

IEEE Industry Applications Society
Industrial Power Converters Committee (IPCC)
2024 Annual Meeting Minutes

Tuesday, October 22nd, 2024, 15:00 pm-16:00 pm CST

Phoenix Convention Center, Room 124b

Phoenix, Arizona, U.S.A.

Members in Attendance

Total attended: 52

| LAST NAME | FIRST NAME | INSTITUTION | COUNTRY |
|-----------------|--------------|--|---------|
| Anglani | Norma | University of Pavia | Italy |
| Biadene | Davide | University of Padova | Italy |
| Briz Del Blanco | Fernando | University of Oviedo | Spain |
| Cacciato | Mario | Univ. of Catania | Italy |
| Damiano | Alfonso | Università di Cagliari | Italy |
| di Benedetto | Marco | Roma Tre University | Italy |
| Di Nezio | Giulia | Roma Tre University | Italy |
| Empringham | Lee | University of Nottingham | UK |
| Formentini | Andrea | University of Genova | Italy |
| Grbović | Petar | University of Innsbruck | Austria |
| Guo | Liping | Northern Illinois University | USA |
| Guo | Feng | University of Wisconsin-Milwaukee | USA |
| Hasegawa | Kazunori | Kyushu Institute of Technology | Japan |
| Itoh | Junichi | Nagaoka University of Technology | Japan |
| Kusaka | Keisuke | Nagaoka University of Technology | Japan |
| Lee | Tzung-Lin | National Sun Yat-Sen University | Japan |
| Lu | Xiaonan | Purdue University | USA |
| Luna | Massimiliano | INM-CNR | Italy |
| LIN | PENGFENG | Shanghai Jiao Tong University | China |
| Manjrekar | Madhav | University of North Carolina - Charlotte | USA |
| Mannen | Tomoyuki | University of tsukuba | USA |
| Mattavelli | Paolo | University of Padova | Italy |

| LAST NAME | FIRST NAME | INSTITUTION | COUNTRY |
|-------------|---------------|------------------------------------|---------|
| Mengoni | Michele | University of Bologna | Italy |
| Ojo | J. Olorunfemi | Tennessee Technological University | USA |
| Petrella | Roberto | University of Udine | Italy |
| Pucci | Marcello | INM-CNR | Italy |
| Pugliese | Sante | Kiel University | Germany |
| Solero | Luca | Roma Tre University | Italy |
| Simonetti | Francesco | Aalborg University | Denmark |
| Terlizzi | Cristina | University of Rome Tor Vergata | Italy |
| Tarisciotti | Luca | University Andres Bello | Chile |
| Tresca | Giulia | University of Pavia | Italy |
| Zanchetta | Pericle | University of Pavia | Italy |
| Zarri | Luca | University of Bologna | Italy |
| Yoon | Young-Doo | Hanyang University | Korea |
| Pizzimenti | Francesca | Terna SPA | Italy |
| Benfatto | Oriana | Università di Pavia | Italy |
| Vancini | Luca | University of Bologna | Italy |
| Fernandez | Pablo Garcia | University of Oviedo | Spain |
| Patil | Niranjan | Tmec | USA |
| Zhang | Daifei | University of Toronto | USA |
| Li | Gang | CATL | Canada |
| Palazzo | Simone | University of Cassino | Italy |
| Avoki | Omekanda | General Motors | USA |
| Riccio | Jacopo | University of Nottingham | UK |
| Adda | Ravindranath | IIT Guwahati | Denmark |
| Volpini | Andrea | Università di Pavia | Italy |
| Gemma | Filippo | Università di Pavia | Italy |
| Rokocakau | Samuela | Università di Pavia | Italy |
| Suh | Yongsug | Jeonbuk National University | Korea |
| Wang | Mei Fang | Sun Yat-sen university | Taiwan |
| Huang | Wenkang | Infineon Technologies | USA |

1. Approval of 2023 COMMITTEE MEETING MINUTES and 2024 IPCC Meeting Agenda

Approval of the 2023 committee meeting minutes was moved by Petar Grbović and seconded by Pericle Zanchetta.

Approval of the 2023 committee meeting agenda was moved by Petar Grbović and seconded by Pericle Zanchetta.

2. IPCC Officers Report

IPCC Chair, Yongsug Suh, organized the meeting and gave a presentation on the following topics. Please refer to the presentation for more details.

A. Membership roster: 470, including 25 new members. However, only 317 are active members, and 153 are temporarily inactive members.

B. Becoming an active member: Attending IPCC meeting held at ECCE; active with IEEE/IAS/IPCC activities; inviting active members to participate IPCC activities; publishing at IAS-sponsored conferences.

C. Introduction of IPCC Officers and Subcommittees for 2024: 4 officers and 10 members, among which 3 are from industry.

D. IPCC participations in ECCE 2024: 2 General Co-Chairs, 3 TPC co-chairs (record), 1 industry partnerships chairs, 1 research and government Lab Partnership Chair, 1 tutorial chair, 1 special sessions chairs, 1 WIE chair, 1 Student Activities Chairs, 1 Young Professionals Chair, 1 awards chair and 5 Organizing Committee Members. IPCC participation in technical activities including Track E and Track F paper review).

3. Reports from Fellow and awards nomination Subcommittees

IPCC Fellow and Award Nominating Chair, Robert Guenther, has made presentation slides on the following topics. Yongsug Suh gave a presentation instead of Robert Guenther. Please refer to the presentation for more details.

A. IAS IPCSD Gerald Kliman Innovator Award: Noriko Kawakami, Toshiba-Mitsubishi-Electric Industrial Systems Corporation (TMEIC)

B. IAS Members in IEEE Fellow Class 2025: 9 nominated through IAS, and 8 nominated through other societies.

C. Fellow nomination must be completed by **February 7, 2025** for Fellow class of 2026, which is earlier than the usual March 1.

D. Other awards: deadlines vary from March 15 to June 1. Please refer to the presentation for more details.

4. Reports from Other Subcommittees

- Standards: Lee Empringham: Standards Chair

A. IPCC has initiated and applied for the following three projects to IEEE:

P3542: Standard for Efficiency Classification of fully Integrated Motor Drives,
P3543: Standard for Power Quality requirements for Fully Integrated Motor
Drives,

P3544: Standard for Data interconnect requirements for Power factor correction
of distributed Variable Frequency Motor Drives.

B. Project in preparation: Standard for EMI emissions fed by DC grids in Industrial
installations

• Special activities Co-Chairs: Elisabetta Tedeschi, Tianqi Hong, Lisa Qi

A. ECCE 2024 Tutorial and Special Session

B. IPCSD DEIC (Diversity, Equity and Inclusion Committee) chair Giovanna Oriti
gave a supplementary presentation on the DEIC activities in IAS on behalf of
Elisabetta Tedeschi.

B. Next Steps: Broad impacts within and beyond IPCC

5. IAS Transactions Report

IAS IPCC Paper Review Chair, Stefano Bifaretti, has been not present and Pericle
Zanchetta gave a presentation on the following topics. Please refer to the presentation for
more details.

A. IPCC Associate Editors: 25 in Oct. 2024

B. Submit paper to IPCC within 12 months after presenting at an IAS-sponsored
conference and with at least 20% new content.

C. Statistics: submissions by committee (IPCC is 36%, largest percentage in IPCSD),
decision time, and acceptance rate (56% in 2023).

6. IEEE Open Journal of Industry Applications

IEEE Open Journal on Industry Applications Editor-in-Chief, Pericle Zanchetta, gave a
presentation on the following topics,

A. 2019-2024: 358 submitted papers, in which 140 have been accepted 218 have been
rejected -> acceptance rate: 39.1%

B. Average Days to First Decision: **40.6 days**

C. Open Access Fee effective 1 Jan. 2025: \$1995 USD, with 20% discount for IAS
members

D. Impact Factor is 7.9 in 2023.

7. IPCC 2024 prize paper awards

IPCC Transaction Review Chair, Stefano Bifaretti, has been not present and Yongsug Suh
presented the following topics

A. IPCC ECCE & TIA 2024 Prize Paper Award Committee & Evaluation process

B. IPCC ECCE 2024 prize paper award winners:

First Prize: Petros Karamanakos, Mirza Abdul Waris Begh, Shirin Rahmanpour, Tobias Geyer, “Gradient-Based Predictive Pulse Pattern Control for Grid-Connected Converters with LCL Filters”.

Second Prize: Xin Lou, Feiyang Zhu, Zheqing Li, Qiang Li, Fred C. Lee, “Single-Stage 48 V/1.8 V Coupled-Transformer Voltage Regulator (CTVR)”.

Third Prize: Daniel Chavez, Damian Sal y Rosas, Julio Tafur , “Single-Stage Quad-Active-Bridge Series-Resonant AC-DC Converter: Modulation for Active and Reactive Power”.

C. IPCC TIA 2024 prize paper award winners:

First Prize: Jacopo Riccio, Petros Karamanakos, Shafiq Odhano, Mi Tang, Mauro Di Nardo, Pericle Zanchetta, “Direct Model Predictive Control of Synchronous Reluctance Motor Drives”.

Second Prize: Arup Ratan Paul, Arghyadip Bhattacharya, Kishore Chatterjee, “A Novel Single Phase Grid Connected Transformer-less Solar Micro-inverter Topology with Power Decoupling Capability”.

Third Prize: Emerson L. Soares, Cursino B. Jacobina, Nady Rocha, Victor Felipe M. B. Melo, “Dual Converter Operating with Floating Capacitors Connecting Open-End Winding Doubly-Fed Induction Generator to the DC-Microgrid”.

8. Presentation on Planning for ECCE 2025 – Iqbal Husain

- To be held in Philadelphia, Pennsylvania, USA, October 19-23, 2025
- Volunteers needed for Topic Chairs and Session Chairs
- Please submit paper digest and tutorial proposals by March 2, 2025.

9. Promotion for IAS sponsored 2025 conferences (...please refer to the presentation slides for more information)

A. Avoki Omekanda Introduced 2025 IEEE Industry Applications Society (IAS) Annual Meeting Incorporating Industrial & Commercial Power Systems (I&CPS)-Asia Conference: **Hilton Taipei Sinban, in New Taipei, Taiwan, June 15-20, 2025**

B. Luca Solero introduced Flagship conference in USA: **APEC 2025, Georgia World Congress Center, Atlanta, GA, March 16-20, 2025**

C. Junichi Itoh, IPCC Asian Liaison Officer, introduced IAS-sponsored conferences in Asia: **ICEMS 2024, Fukuoka, November 26-29, 2024, IPEC 2026 ECCE Asia, May 31- June 4, 2026, Nagasaki, Japan**

D. Petar Grbović, IPCC European Liaison Officer, introduced IAS-sponsored conferences in Europe: XV International Symposium on Industrial Electronics and Applications – INDEL 2024, 6-8 November 2024, Banja Luka, Bosnia and Herzegovina, **23rd International Symposium on POWER ELECTRONICS Ee 2025, Oct. 29th - Nov. 1st 2025, Novi Sad, Republic of Serbia**

10. Planning of ECCE 2025

volunteer recruitment for ECCE 2025 Topic chairs and session chairs

11. Closing remarks & Motion to adjourn

Moved by Luca Solero and seconded by Pericle Zanchetta.

Yongsug Suh, Chair

Wenkang Huang, Vice-Chair

Marco di Benedetto, Secretary

Xiaonan Lu, Past-Chair