

Industrial Power Converters Committee Meeting

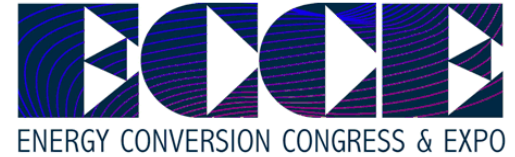
October 22th, 2024

- **Approval of the Agenda and Approval of 2023 Meeting Minutes**
(5 min) (<http://sites.ieee.org/ipcc/minutes>)
- **Officers Report (5 min)**
 - ECCE 2024
- **Reports from Subcommittees**
 - Fellow and awards nomination (5 min)
 - Standards (5 min)
 - Special activities (5 min)

- **IAS Transactions (15 min)**
 - Associate Editors acknowledgment
 - IAS Transactions review statistics
 - IEEE Open Journal of Industry Applications
 - IPCC prize paper awards
- **Promotion for IAS sponsored 2025 conferences (15 min)**
 - ECCE 2025
 - IAS Annual Meeting 2025
 - APEC 2025, Miscellaneous
- **Planning of ECCE 2025 (5 min)**
 - Call for Special Sessions and Tutorials
 - Volunteers as Topic Chairs and Session Chairs
- **Closing remarks & Motion to adjourn**



Committee for 2024



Committee Officers

Chair	Yongsug Suh	yongsug.suh@gmail.com
★ Vice-Chair	Wenkang Huang	wkhuang@ieee.org
Secretary	Marco di Benedetto	marco.dibenedetto@uniroma3.it
Past Chair	Xiaonan Lu	xiaonan.lu@ieee.org



Committee for 2024



Industrial Power Converter Subcommittees

Transactions Review Chair	Stefano Bifaretti	stefano.bifaretti@uniroma2.it
Transactions Review Co-Chair	Shafiq Odhano	shafiq.odhano@newcastle.ac.uk
★ Fellow and Award Nominating Chair	Robert N. Guenther	rnguenther@gmail.com
Standards Chair	Lee Empringham	lee.empringham@nottingham.ac.uk
Special Activity Chair	Elisabetta Tedeschi	elisabetta.tedeschi@ntnu.no
Special Activity Co-Chair	Tianqi Hong	thong@anl.gov
★ Special Activity Co-Chair	Lisa Qi	lisa.qi@ieee.org
Asian Liaison Officer	Junichi Itoh	itoh@vos.nagaokaut.ac.jp
Asian Liaison Officer	Jeehoon Jung	jhjung@unist.ac.kr
European Liaison Officer	Petar Grbovic	petar.grbovic@uibk.ac.at
European Liaison Officer	Petros Karamanakos	p.karamanakos@ieee.org

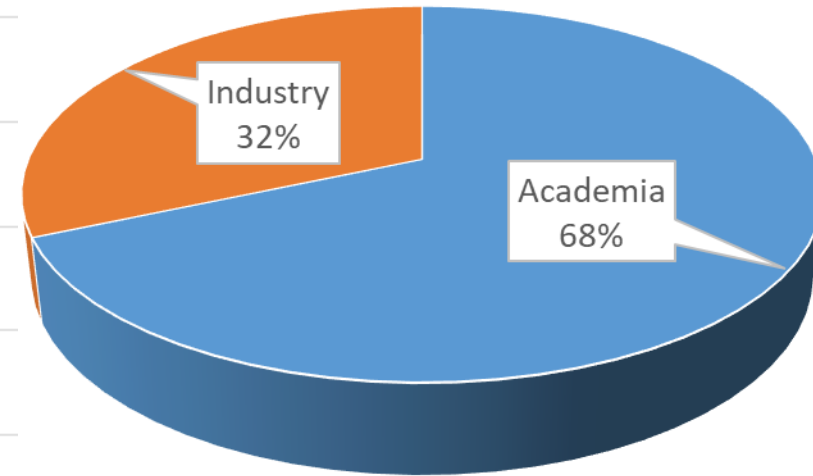
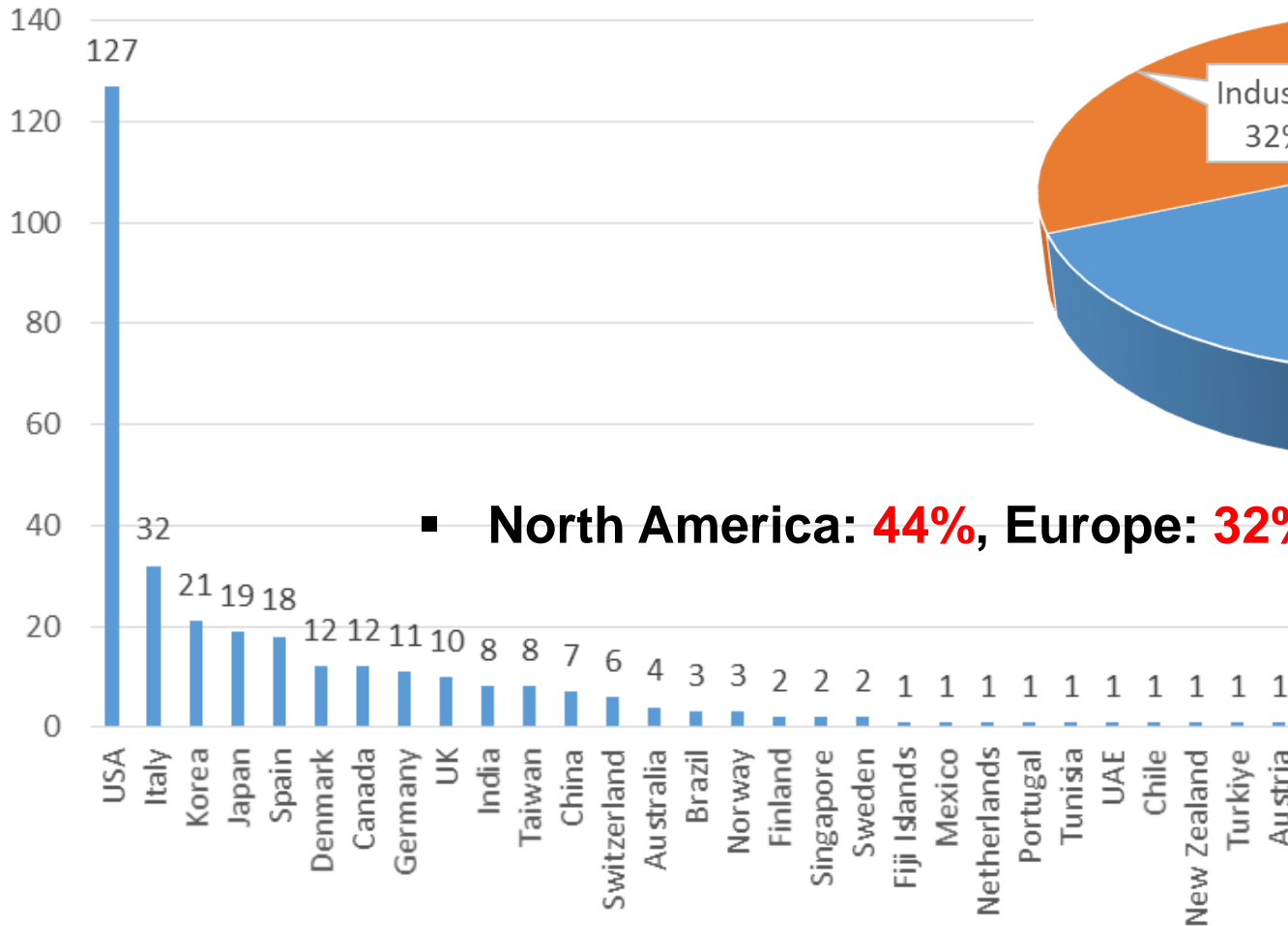
Industry members

IPCC Representative in IPCSD Working Group/Committee

- **Special Issue Proposals for JESTPE: Petros Karamanacos**
- **Conference Development Committee: Xiaonan Lu, Junichi Itoh**
- **DEIC (Diversity, Equity and Inclusion Committee): Elisabetta Tedeschi**
- **Standard – IEEE P3380**
 - Lee Empringham, Arman Oshnoei, Yuhua Du, Woojin Kang

- **Membership roster is at 470 (+25 newly registered since last meeting)**
 - Active members: 317 (67%)
 - Temporarily inactive members: 153 (33%)
- **Definition of temporarily inactive members**
 - According to IPCC Operating Guide (Section II, D Maintaining Membership)
 - In order to keep the member service efficient and focused
 - Temporarily inactive members have been sorted who did not meet minimum standards for active participation and no response to membership confirmation email (no attendance at annual meeting and no participation in subcommittees including TPC of ECCE NA for last 10 years)
 - Temporarily inactive members can come back to active members by meeting minimum standards at any time

Membership Statistics



■ **North America: 44%, Europe: 32%, Asia: 21%**

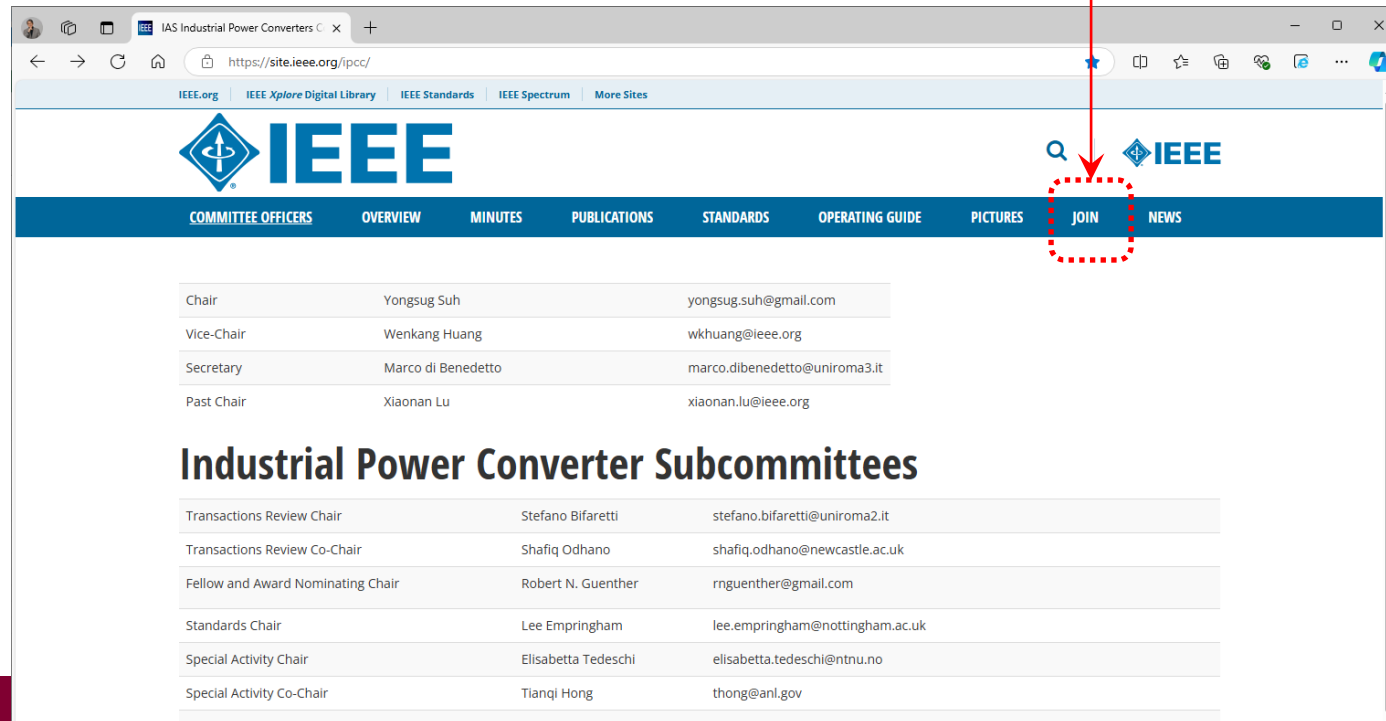


Membership Benefits



- **Journal activities - Associate editors, Special issue proposals**
 - IEEE Transactions on Industry Applications, Magazine, Open Journal
 - JESTPE, JESTIE
 - Transactions on Transportation Electrification, Transactions on Sustainable Energy, IEEE Electrification Magazine, Transactions on Smart Grid
- **Conference activities – Topic Chairs, TPC members**
 - ECCE NA, APEC, ECCE Asia, etc.
- **Technical activities**
 - Webinar presenter, Standard committee
- **Award activities – Review committee**
 - Transactions & conference paper awards, IAS sponsored awards, IEEE Fellow, etc.
- **Email notifications**

- **Spread the word to friends, colleagues, and students**
 - Online registration at <http://sites.ieee.org/ipcc/>
 - Update email address information to get the latest news
 - Attending the IPCC meeting held every year at ECCE (usually)

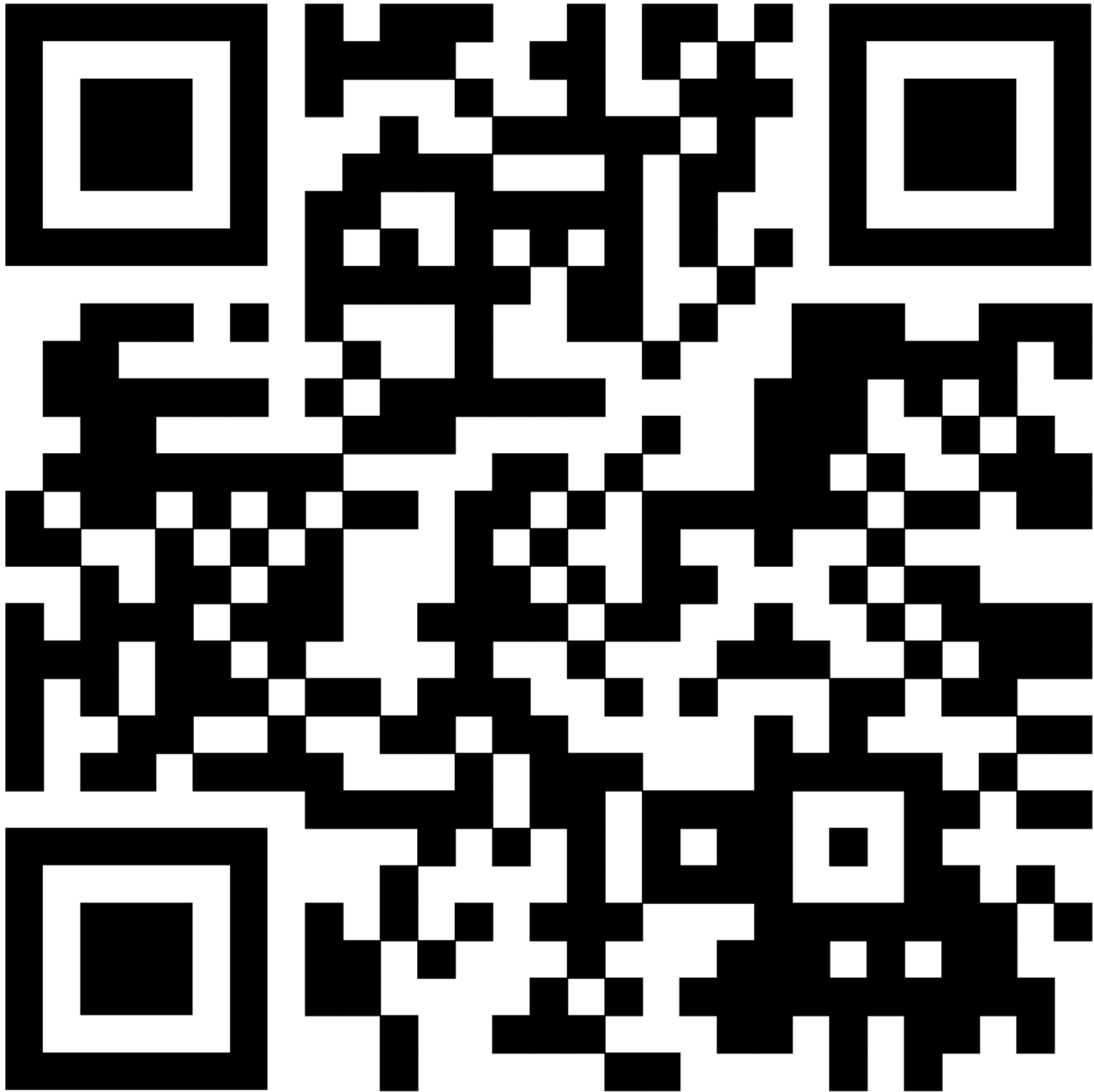


The screenshot shows a web browser window with the URL <https://sites.ieee.org/ipcc/>. The page features the IEEE logo and a navigation menu with the following items: COMMITTEE OFFICERS, OVERVIEW, MINUTES, PUBLICATIONS, STANDARDS, OPERATING GUIDE, PICTURES, JOIN, and NEWS. The 'JOIN' button is highlighted with a red dashed circle and a red arrow pointing to it from the text in the list above. Below the navigation menu, there is a table of committee officers:

Chair	Yongsug Suh	yongsug.suh@gmail.com
Vice-Chair	Wenkang Huang	wkhuang@ieee.org
Secretary	Marco di Benedetto	marco.dibenedetto@uniroma3.it
Past Chair	Xiaonan Lu	xiaonan.lu@ieee.org

Below the table, there is a section titled "Industrial Power Converter Subcommittees" with another table:

Transactions Review Chair	Stefano Bifaretti	stefano.bifaretti@uniroma2.it
Transactions Review Co-Chair	Shafiq Odhano	shafiq.odhano@newcastle.ac.uk
Fellow and Award Nominating Chair	Robert N. Guenther	rnguenther@gmail.com
Standards Chair	Lee Empringham	lee.empringham@nottingham.ac.uk
Special Activity Chair	Elisabetta Tedeschi	elisabetta.tedeschi@ntnu.no
Special Activity Co-Chair	Tianqi Hong	thong@anl.gov



ECCE 2024

2024 ORGANIZING COMMITTEE

- **General Chair**
Rolando Burgos
 Virginia Tech, USA
rburgos@ieee.org
- ★ **General Co-Chairs**
Sudip Mazumder
 University of Illinois
 Chicago, USA
mazumder@uic.edu
- ★ **Pedro Rodriguez**
 Luxembourg Institute of
 Science and Technology
 (LIST), Luxembourg
pedro.rodriguez@list.lu
- **Finance Chairs**
Xiu Yao
 University at Buffalo, USA
xiuyao@ieee.org
- ★ **Ge Yang**
 University at Buffalo, USA
gyang22@buffalo.edu
- **Finance Co-Chair**
Mark Scott
 Miami University, USA
scottmj3@miamioh.edu
- ★ **Technical Program Chairs**
Pericle Zanchetta
 Lead TPC
 University of Pavia, Italy
pericle.zanchetta@ieee.org
- ★ **Luca Solero**
 Univ. Roma Tre, Italy
luca.solero@uniroma3.it
- ★ **Maryam Saeedifard**
 Georgia Tech, USA
maryam@ece.gatech.edu
- ★ **Helen Li**
 Florida State University, USA
li@eng.fsu.edu
- Kevin Bai
 University of Tennessee
 Knoxville, USA
hbai2@utk.edu
- ★ **Fernando Briz**
 University of Oviedo, Spain
fernando@isa.uniovi.es
- **Publications**
Carl Ho
 Manitoba University, Canada
carl.ho@umanitoba.ca
- **Local Chairs**
Zhicheng Guo
 Arizona State University, USA
zhicheng.guo@asu.edu
- ★ **Ayan Mallik**
 Arizona State University, USA
amallik3@asu.edu
- **Exhibition Chairs**
David Morrison
 How2Power.com, USA
david@how2power.com
- ★ **Kris Eberle**
 Plexim, USA
eberle@plexim.com
- ★ **Industry Partnerships Chairs**
Xu She
 Carrier Corporation, USA
xshe@ieee.org
- ★ **Avoki Omekanda**
 GM, USA
avoki.omekanda@ieee.org
- ★ **Mazharul Chowdhury**
 GM, USA
mazharul.chowdhury@gm.com
- **Research and Government
 Lab Partnership Chair**
Burak Ozpineci
 Oak Ridge National Lab, USA
burak@ornl.gov
- ★ **Tutorial Chairs**
Dorin Neacsu
 Technical University of Las, Romania
dorin.neacsu@ieee.org
- ★ **Ozge Taskin**
 Safran Group, UK
ozge.taskin@safranngroup.com
- ★ **Chiara Boccaletti**
 Sapienza University of Rome, Italy
chiara.boccaletti@uniroma1.it
- **Publicity/Electronic
 Media Chairs**
Helen Cui
 University of Tennessee, USA
helencui@utk.edu
- ★ **Gen Li**
 DTU, India
genli@dtu.dk
- **Plenary Session Chairs**
Shanelle Foster
 Michigan State University, USA
hogansha@egr.msu.edu
- ★ **Sara Roggia**
 Magnix, USA
sara.roggia@gmail.com
- ★ **Special Sessions Chairs**
Ryan Li
 University of Alberta, Canada
yunwei.li@ualberta.ca
- ★ **Xiongfei Wang**
 KTH, Sweden
xiongfei@kth.se
- ★ **Sonny Xue**
 ORNL, USA
yx@ieee.org | xuey@ornl.gov
- ★ **Zheyu Zhang**
 Clemson University, USA
zheyu.zhang@ieee.org
- ★ **Jin Ye**
 University of GA, USA
Jin.Ye@uga.edu
- **Outreach Chair**
Brad Lehman
 Northeastern University, USA
brad.pels@ieee.org
- ★ **WIE Chairs**
Qianwen Xu
 KTH Royal Institute of
 Technology, Sweden
qianwenx@kth.se
- ★ **Lakshmi Ravi**
 ABB, USA
lravi@ieee.org
- ★ **Yunting Liu**
 Penn State University, USA
yp15778@psu.edu
- ★ **Hong Li**
 Beijing Jiaotong University,
 China
hli@bjtu.edu.cn
- **Student Activities Chairs**
Jungwon Choi
 University of Washington, USA
jungchoi@uw.edu
- ★ **Sandun Kuruppu**
 Western University, USA
sanduns@ieee.org
- ★ **Luis Herrera**
 University at Buffalo, USA
lherrera@buffalo.edu
- ★ **Harish S. Krishnamoorthy**
 University of Houston, USA
hskrishn@uh.edu
- **Young Professionals Chair**
Joseph Kozak
 The Johns Hopkins University
 Applied Physics Laboratory,
 USA
joseph.kozak@jhuapl.edu
- ★ **Awards Chairs**
Fang Luo
 SUNY at Stony Brook, USA
fang.luo@stonybrook.edu
- ★ **Mahima Gupta**
 Portland State University, USA
mahima@pdx.edu
- **Conference Webmasters**
Rakesh Kumar
 Freelance Tech Writer, USA
rakesh.a@ieee.org
- ★ **Yuan Li**
 University of Pittsburgh, USA
yuan.li@pitt.edu
- **Conference
 Management Company**
 RNA Associates, USA
info@rna-associates.com
- ★ **Organizing
 Committee Members**
Joseph Song-Manguelle
 ORNL, USA
joseph.song.manguelle@uqtr.ca
- ★ **Shajjad Chowdhury**
 ORNL, USA
chowdhurys@ornl.gov
- ★ **Yilmaz Sozer**
 University of Akron, USA
ys@uakron.edu
- ★ **Jin Ye**
 University of GA, USA
Jin.Ye@uga.edu
- ★ **Dong Cao**
 University of Dayton, USA
dcao02@udayton.edu
- ★ **Lauren Kegley**
 Wolfspeed, USA
lauren.kegley@wolfspeed.com
- ★ **Yunting Liu**
 Michigan Tech, USA
yl15778@psu.edu
- ★ **Siavesh Pakdelian**
 UMass Lowell, USA
Siavash_Pakdelian@uml.edu
- ★ **Mahshid Amirabadi**
 Northeastern University, USA
m.amirabadi@northeastern.edu
- ★ **Fei Ding**
 NREL, USA
fei.ding@nrel.gov
- ★ **Mojtaba Forouzes**
 Queens University, Canada
m.forouzes@queensu.ca
- ★ **Lijun He**
 GE, USA
lijun.he@ge.com
- ★ **Dan Ionel**
 University of Kentucky, USA
dan.ionel@ieee.org
- ★ **Yue Zhao**
 University of Arkansas, USA
yuezhao@uark.edu
- ★ **Jose Fernando Jimenez**
 Universidad de los Andes,
 Columbia
fjimenez@uniandes.edu.co
- ★ **Nayara Brandão de Freitas**
 INESC Technology
 and Science, Portugal
nayara.freitas@inesctec.pt

★ IPCC involvement

Power Converter Topologies

- ★ **Vice Chair:** Wenkang Huang, *Infineon Technologies, USA*
- Vice Chair:** Yongsug Sug, *Jeonbuk National University, South Korea*
- Vice Chair:** Fei Lu, *Drexel University, USA*
- ★ Binesh Kumar, *Atom Power Inc., USA*
- ★ Amr Mostafa, *Lockheed Martin, USA*
- ★ Reza Kheirollahi, *Tesla Motor, USA*
- ★ Hang Dai, *General Electric, USA*
- Yao Wang, *Nanyang Technological University-Singapore, Singapore*
- Hua Zhang, *Rowan University, USA*
- Xiaofeng Yang, *Beijing Jiaotong University, China*
- Suyong Chae, *Pohang University of Science and Technology, Korea*
- Jeehoon Jung, *Ulsan National Institute of Science and Technology, Korea*
- Mohammed Agamy, *State University of New York at Albany, USA*
- Mahima Gupta, *Portland State University, USA*
- ★ Winway Chen, *Alpha and Omega Semiconductor, USA*
- Yeonho Jeong, *University of Rhode Island, USA*
- ★ Tianjiao Liu, *Onsemi, USA*
- Santanu Mishra, *India Institute of Technology Delhi, India*
- ★ Shuilin Tian, *Innoscence Incorporated, USA*
- ★ Dongbin Hou, *Texas Instruments, USA*
- Yan Li, *Penn State University, USA*
- ★ Shuyan Zhao, *ABB, USA*
- Liping Guo, *Northern Illinois University, USA*
- Manuel Arias, *University of Oviedo, Spain*

★ **Industry Members**

Regular paper

- Submitted 271
- Accepted (final) 160
- Percentage 59.0%

Two-page Late Break Research

- Submitted 5
- Accepted (final) 5

Control, Modelling and Optimization of Power Converters

Vice Chair: Stefano Bifaretti, *University of Rome Tor Vergata, Italy*

- ★ **Vice Chair:** Yonghao Gui, *Oak Ridge National Laboratory, USA*
- Vice Chair:** Subham Sahoo, *Aalborg University, Denmark*
- Xiaonan Lu, *Purdue University, USA*
- Alessandro Lidozzi, *University of Roma Tre, Italy*
- ★ Francisco D. Freijedo, *Huawei Technologies, Germany*
- Petros Karamanakos, *Tampere University, Finland*
- Mandrile Fabio, *Politecnico di Torino, Italy*
- ★ Rashmi Prasad, *GM Research and Development, USA*
- Mateja Novak, *Aalborg University, Denmark*
- ★ Dingrui Li, *ABB, USA*
- ★ Wenzong Wang, *Electric Power Research Institute (EPRI), USA*
- ★ Le Kong, *Monolithic Power Systems, Inc., USA*
- Yajuan Guan, *Aalborg University, Denmark*
- Qiao Peng, *Sichuan University, China*
- ★ Minghui Lu, *Pacific Northwest National Laboratory, USA*
- Jinhao Meng, *Xi'an Jiaotong University, China*
- ★ Jaldanki Sreenivasa, *Oak Ridge National Laboratory, USA*
- Yuzhuo Li, *University of Alberta, Canada*
- Rui Wang, *Northeastern University, China*
- Hua Zhang, *Rowan University, USA*

Regular paper

- Submitted 267
- Accepted (final) 189
- Percentage 70.8%

Two-page Late Break Research

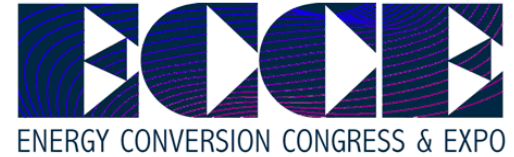
- Submitted 5
- Accepted (final) 5

★ Industry Members



Reports from subcommittees

Fellow and awards nomination



Fellow and Award Nominating Chair

Robert Guenther

IAS IPCSD Gerald Kliman Innovator Award (Deadline: June 1)

- The IEEE IAS Industrial Power Conversion Systems Department (IPCSD) Gerald Kliman Innovator Award was established to honor innovators who contributed to the technical areas of IPCSD Department.
- For meritorious contributions to the advancement of power conversion technologies through innovations and their application to Industry.
- Needs 3 endorsement letters.
- Criteria considered by the Evaluation Committee shall include: impact of the nominee's work on the technology; discernable and salient innovative aspect of the nominee's work; the breadth of use of the work; the depth of the work's impact on the industry; the technical leadership value of the work.

2024 Awardee: Mohammad Anwar

“for the development of optimized power electronics and electric drive systems for reliable & customer affordable electric vehicles”
(General Motors (GM))

IAS Gerald Kliman Award – past recipients

2024 – Mohammad Anwar

2023 – Noriko Kawakami

2022 – Ayman EL-Refaie

2021 – Robert Guenther

2020 – Vlado Blasko

2019 – Alex Huang

2018 – Fred Wang

2017 – Richard Lukaszewski

2016 – Jason Lai

2015 – Manoj Shah

2014 – Jan Abraham Ferreira

2013 – Fang Zheng Peng

2012 – Thomas Habetler

2011 – Leo Lorenz

2010 – William Peterson

2009 – John Miller

2008 – Ira J. Pitel

2007 – Bruno Lequesne

2006 – Kaushik Rajashekara

2005 – Russel J. Kerkman

IAS members in IEEE Fellow Class 2025

- **Jonathan Clare**
- **Hiroshi Fujimoto**
- **Vahan Gevorgian**
- **Xiaochuan Ja**
- **Byoung Kuk Lee**
- **Dong Choon Lee**
- **S. M. Muyeen**
- **Lorraine K Padden**
- **Li Qi**
- **Li Ran**
- **Joseph Rostron**
- **Kazuo Shimizu**
- **Giri Venkataramanan**
- **Brian A Welchko**
- **Wei Xu**
- **Di Zhang**
- **Georges Zissis**



IEEE Fellow (Deadline to Submit Nominations for Fellow Class of 2026: !! February 7, 2025 !!)

Note: Fellow Class of 2025 was announced this past summer

- Any person, including non-IEEE members, is eligible to serve as a nominator. The following are exceptions: Members of the IEEE Board of Directors, members of the IEEE Fellow Committee, IEEE Society/Technical Council Fellow Evaluating Committee Chairs, members of IEEE Society/Technical Council Fellow Evaluating Committee reviewing the nomination, or IEEE Staff.
- The nominator is responsible for preparing the IEEE Fellow Grade Nomination Form.
- The nominator is responsible for soliciting five references capable of assessing the nominee's contributions. References must be IEEE Fellows.
- There is the option of soliciting no more than three endorsements capable of supporting the nomination. Any person, including non-IEEE members, may submit an endorsement. The following individuals are ineligible to serve as endorsements: members of the IEEE Board of Directors, members of the Fellow Committee, members of the IEEE Society/Technical Council Fellow Evaluating Committee reviewing the nomination or IEEE Staff. In addition, a nominator may not serve as an endorser for a nomination he/she is submitting.
- Complete list of IAS Fellows at webpage:
<https://ias.ieee.org/awards/ieee-fellow-program/ias-fellows.html>

2023 IAS Awardees

- Outstanding Achievement: **Sheesa H. Jayaram**
- Mentor/Educator Award: **Germano Lambert-Torres**
- Andrew W. Smith Outstanding Young Member Achievement Award: **Satarupa Bal**
- Outstanding Young Member Service Award: **Sidra Malik**
- Distinguished Service Award: **Daleep Mohia**

2024 Awardees to be honored at ECCE

IAS awards

- IAS IPCSD Gerald Kliman Innovator Award (Deadline: June 1, 2025 for the 2025 Kliman Award)
 - Awards require a nominator (cannot self-nominate)
 - Nominations through web-based-form: <https://ias.ieee.org/awards.html>

Nominations can be submitted starting January 1, 2025

- IEEE Andrew W. Smith Outstanding Young Member Achievement Award (Deadline: May 1, 2025)
- IAS Outstanding Young Member Service Award (Deadline: May 1, 2025)
- IAS Distinguished Service Award (Deadline: May 1, 2025)
- IAS Outstanding Achievement Award (1Deadline: May 1, 2025)
- IEEE AS Outstanding Educator/Mentor (Deadline: May 1, 2025)
- IEEE Fellow (Deadline: February 7, 2025 for Fellow class of 2026)

Standards Chair

Lee Empringham

- **Extensive discussions this year with Variable Speed Drives and Integrated Drives manufacturers – both AC driven and DC grid driven power converters**
 - Identified various areas to target for new standards projects
 - Power Quality
 - Energy Efficiency
 - EMI
 - 3 PAR's submitted

- **P3542: Standard for Efficiency Classification of fully Integrated Motor Drives**
 - This standard defines a set of graded efficiency targets for fully integrated motor drives (IMD). The whole input grid to output mechanical coupling efficiency is quantified. The standard defines a set of efficiency ‘classes’ to which an individual IMD may belong. Efficiency calculation methods are defined. The efficiency classes are further defined over the full torque and speed range of the IMD and are not solely based on the rated power of the IMD. Different torque profiles are defined for different typical usage scenarios. Efficiency of individual power converter or motor parts of the IMD are not considered.

- **P3543: Standard for Power Quality requirements for Fully Integrated Motor Drives**
 - This standard defines power quality requirements for fully integrated motor drives (IMD). The standard defines a set of power quality ‘classes’ to which an individual IMD may belong. Power quality calculation methods are defined. The harmonic current limits of each power quality ‘class’ are defined over the full torque and speed range of the IMD and are not solely based on the rated power of the IMD. Different torque profiles are defined for different typical usage scenarios.

- **P3544: Standard for Data interconnect requirements for Power factor correction of distributed Variable Frequency Motor Drives**
 - This standard defines the data requirements to enable the centralised control of displacement factor of a number of Variable speed drives or fully integrated motor drives (IMD). The standard defines a set of communication layers using standard protocols to which an individual VSD or IMD should use to communicate their available capacity for reactive power generation and to receive demands for reactive power. The standard defines appropriate response times and ramp rates following a demand. This standard does not define requirements for reactive power capability of VSD's.

- **Project in preparation: Standard for EMI emissions fed by DC grids in Industrial installations**

- **UPDATE: PAR P3380 – Data Center Converter Stability**
 - IPCC volunteers recruited
 - Arman Oshnoei, Yuhua Du, Woojin Kang
 - No Activity from organisers

Special Activities Co-Chairs

Elisabetta Tedeschi
Tianqi Hong
Lisa Qi

- **1. Special Session at ECCE24** (October 21, 2024)
“Empowering Sustainable Futures: The Critical Role of Power Electronics in Energy and Industry”, co-organized by Yonghao Gui & Tianqi Hong
- **2. Special Session at ECCE24** (October 21, 2024)
“Dynamic Modeling and Control of Inverter-Based Resources: A Bottom-Up Approach Spanning from Networked Microgrids to Bulk Transmission Interconnection”, co-organized by Xiaonan Lu & Jin Tan

- **3. Tutorial at ECCE24** (October 20, 2024)
“DC Distribution Systems and DC Microgrids”, co-organized by Xiaonan Lu, Kevin Kircher, and Fei Lu
- **4. IEEE-IAS Webinar on**
“Passivity and Dissipativity as Design Objectives for Control of Grid-Connected VSCs”
offered by **Dr. Lennart Harnefors**, on March 6, 2024
co-organized by P. Karamanakos & E. Tedeschi
- **5. Representation of the IAS-IPCC in the IAS-IPCSD Diversity, Equity and Inclusion Committee** to promote and enhance Diversity, Equity & Inclusion practices within IPCSD and its technical committees

IEEE-IAS IPCSD DEIC (Diversity, Equity and Inclusion Committee)

- Committee created in February 2023.
- Kick-off meeting in May 2023
- **Scope:** to promote and enhance DEI [Diversity, Equity and Inclusion] practices within IPCSD and its technical committees. Following the IEEE DEI guidelines, this committee will ensure that IPCSD pursues its technical objectives using the “the talents and perspectives of people with different personal, cultural, and disciplinary backgrounds”.
- Chair appointed by the IPCSD Chair
- One member from each IPCSD TC
- Liaisons: Africa, India, South America, Europe

IEEE-IAS IPCSD DEIC Members

- Chair – Giovanna Oriti, Naval Postgraduate School, USA
- Technical Committees Representatives:
 - Xu Yang, Key Drives LLC, USA [Electric Machines]
 - Elisabetta Tedeschi, NTNU, Norway/U. of Trento, Italy [Industrial Power Converters]
 - Maria Martinez, U. of Oviedo, Spain [Industrial Drives]
 - Akanksha Singh, DNV, USA [Renewable and Sustainable Energy Conversion Systems]
 - Majid Fard, GE Aerospace, USA [Transportation Systems]
 - Pratibha Sharma, COFAN/Violumas, Canada [Power Electronics Devices and Components]

IEEE-IAS IPCSD DEIC Members

Liaisons

- **Africa**: Mhret Behre Gebremariam, University of Oviedo, Spain
- **India**: Arnab Sarkar, Jaguar Land Rover, India
- **South America**:
 - Thiago Fonseca Rech, Universidade Federal de Santa Catarina, Brazil
 - Mariana (Mary) Espinola, Universidade Federal de Mato Grosso do Sul, Brazil
- **Europe**: Giulia Di Nezio, Universita' Roma Tre, Italy

IPCSD DEIC Activities to Date

Increasing the number of all under-represented members active within IAS-IPCSD:

- Student Design Contests in Africa, India and South America
 - In 2025 we will explicitly ask the participants to include a few words to highlight diversity in the required team description
- Travel grants
- Support for Liaisons to attend local conferences and advertise IAS IPCSD
- Collaboration with the IAS Education Department and the IAS Chapter and Membership Development Department

Student Design Contests 2024

Design topics

- Components and systems for motor drives.
- Renewable energy power conditioning systems.
- Components and systems for transportation electrification.
- Power electronics for energy efficiency and to reduce fossil fuel consumption.
- Functional apps related to motor/renewable energy/transportation electrification systems.
- IoT devices.
- 3D printings or rapid model.
- Wireless PCB prototypes.



IEEE IAS-IPCS D Engineering Student Chapter Design Contest (Africa) 2024



\$2000 each (three awards)

Who can apply

All IEEE Students Members of African Student Chapters.

- Teams: 4 to 6 IEEE student/graduate members, including Team leader.
- At least one student member of the IEEE IAS.
- Woman lead will have preference.
- Diverse team encouraged.
- The design must provide a practical solution and within the scope of the IEEE IAS.

APPLY NOW

Apply to contribute to technological advancement for humanity.

<https://site.ieee.org/ias-ipcspd/scdc-africa/>

Application Deadline: Aug 1, 2024

Awards Announcement: Sept 1

CONTACT US IPCSD-DEIC Liaison for Africa
iasipcspd.competition@gmail.com



IEEE
Advancing Technology for Humanity



Submission requirements

- Short video (max 5 minutes) and presentation in PDF format.
- A letter of recommendation from IEEE IAS Student Branch Chapter or IEEE Student Branch or IEEE IAS Section Chapter or IEEE Section.

Evaluation criteria

- Innovation and impact on African countries.
- Diversity of the team members.
- Significance of the work to the scope of IAS.
- The quality of the presentation and video.

Design topics

- Components and systems for motor drives.
- Renewable energy power conditioning systems.
- Components and systems for transportation electrification.
- Power electronics for energy efficiency and to reduce fossil fuel consumption.
- Functional apps related to motor/renewable energy/transportation electrification systems.
- IoT devices.
- 3D printings or rapid model.
- Wireless PCB prototypes.



IEEE IAS-IPCS D Engineering Student Chapter Design Contest (India) 2024



\$2000 each (three awards)

Who can apply

All IEEE Student Members of Indian Student Chapters.

- Teams: 4 to 6 IEEE student/graduate members, including Team leader.
- At least one student member of the IEEE IAS.
- Woman lead will have preference.
- Diverse team encouraged.
- The design must provide a practical solution and within the scope of the IEEE IAS.

APPLY NOW

Apply to contribute to technological advancement for humanity.

<https://site.ieee.org/ias-ipcspd/scdc-india/>

Application Deadline: Aug 1, 2024

Awards Announcement: Sept 1

CONTACT US IPCSD-DEIC Liaison for India
iasipcspd.indiacomp@gmail.com



IEEE
Advancing Technology for Humanity



Submission requirements

- Short video (max 5 minutes) and presentation in PDF format.
- A letter of recommendation from IEEE IAS Student Branch Chapter or IEEE Student Branch or IEEE IAS Section Chapter or IEEE Section.

Evaluation criteria

- Innovation and impact on Indian regions.
- Diversity of the team members.
- Significance of the work to the scope of IAS.
- The quality of the presentation and video.

<https://site.ieee.org/ias-ipcspd/scdc-africa/>

<https://site.ieee.org/ias-ipcspd/scdc-india/>

Student Contest Winners (India)

- Winners of the 2024 IPCSD Student Chapter Design Contest for India:

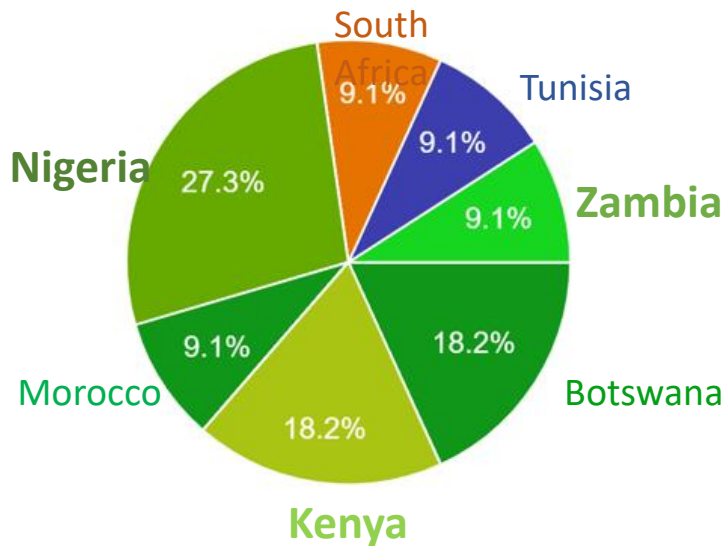
Project Title: Enhanced Power Management and Efficiency in Electric Bicycles using Super-Lift Converter for improved Range and Power Factor

Team Members: Adiba Muskan. A, Rahul. A, Subiya Mehek. S, Shams Tabrez Hussain. A
(B.S.Abdur Rahman Crescent Institute of Science and Technology - India)

- Ideas for expanding the publicity for student contest:
 - Include countries from the same region, such as Sri Lanka, Pakistan, Bangladesh, and Nepal, with a focus on rural and underrepresented colleges.
 - Increase engagement through social media platforms and prioritize outreach to student councils, clubs, and organizations instead of relying solely on faculty networks.
 - Promote the event in official IAS newsletters and at conferences for broader visibility.
 - Implement a two-tiered application process: start with an initial form for participants to express their intent to join, followed by a second form for full project submission later. This approach allows us to gauge the number of participants early on, without waiting until the final submission deadline.

Student Design Contest (Africa) 2024

Applicants



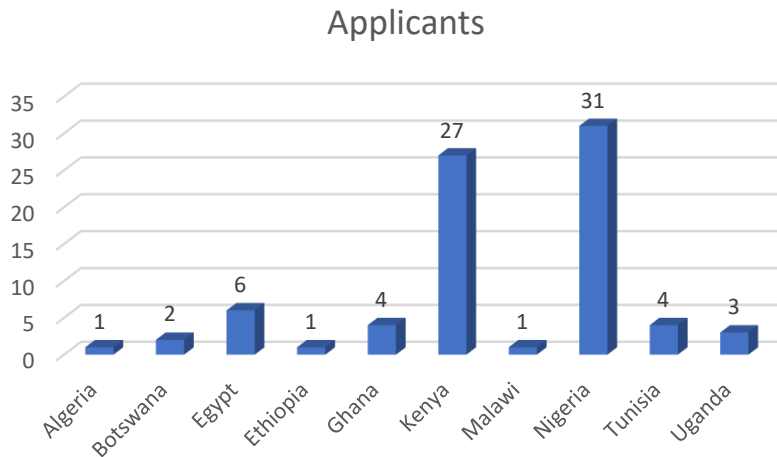
11 proposals from 7 countries

Winners

1. AgriTracka -Machine learning-based agricultural monitoring platform, **University of Lagos, Nigeria**
2. Sky Guardian - Advanced Air Quality Monitoring System, **Dedan Kimathi University of Technology, Kenya.**
3. EcoCharge - A Smart Mppt Charge Controller, **University of Zambia, Zambia**
3. An IOT-based Smart Emergency Management System, **Nnamdi Azikiwe University (UNIZIK), Nigeria**
3. Lesser Waste and Cleaner Air: Bringing Sustainable Energy Solutions to Anambra State of Nigeria, **Nnamdi Azikiwe University (UNIZIK), Nigeria**

Travel Grants

- Travel Grant for 10 African students to attend the R8 SYP in Grenoble, France, July 2024.
- Ten selected, with 6 in reserve. Only four were able to attend because of visa issues.



IEEE IAS-IPCSD R8 SYP Grenoble Travel Grant Africa 2024

The IEEE IAS-IPCSD offers **ten travel grants** for African students to attend the IEEE R8 SYP Grenoble 2024 Congress up to - **\$2000**.

IEEE R8 SYP Grenoble 2024 Congress
France | 15-19 July

Eligibility:

- Undergraduate, MSc, or PhD student living in Africa.
- Interested to be a member of IEEE and IEEE IAS if selected. IEEE free membership will be offered for the 1st year (use the IASLRP code for IEEE IAS membership).
- Interested to volunteer in IEEE IAS student activities.
- Recommendation letter from your university or department.

CONTACT US IPCSD-DEIC Liaison for Africa
iasipcsd.competition@gmail.com

Apply Now: [Use this link](#)

Deadline: **May 30, 2024**



Travel Grant to Power Africa 23 and 24

- Travel Grant for the DEIC Africa Liaison, Mhret Behre Gebremariam, to attend Power Africa 2023 and 2024 and publicize IAS IPCSD, with emphasis on DEI activities.

Great job,
Mhret!



2025 Funds Requests

- 3 Student Design Contests
 - Africa - \$6k
 - India (extend to Bangladesh, Pakistan, etc) – \$6k
 - Central and South America - \$6k
- Liaisons travel Grants
 - Power Africa 2025
 - Relevant 2025 conferences in South America and India
- Other ideas in the following slides
 - To be implemented in collaboration with other IAS departments including CMD (Srikanth Pillai), Diversity and Inclusion (Pia Torres) and Education Department (Pericle Zanchetta)

IPCSD DEIC New Ideas

- DEIC-sponsored Best Paper award - encouraging female first authors to apply
 - Journal papers – Transactions on IA and Open Journal on IA
 - Conference papers
 - IEEE PES/IAS Power Africa conference has the Best Paper Award in two categories: "Postgraduate students" and "Undergraduate students." Can we add best paper by a female first author?
 - ECCE has a best presentation award for everybody where female authors are strongly encouraged to participate – at ECCE 2023 a female author won the award.
- Mentorship Program for Students and Young Engineers: virtual - to connects students and young professionals, particularly female, from underrepresented regions with experienced engineers in the IEEE community. This would provide guidance, networking opportunities, and professional development support at minimal cost.
- Outstanding chapter awards with specific focus on DEI in underrepresented countries, i.e. best chapter to promote DEI

IPCSD DEIC New Ideas cont.

- Outreach: promote engineering in high schools, particularly in rural areas and low-income neighborhoods
 - IAS has previously sponsored awards at US science fairs (grades 6-12) in the past (status today?). DEIC would like to sponsor awards specifically for female students and pre-college students in underdeveloped or rural regions
- Virtual Technical Workshops and Webinars for engineers in remote or underrepresented areas: low-cost, topic-specific webinars or short virtual courses led by experts in the field could help broaden access to knowledge
 - focus on practical skills, problem-solving in resource-constrained environments, or innovations in IAS topics relevant to developing countries
- Open Access Technical Resources: Creating a repository of open-access educational materials, technical papers, and recorded sessions specifically targeted at underdeveloped areas could provide lasting value
 - partnering with educational platforms or utilizing existing IEEE resources (IAS sister societies?)

Reports from IAS Transactions

Review Chair: Stefano Bifaretti
Review Co-Chair: Shafiq Odhano

25 AEs in Oct. 2024

- Mohammed Agamy, USA
- Vivek Agarwal, India
- Norma Anglani, Italy
- Manuel Arias, Spain
- Dong Cao , USA
- Andrea Formentini, Italy
- Francisco Freijedo, Germany
- Dong Jiang, China
- Tianqi Hong, USA
- Petros Karamanakos, Finland
- Fabio Immovili, Italy
- Xiaonan Lu, USA
- Alessandro Lidozzi, Italy
- Bo Liu, USA
- Marcello Pucci, Italy
- Luca Solero, Italy
- Mi Tang, UK
- Luca Tarisciotti, Chile
- Young-Doo Yoon, Korea

Appointed in 2024

- Feng Guo, USA
- Cristina Terlizzi, Italy
- Priyabrata Shaw, India
- Sante Pugliese, Germany
- Zheng Wang, USA
- Giulia Tresca, Italy

Gender balance improved
but still too low!

WIE are welcome!

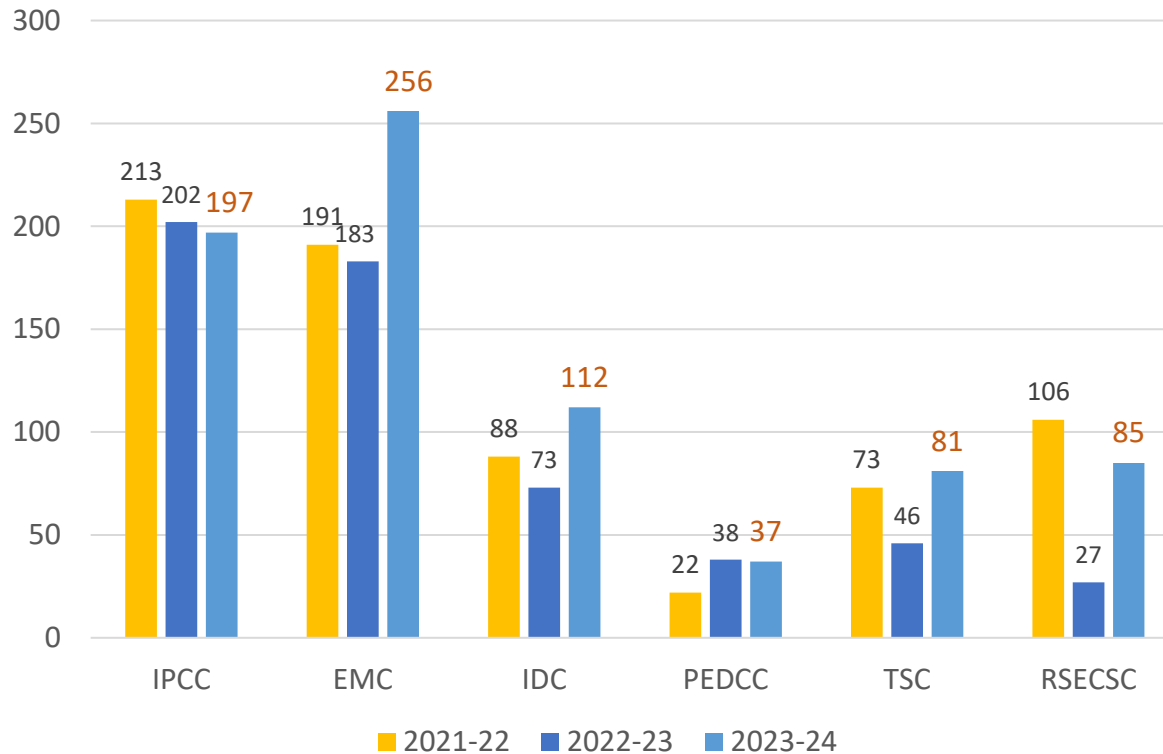
- Paper first must be presented at an IAS-sponsored conference (**within the last 12 months**)
- To obtain a submission invitation send an email to shafiq.odhano@newcastle.ac.uk and stefano.bifaretti@uniroma2.it
- **ONLY if the paper is ready for submission**, including:
 - Paper title and conference paper attached
 - Conference name and date when paper presented
 - Contact Author ID on IAS ScholarOne web site
- An email will be sent to you from S1M with instructions on uploading your paper for review (usually **within 1-2 weeks**)
- **30 days to submit the paper once the invitation has been sent**

- You **must include the conference paper** version in your Transactions submission reference list.
- Papers need to be different from the conference ones. **Change title and Update/add new material to conference version.** There is no fixed amount of difference, but **at least 20%** of new content is required. Be reasonable.

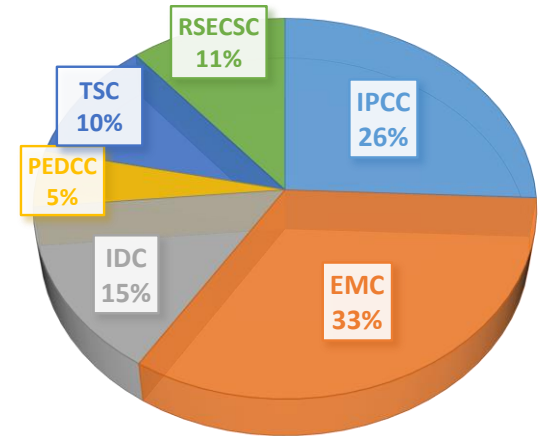
Please cite relevant TIA papers!

Total submissions by Committee

IPCSD Submissions Trend

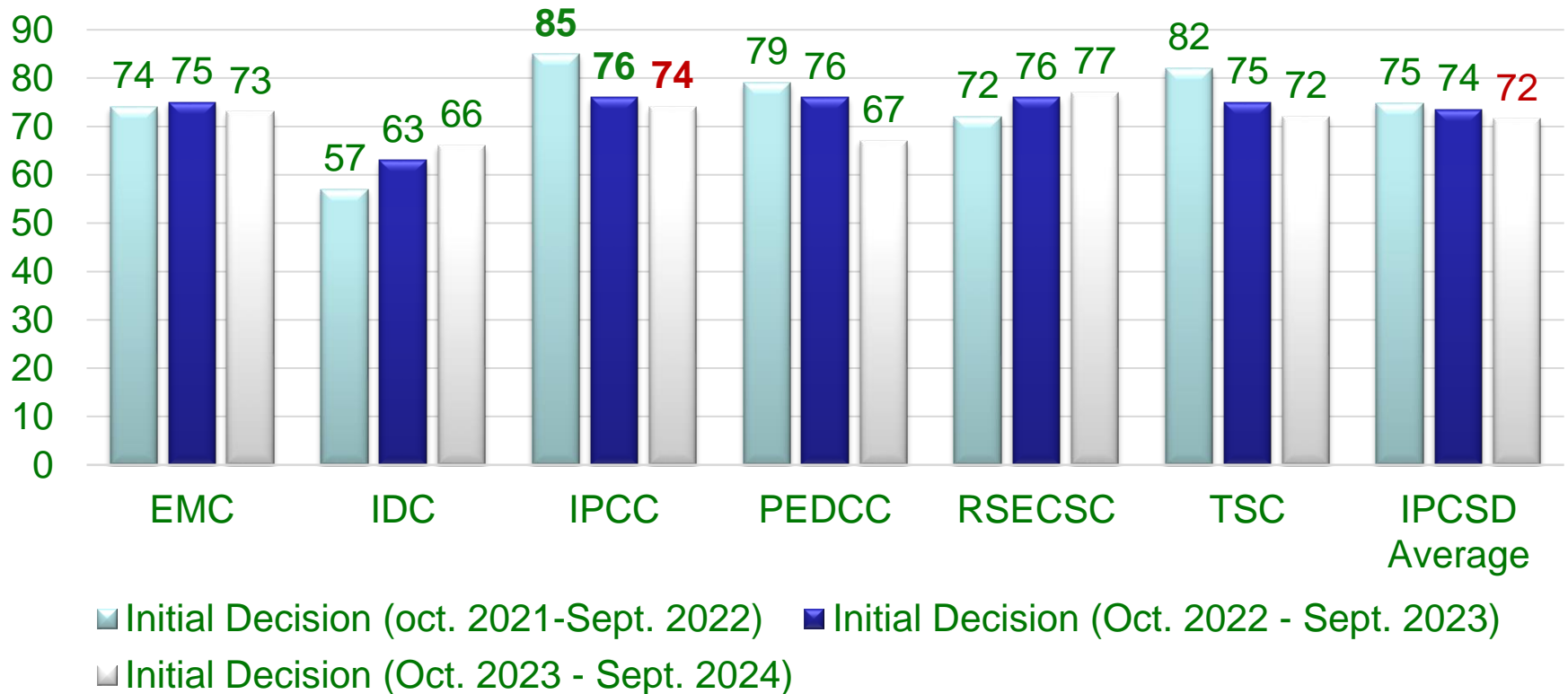


2023-24 IPCC SUBMISSIONS IMPACT IN
IPCSD



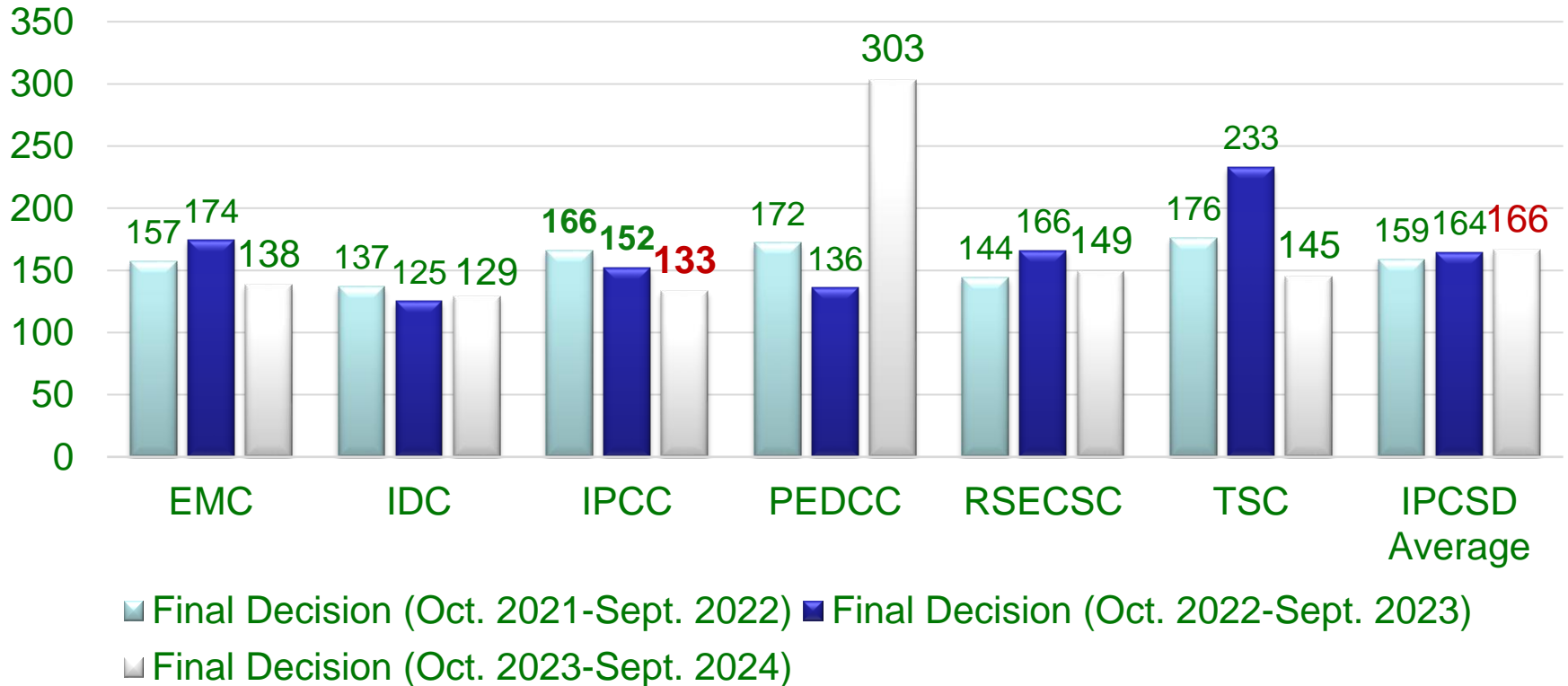
IPCC has the second largest number of submitted papers in 2023-24

First Decision time for IPCSD Technical Committees



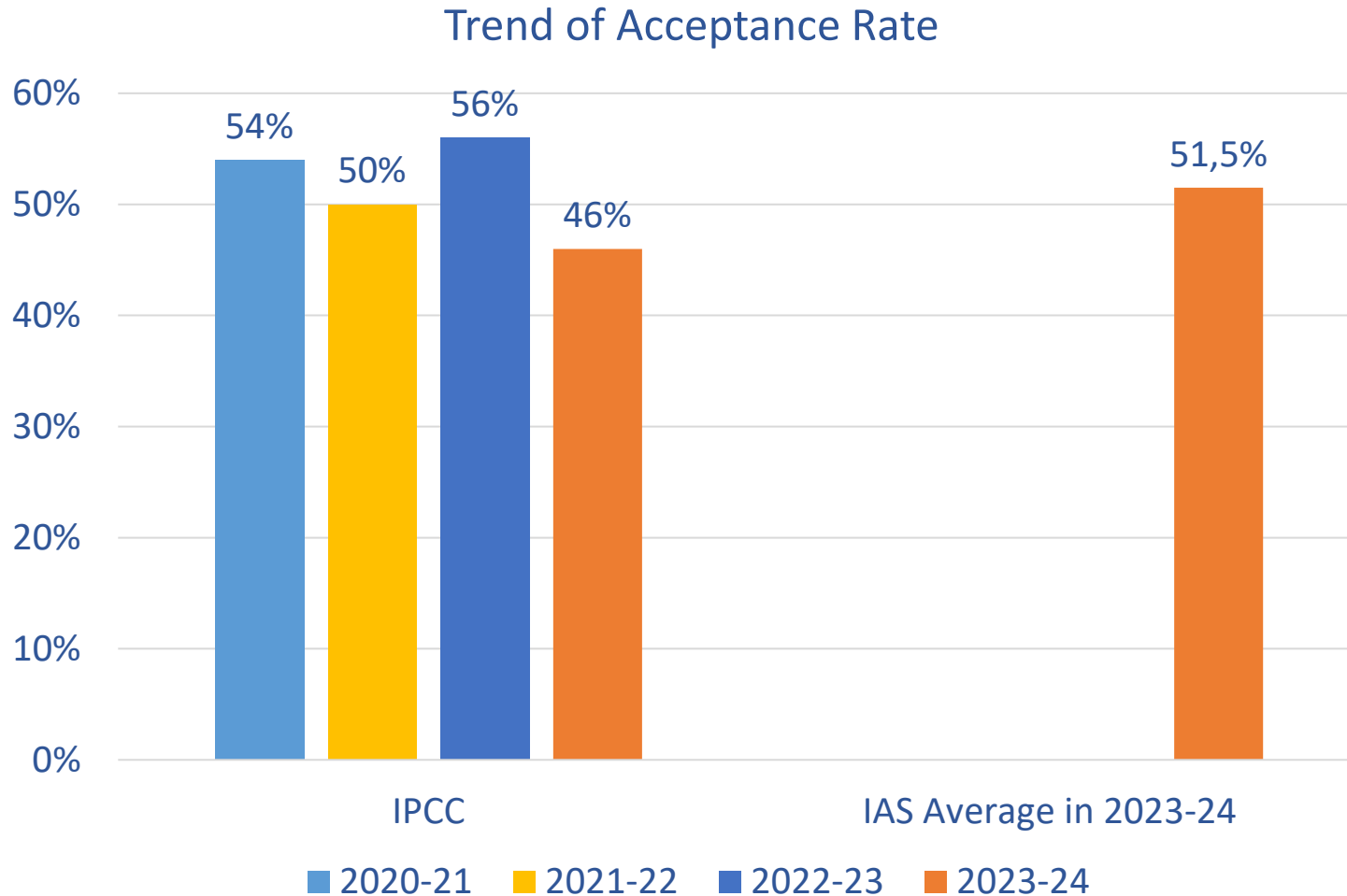
IPCC time to first decision has been improved in the last years

Final Decision time for IPCSD Technical Committees



IPCC time to final decision has been significantly improved in 2024

IPCC Acceptance Rate Trend



Reports from Open Journal of Industry Applications

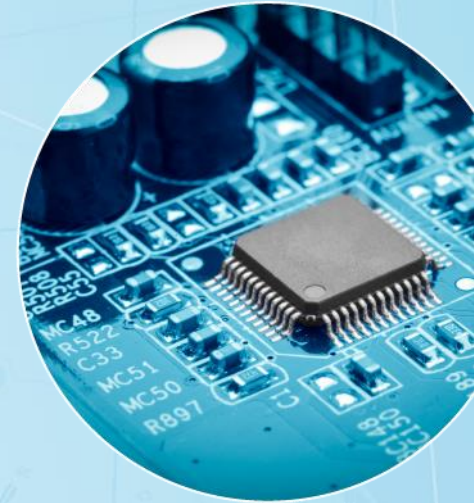
EiC: Pericle Zanchetta



IEEE Open Journal of Industry applications update

EiC: Prof. Pericle Zanchetta

October 2024



Governance

Advisory Board

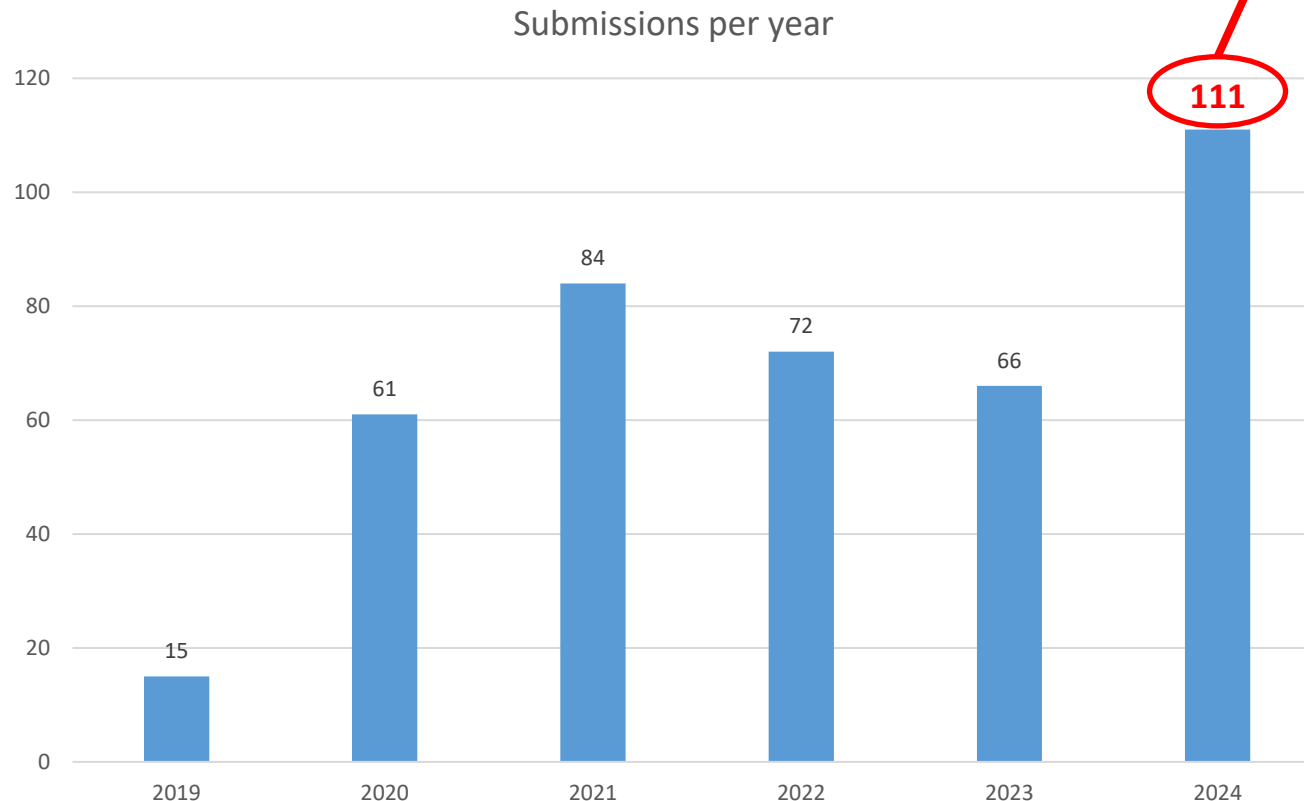
- ▶ Prof. Pericle Zanchetta, University of Nottingham (UK) and University of Pavia (Italy) - **Editor in Chief**
- ▶ Prof. Luca Solero, University of Roma Tre - **Deputy Editor in Chief**
- ▶ Prof. Andy Knight, University of Alberta (Canada) – **President, IEEE IAS**
- ▶ Prof. Leon Tolbert, University of Tennessee, (USA) – **Publications Dept Chair, IEEE IAS**

Editorial Board

- ▶ Composed by the editor in chief, the deputy editor in chief and 24 Associate Editors from all IAS departments.

Journal Statistics

Submitted papers per calendar year



Up to October 15th

111

**Total
submitted
papers 409**

**358 with
decision**

**47 under
review**

4 withdrawn

Journal Statistics

2020-2024

Papers 358

#Accepted 140

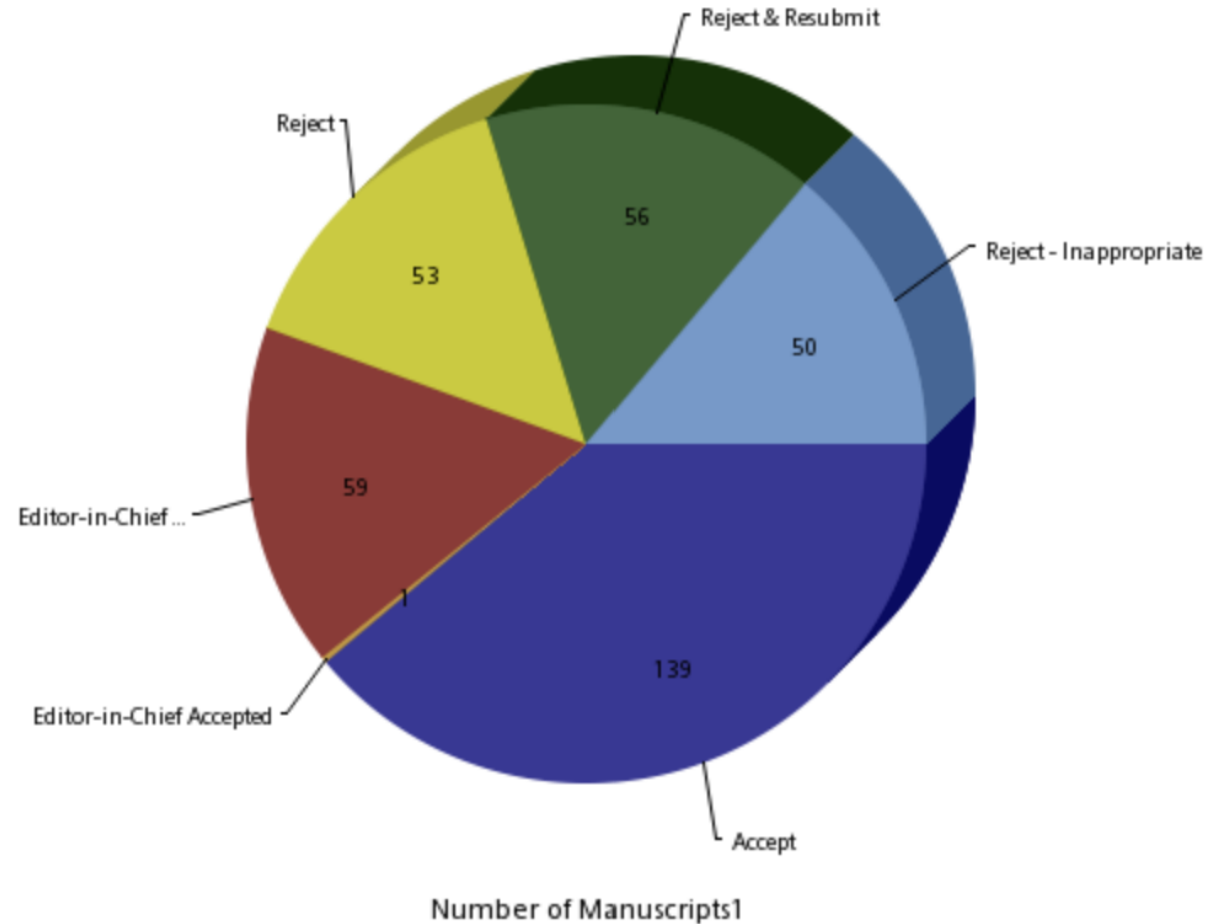
#Rejected 218

Acceptance Rate 39.1%

Avg Days to First Decision 40.6

Avg Days to Final Decision 62.7

Papers with decisions

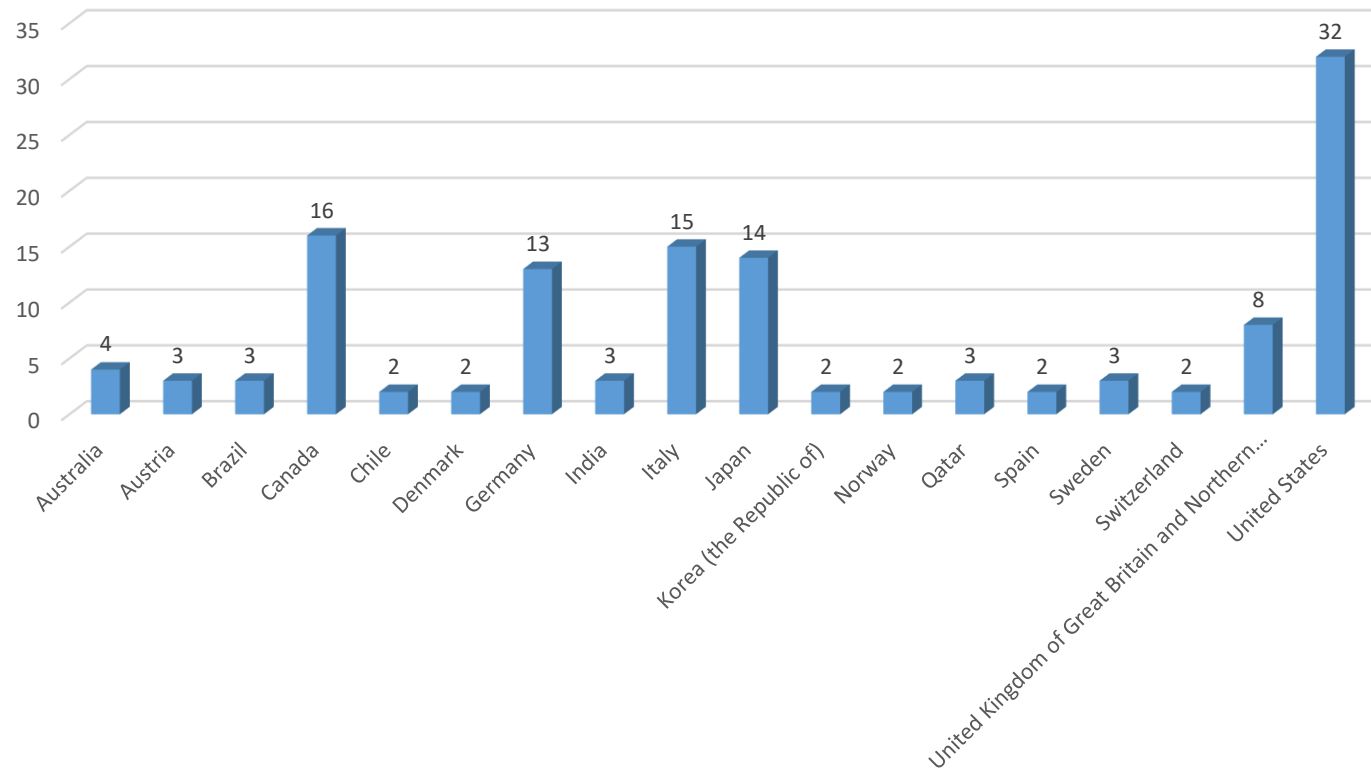


Journal Statistics

Accepted papers by country

2020-2024

Accepted papers by countries (>1)



Journal info

- ▶ 5 Volumes of the OJIA have been released so far:
 - ❖ 2020 (23 papers)
 - ❖ 2021 (31 papers)
 - ❖ 2022 (21 papers)
 - ❖ 2023 (29 papers)
 - ❖ 2024 (32 papers up to October 15)

**Article Processing Charge (APC): US\$1995 – Until December 31st 2024.
It will increase to US\$2075 from January 1st 2025**

Discounts

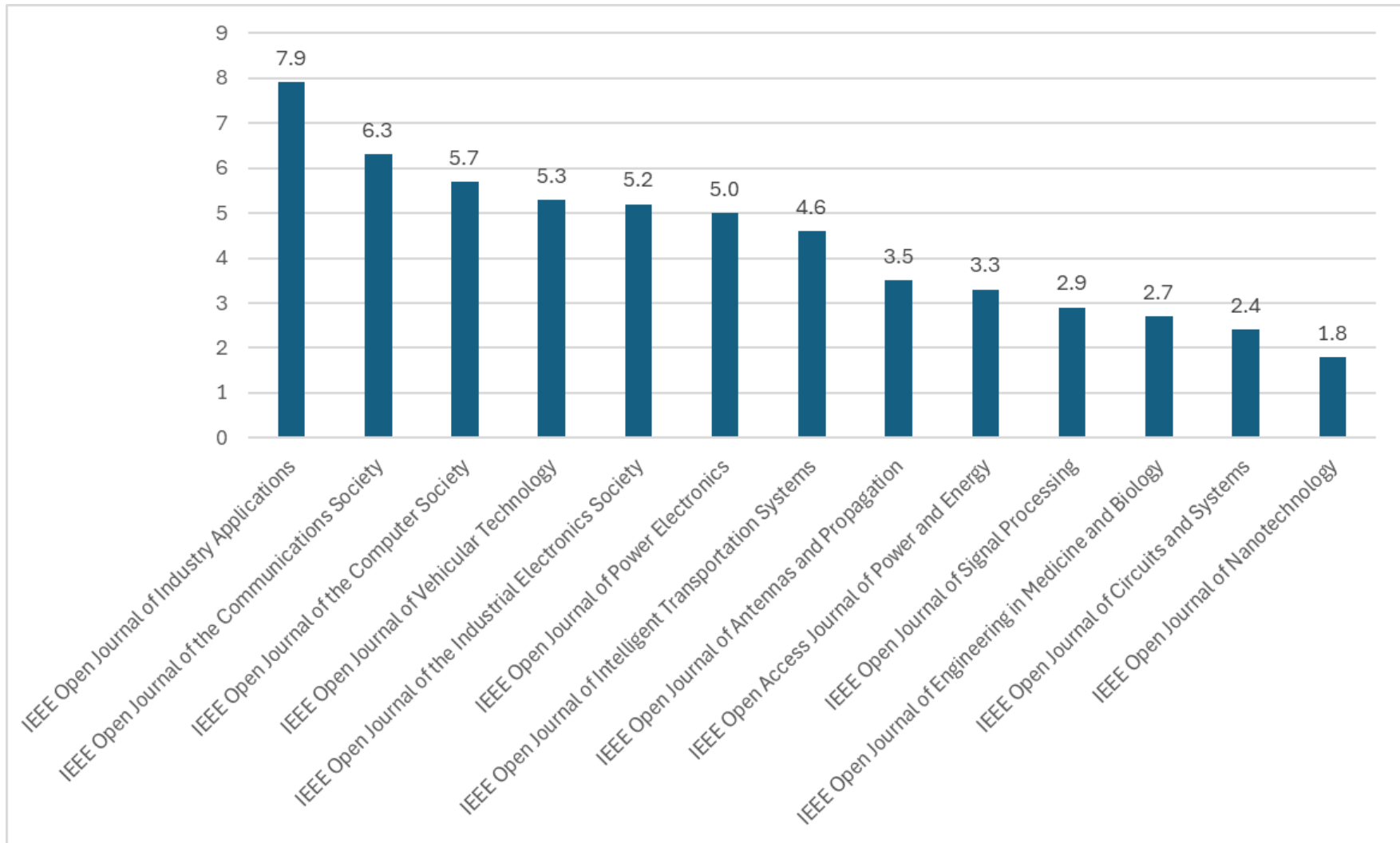
IEEE Members receive a 5% discount.

IEEE Society Members receive a 20% discount.

These discounts cannot be combined.

Journal performance

IEEE Open Journals IF 2023



Journal performance

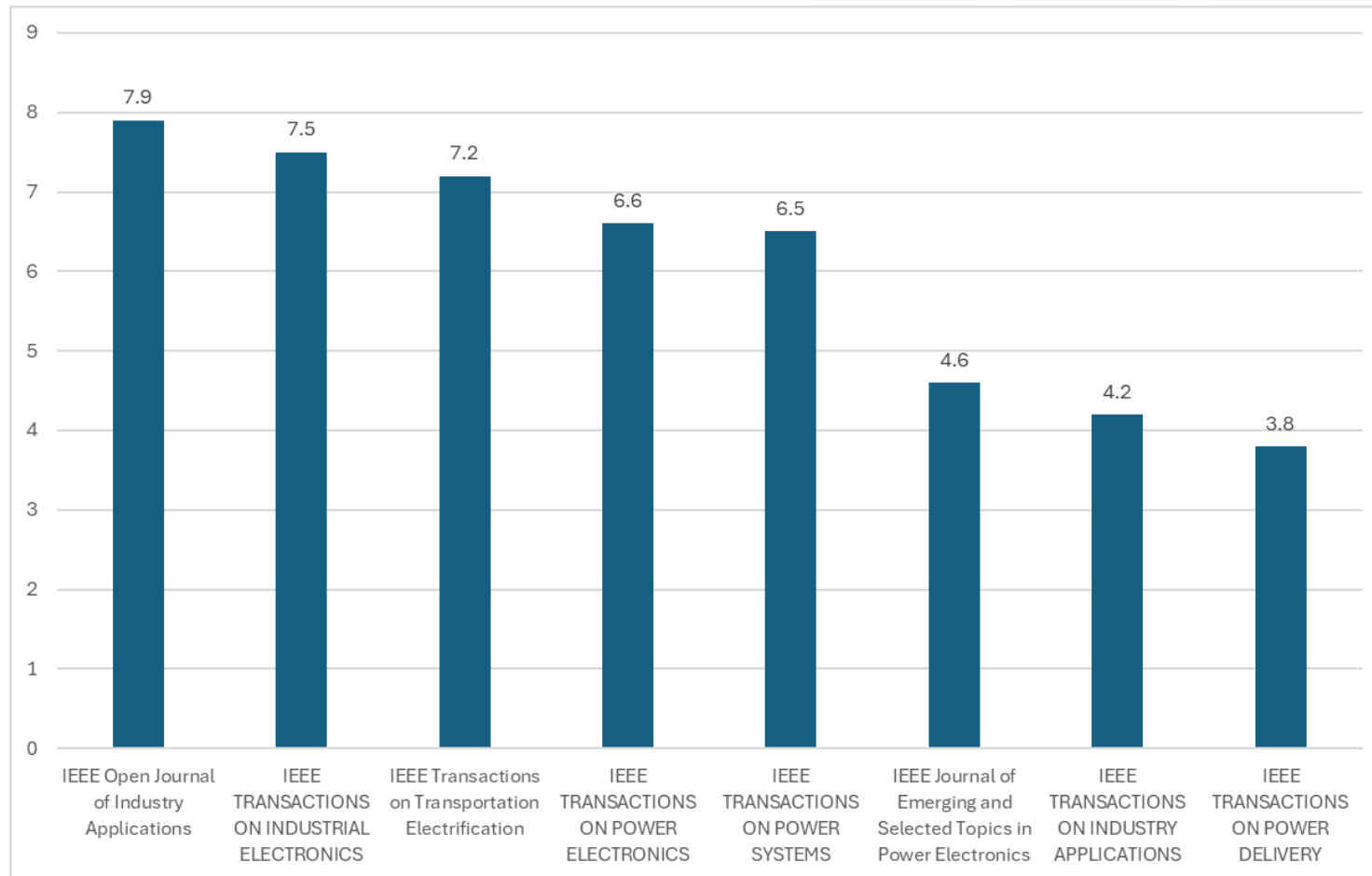
IEEE Transactions IF 2023 Comparison

7.9
Impact
Factor

0.00129
Eigenfactor

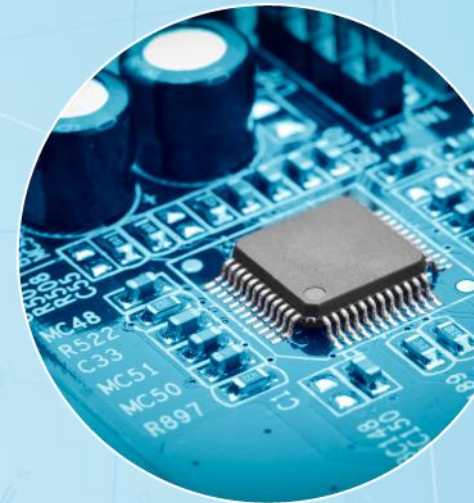
2.993
Article
Influence
Score

13.5
CiteScore
Powered by Scopus





Thanks for your attention
Questions?



Reports on 2024 IPCC Prize Paper Awards

**Awards Subcommittee Chair:
Stefano Bifaretti**

- Mohammed Agamy, USA
- Vivek Agarwal, India
- Manuel Arias, Spain
- Dong Cao, USA
- Andrea Formentini, Italy
- Francisco Freijedo, Germany
- Feng Guo, USA
- Tianqi Hong, USA
- Fabio Immovili, Italy
- Petros Karamanakos, Finland
- Alessandro Lidozzi, Italy
- Bo Liu, USA
- Xiaonan Lu, USA
- Shafiq Odhano, UK
- Sante Pugliese, Germany
- Luca Solero, Italy
- Priyabrata Shaw, India
- Mi Tang, UK
- Luca Tarisciotti, Chile
- Cristina Terlizzi, Italy
- Young-Doo Yoon, Rep. of Korea

All the TIA Associate Editors for IAS-IPCC have been included in the Awards Subcommittee, except who did not accept the invitation. Papers have been managed to avoid any conflicts with the co-authors who have papers in the competition.

- IPCC was responsible for any paper included in Track E and F
- According to the 2022 IPCSD guidelines, a preselection process has been performed to reduce the workload of the Awards Subcommittee (about 116 papers for Track E and 134 papers for Track F)
- Nominally, **Top 10 papers from Track E and Top 10 papers from Track F have to be preselected based on the digests' average score**
- **Top 17 papers from Track E and Top 13 papers from Track F have been evaluated by the Awards Subcommittee**
- Discrepancies on the number of papers are due to the equal average scores obtained by the papers ranked over the 10th position
- Criteria for papers evaluation:
 1. Degree of novelty
 2. Presentation
 3. Industrial impact

Final Ranking 2024 IPCC ECCE Awards

Rank	Authors	Paper Title
1	Petros Karamanakos, Mirza Abdul Waris Begh, Shirin Rahmanpour, Tobias Geyer	Gradient-Based Predictive Pulse Pattern Control for Grid-Connected Converters with LCL Filters
2	Xin Lou, Feiyang Zhu, Zheqing Li, Qiang Li, Fred C. Lee	Single-Stage 48 V/1.8 V Coupled-Transformer Voltage Regulator (CTVR)
3	Daniel Chavez, Damian Sal y Rosas, Julio Tafur	Single-Stage Quad-Active-Bridge Series-Resonant AC-DC Converter: Modulation for Active and Reactive Power



*Industrial Power Conversion Systems Department
Industrial Power Converter Committee*

of the

IEEE Industry Applications Society

*takes pleasure in presenting the
2024 Energy Conversion Congress and Exposition First Prize Paper Award
to*

Petros Karamanakos

For the manuscript co-authored with

Mirza Abdul Waris Beghi, Shirin Rahmanpour, Tobias Geyer

Entitled,

*“Gradient-Based Predictive Pulse Pattern Control for Grid-Connected
Converters with LCL Filters”*

Presented at the 2023 IEEE Energy Conversion Congress and Exposition (ECCE)



October 2024

Andy M. Knight

*Andy Knight
President*

IEEE Industry Applications Society

Yongsug Suh

IPCC Committee Chair

IEEE Industry Applications Society





*Industrial Power Conversion Systems Department
Industrial Power Converter Committee*

of the

IEEE Industry Applications Society

*takes pleasure in presenting the
2024 Energy Conversion Congress and Exposition Second Prize Paper Award*

to

Xin Lou

For the manuscript co-authored with

Feiyang Zhu, Zheqing Li, Qiang Li, Fred C. Lee

Entitled,

*“Single-Stage 48 V/1.8 V Coupled-Transformer Voltage Regulator
(CTVR)”*

Presented at the 2023 IEEE Energy Conversion Congress and Exposition (ECCE)



October 2024

Andy M Knight

Andy Knight

President

IEEE Industry Applications Society

Yongsug Suh

IPCC Committee Chair

IEEE Industry Applications Society





*Industrial Power Conversion Systems Department
Industrial Power Converter Committee*

of the

IEEE Industry Applications Society

*takes pleasure in presenting the
2024 Energy Conversion Congress and Exposition Third Prize Paper Award
to*

Daniel Chavez

*For the manuscript co-authored with
Damian Sal y Rosas, Julio Tafur
Entitled,*

*“Single-Stage Quad-Active-Bridge Series-Resonant AC-DC Converter:
Modulation for Active and Reactive Power”*

Presented at the 2023 IEEE Energy Conversion Congress and Exposition (ECCE)



October 2024

Andy M Knight

*Andy Knight
President*

IEEE Industry Applications Society

*Yongsug Suh
IPCC Committee Chair*

IEEE Industry Applications Society



- Papers submitted for review through the IPCC and published in 2023 are eligible
- According to the 2022 IPCSD guidelines, to reduce the workload of the Awards Subcommittee (about 100 papers published in 2023), papers have been preselected based on the M-score provided in the Manuscript Central
- **Top-10 papers have been included in the ballot**
- Criteria for papers evaluation:
 1. Degree of novelty
 2. Presentation
 3. Industrial impact

For next edition two different subcommittees can be nominated:

- ECCE prize papers awards subcommittee, composed of Vice-chairs and Topic Chairs having served for Track E and Track F
- TIA prize papers awards subcommittee including the Associate Editors pool

Final Ranking for 2024 IPCC Transactions on Industry Applications Papers Awards

Rank	Authors	Paper Title
1	Jacopo Riccio, Petros Karamanakos, Shafiq Odhano, Mi Tang, Mauro Di Nardo, Pericle Zanchetta	Direct Model Predictive Control of Synchronous Reluctance Motor Drives
2	Arup Ratan Paul, Arghyadip Bhattacharya, Kishore Chatterjee	A Novel Single Phase Grid Connected Transformer-less Solar Micro-inverter Topology with Power Decoupling Capability
3	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



*Industrial Power Conversion Systems Department
Industrial Power Converter Committee*

of the

IEEE Industry Applications Society

*takes pleasure in presenting the
2024 IPCC Transactions on Industry Applications First Prize Paper Award
to*

Jacopo Riccio

For the manuscript co-authored with

Petros Karamanakos, Shafiq Odhano, Mi Tang, Mauro Di Nardo, Pericle Zanchetta

Entitled,

*“Direct Model Predictive Control of Synchronous Reluctance Motor
Drives”*

Published in IEEE Transactions on Industry Applications, 2023



October 2024

Andy M. Knight

Andy Knight

President

IEEE Industry Applications Society

Yongsug Suh

IPCC Committee Chair

IEEE Industry Applications Society





*Industrial Power Conversion Systems Department
Industrial Power Converter Committee*

of the

IEEE Industry Applications Society

*takes pleasure in presenting the
2024 IPCC Transactions on Industry Applications Second Prize Paper Award
to*

Arup Ratan Paul

*For the manuscript co-authored with
Arghyadip Bhattacharya, Kishore Chatterjee
Entitled,*

*“A Novel Single Phase Grid Connected Transformer-less Solar Micro-
inverter Topology with Power Decoupling Capability”*

Published in IEEE Transactions on Industry Applications, 2023



October 2024

Andy M Knight

*Andy Knight
President*

IEEE Industry Applications Society

*Yongsug Suh
IPCC Committee Chair*

IEEE Industry Applications Society





*Industrial Power Conversion Systems Department
Industrial Power Converter Committee*

of the

IEEE Industry Applications Society

*takes pleasure in presenting the
2024 IPCC Transactions on Industry Applications Third Prize Paper Award
to*

Emerson L. Soares

For the manuscript co-authored with

Cursino B. Jacobina, Nady Rocha, Victor Felipe M. B. Melo

Entitled,

*“Dual Converter Operating with Floating Capacitors Connecting Open-
End Winding Doubly-Fed Induction Generator to the DC-Microgrid”*

Published in IEEE Transactions on Industry Applications, 2023



October 2024

Andy Knight

*Andy Knight
President*

IEEE Industry Applications Society

Yongsug Suh

IPCC Committee Chair

IEEE Industry Applications Society



ECCE 2025



IEEE ENERGY CONVERSION CONGRESS & EXPO PHILADELPHIA, PA, USA  OCT. 19-23

General Chair

Iqbal Husain

iqbal_husain@ncsu.edu

General Co-chair

Giovanna Oriti

giovanna.oriti@ieee.org

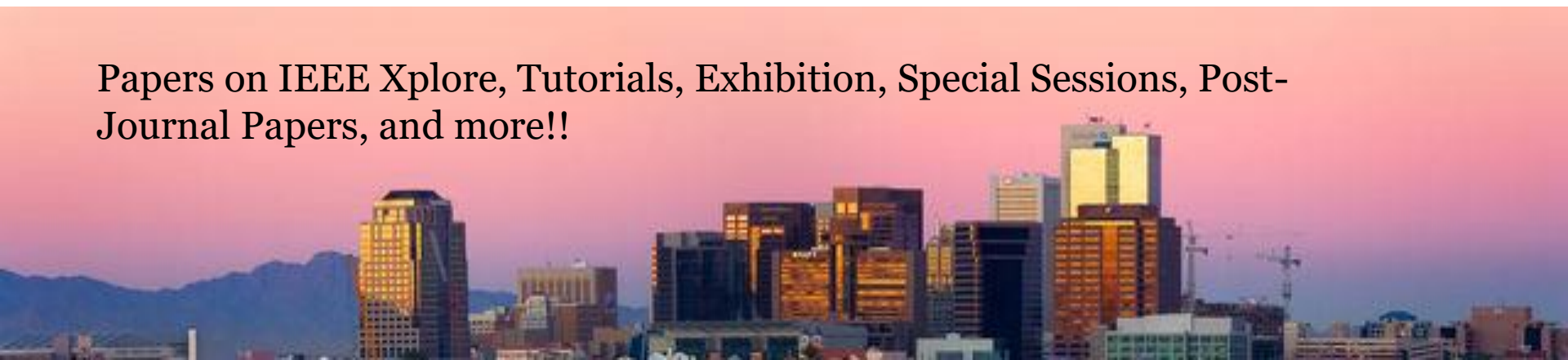


Live Philadelphia!

Join ~2000 of your closest friends

- Power Electronics, Semiconductor Devices, and Electric Drives
- Electric machines, Electric Vehicles, Electric Transportation
- Renewable Energy, Sustainable Energy
- Big Data, Machine Learning, Cybersecurity, Design Automation
- Smart Grid, Grid Modernization,
- Controls Modeling, and Optimization
- Passive Components, Materials, Energy Storage
- Many, many more topics

Papers on IEEE Xplore, Tutorials, Exhibition, Special Sessions, Post-Journal Papers, and more!!



Philadelphia Convention Center

- An elegant conference space that is marvelously adorned with works by 52 artists including a flying design of steel and aluminum tubes
- Only 15 minutes from Philadelphia International Airport



Hotels

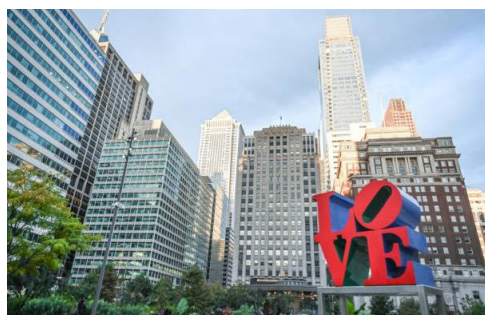
Four hotels contracted, all within less than a mile from the convention center:

- Canopy Hilton
- Hilton Garden Inn
- Le Meridian
- Wyndham Historic District



Many Attractions in Philadelphia

- Independence Hall: Birthplace of the United States
- Famous Love Sculpture
- Benjamin Franklin Parkway: Philadelphia most artistic mile
- Reading Terminal Market: One of America's oldest farmers market and food paradise
- Authentic Philly Cheesesteak
- Longwood Gardens
- Delaware River Waterfront
- Checking out Philly prior to World Cup 2026
- Rocky Steps and Rocky Statue
- and many others...



Important Dates

- Mar. 2nd, 2025 - Deadline for Digest, Tutorial and Special Sessions
- May 25th, 2025 – Digest, Tutorial and Special Sessions decision
- Jun. 15th, 2025 – Post-Journal Online Form Submission Due
- Jun. 20th, 2025 - Final papers and Tutorial Materials due
- Jul. 6th, 2025 – Post-Journal Author Notification

IAS/PELS technical committees to nominate Vice-Chairs

For details visit our website:

<https://www.ieee-ecce.org/2025/>

Organizing Committee

*Representatives from
Academia, Industry
and US National Lab*

- General Chair: Iqbal Husain
- Co-General Chair: Giovanna Oriti
- Finance Chairs: Dong Cao, Sanjida Moury
- TPCs: Xiaonan Lu, Andrea Cavagnino, Shanelle Foster, Jiangbiao He, Giacomo Scelba
- Tutorial Chairs: Luca Zarri, M A Awal
- Special Session Chairs: Grant Pitel, Anant Singh, Sarif Islam
- Publicity Chairs: Mhret Gebremariam, Helen Cui
- Publication Chairs: Brian Welchko, Silvio Vaschetto
- Local Chair: Liang Du
- Exhibit Chairs: David Morrison, Kris Eberle
- Industry Partnership Chairs: Avoki Omekanda, Mazharul Islam, Xu She
- Plenary Session Chair: Tomy Sebastian, Brad Lehman
- Student Activities Chair: Sandun Kuruppu
- Women in Engineering Chair: Vandana Rallabandi, Sneha Narasimhan
- Webmaster: Anant Singh, Chaitanya Jaolekar, Akshat Nigam
- Awards Chair: Mohammad Islam, Uday Deshpande

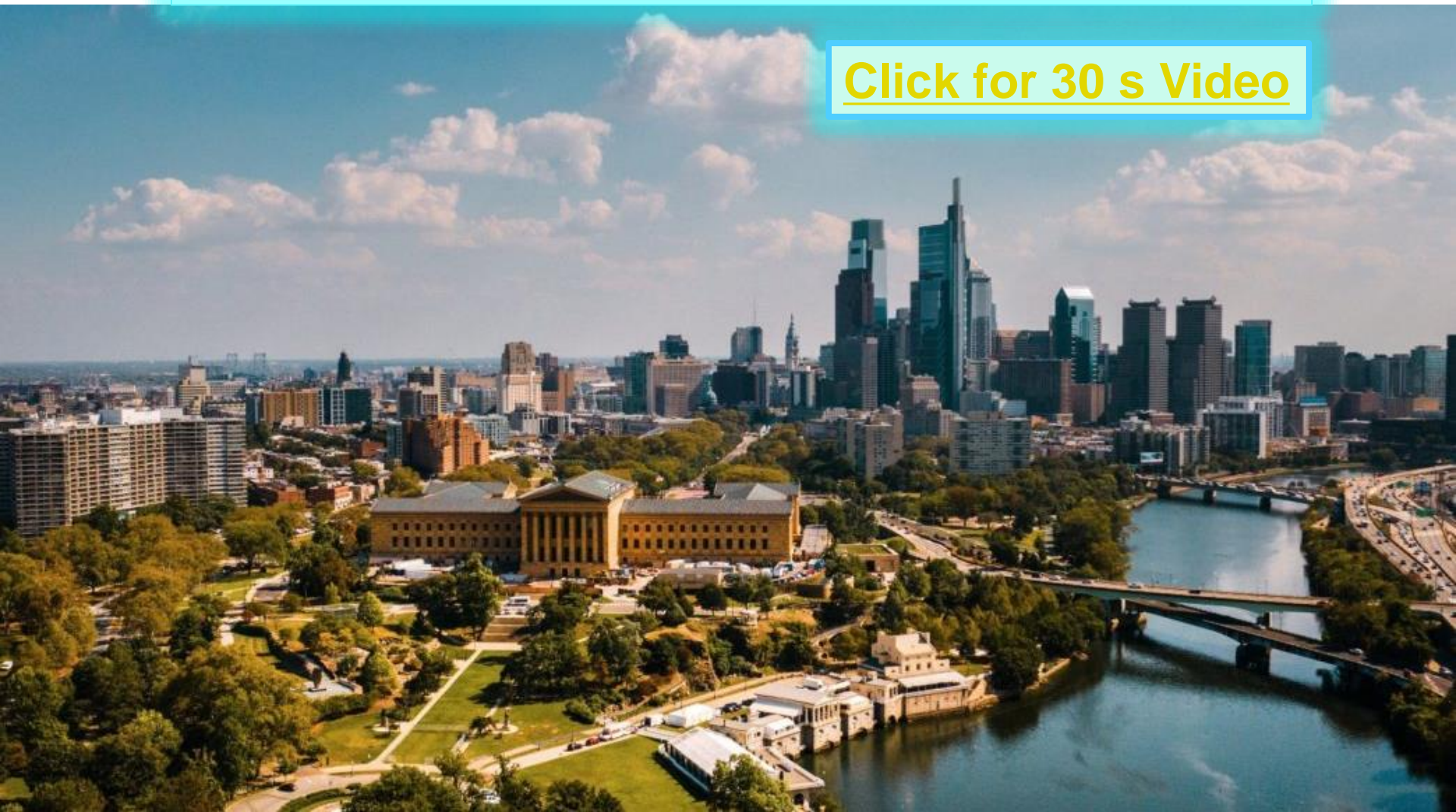


IEEE ENERGY CONVERSION CONGRESS & EXPO PHILADELPHIA, PA, USA OCT.19-23



See you in October 2025 - in Philly!!

[Click for 30 s Video](#)



IAS Annual Meeting 2025



2025 IEEE Industry Applications Society (IAS) Annual Meeting

Incorporating The
**Industrial & Commercial Power Systems (I&CPS)-Asia
Conference**

Hilton Taipei Sinban, in New Taipei, Taiwan, June 15-20, 2025

General Chair

Dr. Avoki Omekanda

avoki.omekanda@ieee.org





Conference Topics

- Industrial Power and Energy Systems, Smart Grids, Energy Storage Systems, Carbon-neutral Power and Energy Systems.
- Best practice for Data Centers, including their design, analysis, monitoring, maintenance, safety, and operation.
- Industrial Power Conversion, including Electric machines, Industrial drives, Electrified Transportation Systems and Renewable and Sustainable Energy Conversion Systems.
- Topologies, Modeling, and control of Power Electronic converters, devices and components.
- Industrial Lighting Systems, including Sources, Display Technologies, and Drivers.
- Fundamentals and Industrial Applications of Electrostatics, including Electro-hydrodynamics, Electrostatic Measurements, Computation Electrostatics, Electrostatic Precipitation and Separation, Coronas and Gas Discharges.
- Smart Manufacturing, Intelligent Process Control, and Factory Automation.
- Industry 4.0 and Best Practices in Industrial Automation and Control.
- Regulation and Utilization of Electricity for the Control of Industrial Process including machinery, heating and electrical safety. Industrial applications in continuous process
- industries, including metal production, mining, petrochemical, and others.

<https://ias-am.ieee.org/2025/author-information/>

Important Dates & Papers Submission



IMPORTANT DATES

Deadline of Digests Submission
Feb. 28, 2025

Notification of Paper Acceptance
April 15, 2025

Deadline for submitting a camera-ready PDF of the Full Paper
May 15, 2025

Author Registration Due
May 15, 2025

Conference Dates
June 15-20, 2025

- All paper submissions must be made in English. One author must be selected as the corresponding author, and an email address must be provided for that individual.
- Accepted papers from the main technical program will be published in [IEEE Xplore](#). Papers that are scheduled for presentation but are not delivered will not be included in IEEE Xplore.
- The final manuscripts for the Conference Record will be submitted electronically via the [Scholar One Manuscripts](#) website.

For details visit our website:
<https://ias-am.ieee.org/2025/>



Organizing Committee

- General Chair: [Avoki Omekanda](#), USA
- Industry Chair: [Min-Fu Hsieh](#), Taiwan
- Treasurer: [Tamas Ruzsanyi](#), Hungary
- Event Manager: [Michelle Measel](#), USA
- International Advisor: [Andy Knight](#), Canada
- TPCs: [Luca Solero](#) (Italy), [Xiaodong Liang](#) (Canada), [Saleh Saleh](#) (Canada)
- IEEE IAS Annual Meeting Local Chair: [Min-Fu Hsieh](#), Taiwan
- I&CPS Asia Local Chair: [Allen Wu Yuan-Kang](#), Taiwan
- Local Committee International Advisor: [Wei-Jen Lee](#), USA
- Local Organizing Committee (LOC) Team: [22 Members](#) (see next slide)
- Society Organizing Team: [Patrick McCarren](#), [Kimberly Borini](#), [Andrea M. Sadlowski](#)

Local Organizing Committee (LOC)



Name	Affiliation	Email
Hsueh-Hsien Chang	Minghsin University of Science and Technology	sschang@must.edu.tw
Le-Ren Chang-Chien	National Cheng Kung University	leren@ee.ncku.edu.tw
Cheng-I Chen	National Central University	cichen@ee.ncu.edu.tw
Yu-Shan Cheng	National Taiwan Ocean University	yscheng@mail.ntou.edu.tw
Chia-Chi Chu	National Tsing Hua University	ccchu@ee.nthu.edu.tw
Ching-Ming Lai	National Chung Hsing University	pecmlai@gmail.com
Chia Hung Lin	National Kaohsiung University of Science and	chlin@nkust.edu.tw
Kun-Che Ho	National Formosa University	kcho@nfu.edu.tw
Shyh-Jier Huang	National Cheng Kung University	clhuang@mail.ncku.edu.tw
Te-Tien Ku	National Kaohsiung University of Science and	ttku@nkust.edu.tw
Ming-Tse Kuo	National Taiwan University of Science and Technology	mkuo@mail.ntust.edu.tw
Kuo-Lung Lian	National Taiwan University of Science and Technology	ryanlian@mail.ntust.edu.tw
Tsorng-Juu Liang	National Cheng Kung University	tjliang@mail.ncku.edu.tw
Jian-Hong Liu	National Taiwan University of Science and Technology	jhliu727@mail.ntust.edu.tw
Yu-Jen Liu	National Chung Cheng University	azenliu@ccu.edu.tw
Shiue-Der Lu	National Chin-Yi University of Technology	SDL@ncut.edu.tw
Kin-Cheong Sou	National Sun Yat-sen University	sou12@mail.nsysu.edu.tw
Chun-Lien Su	National Kaohsiung University of Science and	cls@nkust.edu.tw
Heng-Yi Su	National Taipei University of Technology	hysu@ntut.edu.tw
Yu-Chen Su	National Tsing Hua University	yycsu@ee.nthu.edu.tw
Chin-Chung Wu	Taiwan Power Company	u850899@taipower.com.tw
Tung-Sheng Zhan	National Kaohsiung University of Science and	tszhan1109@nkust.edu.tw



See You in June 2025 in Taipei, Taiwan



APEC 2025

Flagship Conference APEC 2025 (USA)

IEEE APEC 2025 will highlight the latest news in power electronics technology

- Georgia World Congress Center | Atlanta, GA | March 16-20, 2025
- Papers selected for Lecture Sessions are presented in traditional oral presentations. Papers are selected for the Lecture Sessions for their interest to a broad range of APEC attendees.
- Papers selected for the Dialogue Session are presented in poster format. Papers are selected for the Dialogue Session generally because the scope of the paper is of interest to a narrower range of APEC attendees. The big advantage to the Dialogue Sessions is that attendees interested in the paper can have an extended, in-person discussion with the paper's author.
- **Detailed updates about the conference at www.apec-conf.org**



APEC 2025 Technical Areas of Interest

- AC-DC Converters
- DC-DC Converters
- DC-AC Inverters
- Devices and Components
- Magnetics
- Power Electronics Integration and Manufacturing
- Control
- Modeling and Simulation
- Motor Drives (split from Motor Drives and Inverters Track)
- Power Electronics for Utility Interface (Applications)
- Renewable Energy Systems
- Transportation Power Electronics
- Wireless Power Transfer
- Power Electronics Applications



IPCC contribution to APEC 2025

Since IAS is a co-sponsor of the APEC conference, IPCSD is interested in getting more involved in its organization.

Volunteers from IPCC have been invited to propose themselves as Potential Session Chairs.

APEC Mentorship Program

- **First-Time Cross-Society Mentorship Program:** PSMA/IAS/PELS started in APEC 2024
- Xiaonan Lu, IPCC Past Chair, is working with the APEC membership committee since early 2024 in preparation for APEC 2025
- IPCC members are invited to participate to the mentorship program



Miscellaneous

Welcome to ICEMS2024-Fukuoka 2024

November 26-29 (Tuesday-Friday), 2024

The 27th International Conference on Electrical Machines and Systems



Where is Fukuoka City?



<https://www.icems2024.com/>

- In the region of Asia, ICEMS is an important conference in the field of electrical machines and systems including motors, generators, drives, power electronics, motion control, energy systems, and e-mobility.
- ICEMS is now held annually in rotation in China, Korea, Japan and other Asia-Pacific countries.
- In ICEMS2024-Fukuoka, over 600 general papers, 20 organized/special session papers, and 5 keynote speeches will be presented.
- There will also be a banquet, technical tour, family tour, and student barbecue. Join us and enjoy Fukuoka culture and food (ramen, sake)!



We are really looking forward to welcoming all of you at Fukuoka, Japan!





Inter
Power
Conf

- **Conference Date**
May 31-June 4, 2026
- **Deadline of Extend Summary**
Oct. 30, 2025

IPEC 2026
ECCE ASIA
NAGASAKI
- Integration of Power conversion, Electric machine, and Control -



NAGASAKI May 31-June 4, 2026
DEJIMA MESSE NAGASAKI

ECCE Asia cooperation



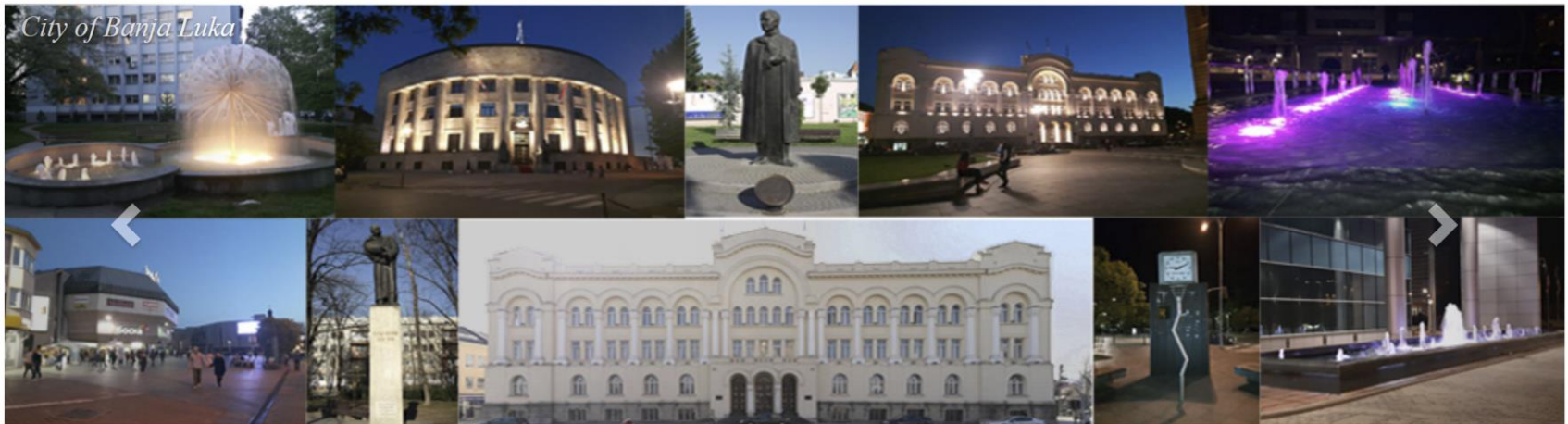
Co-Sponsorship



- **Organizing Comm. Chair**
Kan Akatsu,
Yokohama National Univ.
- **Steering Comm. Chair**
Junichi Itoh,
Nagaoka Univ. of Tech.
- **TPC Chair**
Keiji Wada,
Tokyo Metropolitan Univ.

XV International Symposium on Industrial Electronics and Applications - INDEL 2024 6-8 November 2024, Banja Luka, Bosnia and Herzegovina

The Symposium is sponsored by IEEE Industry Applications Society, IEEE Power Electronics Society and IEEE Industrial Electronics Society.



Tutorials

<p>Current Source PWM Converters <i>-From Theory to Practice-</i></p>	<p>IoT Device Development <i>-From Idea to Product-*</i></p>	<p>The Design of Digital ASICs with Open-Source EDA Tools <i>-From Theory to Practice-*</i></p>
<p>Univ. Prof. Dr. Petar. J. Grbović</p>	<p>Amar Mahmutbegovic</p>	<p>Dr. Aleksandar Pajkanović</p>

*In the cooperation with IEEE B&H SBs and YP

23rd International Symposium on POWER ELECTRONICS

Ee 2025

Oct. 29th ~ Nov. 1st 2025

Novi Sad, Republic of Serbia



**Power Electronics
Society,
Novi Sad**

Trg Dositeja Obradovića 6,
21000 Novi Sad
Republic of Serbia
e-mail: dee@dee.org.rs
www: www.dee.org.rs



**Serbian Academy of
Sciences
and Arts, Belgrade**

Kneza Mihaila St. 35,
11 000 Belgrade,
Republic of Serbia
e-mail: sasadir@sanu.ac.rs
www: www.sanu.ac.rs/en/



**Electrical Institute
"Nikola Tesla"**

Koste Glavinića 8a,
11000 Belgrade,
Republic of Serbia
e-mail: info@ieent.org
www: www.ieent.org



**University of Novi Sad,
Faculty of Technical
Sciences**

Trg Dositeja Obradovića 6,
21000 Novi Sad,
Republic of Serbia
e-mail: ftndean@uns.ac.rs
www: www.ftn.uns.ac.rs



**IEEE Power Electronics
Society**



IEEE Industrial Electronics Society



IEEE Industry Applications Society



**IEEE - Serbia and Montenegro
Section, Belgrade**



**PEMC Council,
Budapest, Hungary**

Planning of ECCE 2025

Topic chairs and session chairs needed for ECCE 2025

- Business cards collected in Virtual Mode for candidate topic chairs and session chairs.
- **Volunteers send an email message (first name, last name, email address, preferred topics from the list in the next page) to the Committee Secretary by November 15th marco.dibenedetto@uniroma3.it**
- Names and email addresses will be collected

E. Power Converter Topologies

1. DC-DC non-isolated
2. DC-DC isolated
3. AC-DC single-phase
4. AC-DC multi-phase
5. DC-AC single-phase
6. DC-AC multi-phase
7. AC-AC converters
8. Multi-level converters

F. Control, Modelling and Optimization of Power Converters

1. Power converter modeling
2. Power converter control
3. Power converter EMI
4. Stability of converters / systems
5. Converter power quality
6. Reliability, diagnostics and fault analysis of power converters
7. New and advanced control algorithms

Adjournment

Motion to Adjourn.

**THANK YOU MEMBERS!
THANK YOU VOLUNTEERS!**

**FAREWELL!
SEE YOU IN PHILADELPHIA!!!**