

**IEEE Industry Applications Society
Industrial Power Converters Committee (IPCC)
2023 Annual Meeting Minutes**

Tuesday, October 31st, 2023, 7:00pm-8:00pm CST

Music Center, Room 204

Nashville, Tennessee, U.S.A.

Members in Attendance

Total attended: 48

LAST NAME	FIRST NAME	INSTITUTION	COUNTRY
Bifaretti	Stefano	University of Rome Tor Vergata	Italy
Bruno	Lara	Politecnico di Bari	Italy
Burgos	Rolando	Virginia Tech	USA
Chang	Che-Wei	Virginia Tech	USA
Chen	Yuxiang	University of Arkansas	USA
Choi	Hee-won	Jeonbuk National University	Korea
Cuzner	Robert	University of Wisconsin - Milwaukee	USA
D'amato	Davide	Politecnico di Bari	Italy
Di Benedetto	Marco	Roma Tre University	Italy
Di Nezio	Giulia	Roma Tre University	Italy
Di Salvo	Salvatore	University of Pavia	Italy
Dong	Dong	Virginia Tech	USA
Du	Xinyuan	University of Arkansas	USA
Du	Liyang	University of Arkansas	USA
Empringham	Lee	University of Nottingham	UK
El Shafei	Ahmad	University of Wisconsin - Milwaukee	USA
Guenther	Robert	EPEM LLC	USA
Granata	Samuele	University of Pavia	Italy
Huang	Wenkang	Infineon Technologies	USA
Hidemine	Obara	Yokohama National University	Japan
Hiroki	Watanabe	Nagaoka University of Technology	Japan

LAST NAME	FIRST NAME	INSTITUTION	COUNTRY
Keisuke	Kusaka	Nagaoka University of Technology	Japan
Kim	Tae Yun	Jeonbuk National University	Korea
Koukoula	Isavella	Tampere University	Finland
Leuzzi	Riccardo	University of Pavia	Italy
Li	Tianchen	University of Wisconsin - Milwaukee	USA
Li	Xiaoling	University of Arkansas	USA
Lu	Xiaonan	Purdue University	USA
Mannen	Tomoyuki	University of Tsukuba	Japan
Mantooth	Alan	University of Arkansas	USA
Nasiri	Adel	University of South Carolina	USA
Odhano	Shafiq	Newcastle University	UK
Oriti	Giovanna	Naval Postgraduate School	USA
Qi	Lisa	ABB	USA
Olson	Ryan	University of Wisconsin - Milwaukee	USA
Palazzo	Simone	University of Cassino	Italy
Phukan	Ripun	Virginia Tech	USA
Pugliese	Sante	Kiel University	Germany
Solero	Luca	Roma Tre University	Italy
Suh	Yongsug	Jeonbuk National University	Korea
Tarisciotti	Luca	University Andres Bello	Chile
Terlizzi	Cristina	University of Rome Tor Vergata	Italy
Tresca	Giulia	University of Pavia	Italy
Vahid	Sina	Marquette University	USA
Wasiq	Mohammad	University of Rome Tor Vergata	Italy
Yang	Haodong	University of Arkansas	USA
Zanchetta	Pericle	University of Nottingham	UK
Zarri	Luca	University of Bologna	Italy

1. Approval of 2022 COMMITTEE MEETING MINUTES and 2023 IPCC Meeting Agenda

Approval of the 2022 committee meeting minutes was moved by Luca Solero and seconded by Pericle Zanchetta.

Approval of the 2023 committee meeting agenda was moved by Luca Solero and seconded by Pericle Zanchetta.

2. IPCC Officers Report

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

- A. Membership roster: 445, including 12 new 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 2023: 4 officers and 10 members, among which 3 are from industry.
- D. IPCC participations in ECCE 2023: 3 TPC co-chairs (record), 4 industry partnerships chairs, 1 tutorial chair, 2 plenary session chairs, 2 special sessions chairs, 1 WIE chair, and 1 awards chair. 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, gave a presentation on the following topics. 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 2023: 8 nominated through IAS, and 6 nominated through other societies.
- C. Fellow nomination must be completed by **February 7, 2024 for Fellow class of 2025**, 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

- Special activities: Elisabetta Tedeschi, Special Activity Chair, and Tianqi Hong, Co-Chair
 - A. Working group: Grid Interactive Power Converters
 - B. ECCE 2023 Tutorial and Special Session
 - C. Next Steps: Broad impacts within and beyond IPCC
- Standards: Lee Empringham: Standards Chair
 - A. IPCC to co-sponsor with PELS the standard, P3380 - Recommended Practice for System Stability of AC Power Converters in Data Centers
 - B. Industry Engagement: ITT Goulds Pumps, Sprint Electric, TTPi, Infineon, ST Microelectronics

5. Election

- New Secretary: Marco di Benedetto, Assistant Professor of Roma Tre University, and strong IPCC involvement. Moved by Pericle Zanchetta, and seconded by Stefano Bifaretti.
- New Special Activity Co-Chair: Lisa Qi, Senior Principal Scientist of ABB. 18 granted US patents and industry standards experience. Moved by Luca Solero, and seconded by Shafiq Odhano.

6. IAS Transactions Report

IAS IPCC Paper Review Chair, Stefano Bifaretti, gave a presentation on the following topics. Please refer to the presentation for more details.

- A. IPCC Associate Editors: 25 in 2022 and 21 in 2023
- 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).

7. 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. 2020-2023: 104 papers accepted out of 258 submissions -> acceptance rate: 41%
- B. Average Days to First Decision: **40.6 days**
- C. Open Access Fee effective 1 Jan. 2024: \$1995 USD, with 20% discount for IAS members
- D. Impact Factor was not received in 2023 due to non-technical issues.

8. IPCC 2022 prize paper awards

IPCC Transaction Review Chair, Stefano Bifaretti, presented the following topics

- A. IPCC ECCE 2022 Prize Paper Award Committee & Evaluation process
- B. New Rules used in the award paper selections
 - 1) IPCC ECCE 2022 Prize: Selected from papers in ECCE Tracks E and F, and papers are selected based on the digests' average scores. Top 12 papers from Track E and top 10 papers from Track F are evaluated by Awards Subcommittee.
 - 2) IPCC TIA 2022 Prize: Papers are preselected based on the M-score provided by Manuscript Central, and the top-10 papers are included in the ballot and evaluated by Awards Subcommittee.
- B. IPCC ECCE 2022 prize paper award winners:

First Prize: Ripun Phukan, Xingchen Zhao, Che-Wei Chang, Rolando Burgos, Dong Dong, Arnaud Plat and Debbou Mustapha, "Optimized DC-AC EMI Filter Design for DC-Fed High Speed SiC-Based Motor Drive".

Second Prize: Thiago Pereira, Yuqi Wei, Homer A. Mantooth and Marco Liserre, “Analysis and Design of a Multiport Resonant DC Transformer for Solid-State Transformer Applications”.

Third Prize: Ryan Olson, Ahmad El Shafei, Robert M. Cuzner, Yue Zhao, Ma Zhuxuan, Adel Nasiri and Tianchen Li, “Derivation and Validation of a Common-Mode Model for a Neutral Point Clamped Dual Active Bridge”.

C. IPCC TIA paper award is a newly added award.

IPCC TIA 2022 prize paper award winners:

First Prize: Tarisciotti, Luca; CHEN, LINGLIN; Shao, Shuai; Dragicevic, Tomislav; Wheeler, Patrick; Zanchetta, Pericle, “Finite Control Set Model Predictive Control for Dual Active Bridge converter”.

Second Prize: Lin, Fanfan; Zhang, Xin; Li, Xinze; Sun, Changjiang; Cai, Wenjian; Zhang, Zhe, “Automatic Triple Phase Shift Modulation for DAB Converter with Minimized Power Loss”.

Third Prize: Du, Xinyuan; Diao, Fei; Zhao, Zhe; Zhao, Yue, “An All Silicon Carbide 3kV/540V Series-Resonant Converter for Electric Aircraft Systems”.

9. Promotion for IAS sponsored 2024 conferences

A. Yongsug Suh introduced flagship conference in Asia: **IPEMC 2004/ECCE Asia 2024, may 17-20, 2024, Chengdu, China;**

B. Flagship conference in USA: **APEC, Long Beach, California, Feb. 25-29, 2024**

10. Presentation on Planning for ECCE 2024 - Luca Solero

- To be held in Phoenix, Arizona, USA, October 20-24, 2024
- Volunteers needed for Topic Chairs and Session Chairs
- Please submit paper digest and tutorial proposals by March 8, 2024, special session proposals April 1, 2024, and late breaking research briefs June 7, 2024.

11. Closing remarks & Motion to adjourn

Moved by Luca Solero, and seconded by Pericle Zanchetta.

Xiaonan Lu, Chair

Yongsug Suh, Vice-Chair

Wenkang Huang, Secretary

Luca Solero, Past-Chair