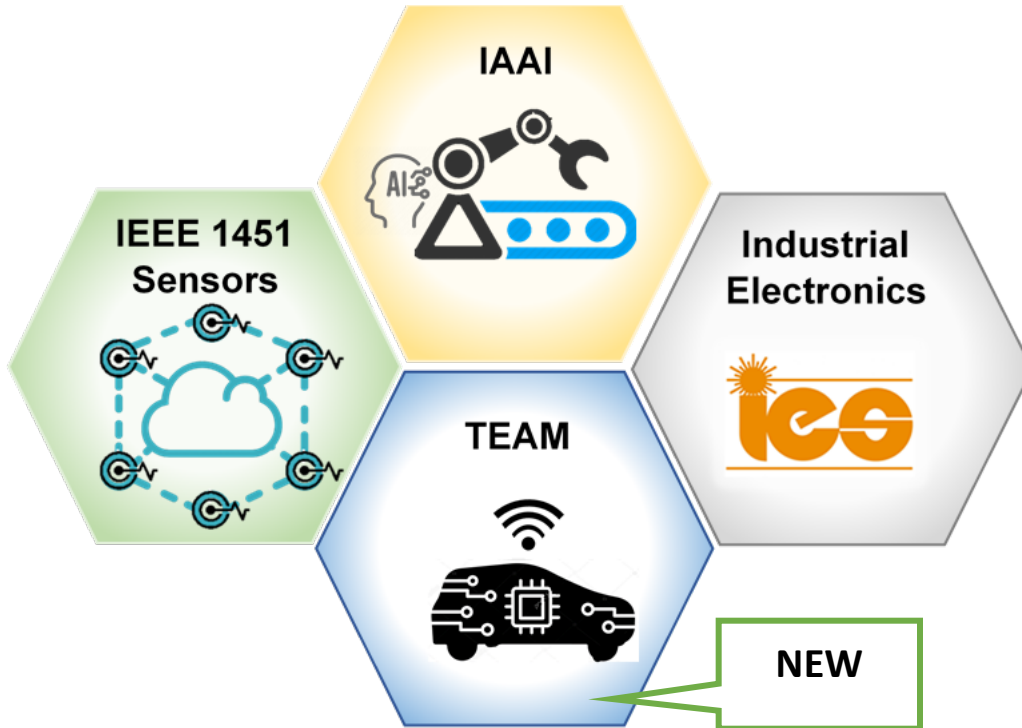
PUBLICITY: V. Huang

REGISTRATION:

1. INTEROP Plugfest (Demos, F2F STDS sessions, conference): **US \$250 INTEROP Rate**
2. Full IECON Conference (includes INTEROP Plugfest) : Full regular IECON fee

Register using the INTEROP registration section.

INTEROP PLUGFEST : PARTICIPANTS

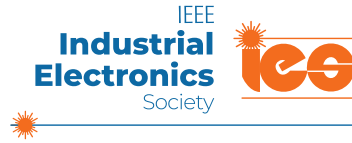


- IEEE 1451 Sensors Standards Cluster**
1. P1451.0
 2. P1451.001-2017
 3. P1451.002
 4. P1451.5.X
 5. P1451.1.5
 6. P1451.1.6

- Industrial Automation- Artificial Intelligence (IAAI) Cluster**
1. P2805
 2. P2668

- Industrial Electronics Cluster**
1. Smart Battery Gauge
 2. P2023
 3. TBD (Reza)

- Transportation Electrification & AutonoMous Vehicles (TEAM) Cluster**
1. E-mobility Cloud Computing - Siemens
 2. RT HIL for grid & EVs – Typhoon HIL
 3. Energy Management for EVs – NC State



PROGRAM

TIME (EDT)	Wednesday Oct 13	Thursday Oct 14	Friday Oct 15	Saturday Oct 16
10:00 – 11:20AM	Session 1 Automation		Session 3 IEEE 1451 & Wireless I/F	Session 4 IEEE 1451 CoE
11:30AM – 12:50PM		Session 2 TEAM (Automotive) New!		

PLUGFEST TECHNICAL SESSIONS:

All times set to IECON 2021 Canadian EST time

Wednesday October 13, 2021, 10:00 AM – 11:20 AM

Session 1: Automation

Chair; Dietmar Bruckner

- | | |
|------------------------|------------------|
| 1. Smart Battery Gauge | Mo-Yuen Chow |
| 2. P2805 | William Dai |
| 3. P2023 | Lee Stogner |
| 4. P2668 | Kim Fung Tsang |
| OPEN DISCUSSIONS | -- 20 minutes -- |

Thursday October 14, 2021, 11:30 AM – 12:50 PM

Session 2: TEAM (Automotive) NEW!!

Chairs; Fei Gao & Akshay Rathore

- | | |
|---|-------------------------------|
| 5. Cloud Computing Simulation platform for e-mobility | Siemens |
| 6. Real-Time Sim & HIL for grids & EVs | Typhoon HIL |
| 7. Energy Management & EVs | NC State University (MY Chow) |
| 8. AUTO 4 (TBD) | TBD |
| OPEN DISCUSSIONS | -- 20 minutes -- |



Friday October 15, 2021, 10:00 AM – 11:20 AM

Session 3: IEEE 1451 & Wireless Interface

Chairs: Allen Chen & Eugene Song

- | | |
|--|--------------------|
| 9. P1451.0 | Lee/Song/Schmalzel |
| 10. P1451.5X | Kim Fung Tsang |
| 11. IEEE 1451 & IEC 61499 Interoperability | Reza Abrishambaf |
| OPEN DISCUSSIONS | -- 20 minutes -- |

Saturday October 16, 2021, 10:00 AM – 11:20 AM

Session 4: IEEE 1451 Centers of Expertise (CoE)

Chairs: Victor Huang & Kang Lee

- | | |
|--------------------|------------------------|
| 12. P1451.001-2017 | Gustavo Monte |
| 13. P1451.002 | Antonio Espirito-Santo |
| 14. P1451.1.5 | Jun Wu |
| 15. P1451.1.6 | Hiroaki Nishi |
| OPEN DISCUSSIONS | -- 20 minutes -- |