

Transportation Systems Committee (TSC) Annual Meeting

October 22, 2024
3:00-4:00PM PST, Room 123

TSC Chair: John Kisacikoglu, Ph.D.
National Renewable Energy Laboratory

Agenda

A. TSC Business Report

1. 2024-2025 Committee Officers
2. Introduction About TSC and Key 2024 Highlights
3. Committee Activities
4. TSC Transactions Paper Review
5. Paper Awards for ECCE and Transaction Papers
6. Conference Activities

B. TSC Related Conferences

1. ITEC and ITEC-AP 2025
2. ECCE-2025
3. IAS Annual Meeting-2025

C. Nagamori Award Program

D. Closing Comments and Adjourn

Committee Officers – 2024-2025

Chair

Dr. John Kisacikoglu
National Renewable Energy Laboratory

Vice Chair (Papers)

Dr. Rakib Islam
American Axle & Manufacturing

Vice Chair (Conferences)

Dr. JiangBiao He
University of Tennessee

Secretary

Dr. Khorshed Alam
General Motors

Past Chair

Dr. Mohammad Anwar
General Motors

Subcommittee Officers

Award Subcommittee (2023-2024)

Chair: Dr. Dong Cao, University of Dayton
Vice-Chair: Dr. Khorshed Alam, General Motors

Standards Subcommittee (2025-2026)

Dr. Marium Rasheed, Ford Motor Company

Webmaster (2024-2025)

Abdulmueen Alrashide, Florida International University

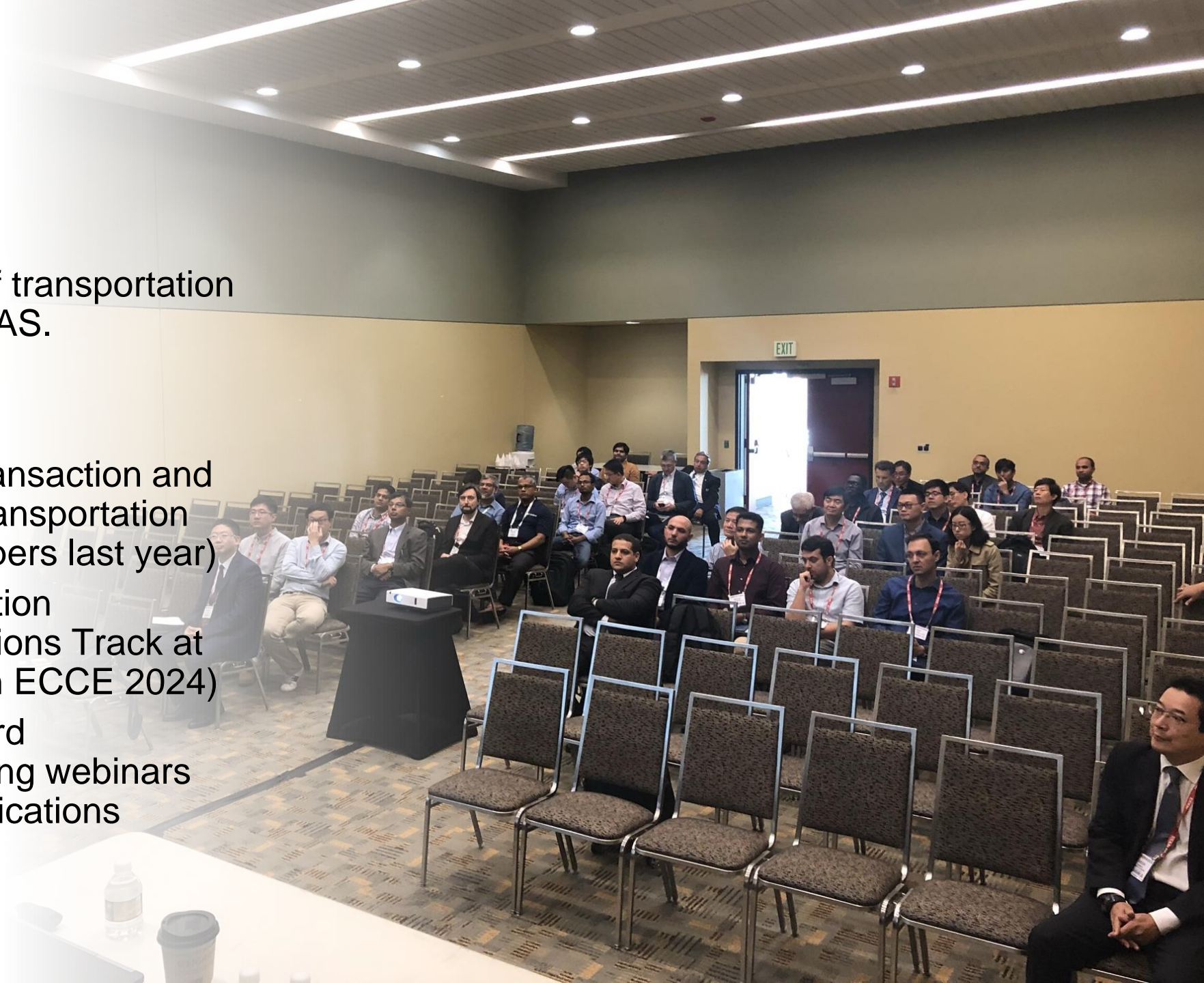


Award subcommittee
positions will be
renewed in 2025.
Apply if you are
interested.

Who we are

TSC covers all aspects of transportation systems within scope of IAS.

- managing review of transaction and magazine papers in transportation area for IAS (150+ papers last year)
- organizing Transportation Electrification Applications Track at ECCE (170+ papers in ECCE 2024)
- participating in standard development, organizing webinars and special issue publications



Key Updates from Committee Chair

TSC Website Update

- We selected a new webmaster, Abdulmueen Alrashide, Florida International University
- Completely revamped TSC website: <https://site.ieee.org/ias-tcs/>

TSC New Standards Chair

- Marium Rasheed, Ford Motor Company will help coordinate standards activities within TSC

Conference Outreach

- John Kisacikoglu (chair) and JiangBiao He (vice chair) attended and presented on TSC activities at PELS TC4 at ITEC
- JiangBiao He appointed steering committee chair for ITEC-Asia Pacific 2025-2026

Committee Documents in Box Cloud

- All ongoing and archival documents are available to officers in Box shared folder
- Provides a synchronized working environment for all officers

Other

- Monthly Committee Coordination Meetings to Sync up with committee and subcommittee officers
- TSC membership database moved to Google Groups

Khorshed Alam, Ph.D.
General Motors
Secretary

Committee Membership Updates

- Total members as of Oct 2024 is **329** (*increased from 270 members in Sep 2023*).
 - Some members' e-mails may need to be updated as a result of the changes in their affiliations.
- If you are interested in being a TSC member, please send your contact information to Dr. Khorshed Alam at mohammed.k.alam@gm.com or fill out the form using the QR code
- Spread the word about TSC to friends, colleagues, and students



TSC Brochure

Transportation Systems Committee (TSC) is a technical committee within the Industrial Power Conversion Systems Department (IPCSD) in the Industry Applications Society (IAS) of IEEE.

The scope of TSC is to promote electrification of the transportation industry, including components, systems, and infrastructure, and encompassing all modes of transportation (e.g., on-road and off-road vehicles, aerospace vehicles, rail-road and marine transports, etc.) for people and goods within the scope of the IAS.

Our technical program activities include:

- Review and evaluation of scientific papers for IEEE Industry Application Society
- Solicitation and selection of papers for presentation at IEEE IAS sponsored conferences such as ECCE, APEC, and others.
- Initiation, preparation and formulation of Standards, Specifications, Operating and Application Guides, Test Procedures and Recommended Practices.
- Providing technical assistance to IAS chapters formed within their respective scope.

Our current TSC officers include (2024-2025 term):

- Chairman – Dr. John Kisacikoglu, National Renewable Energy Laboratory
- Vice Chairman (Papers) – Dr. Rakibul Islam, American Axle & Manufacturing
- Vice Chairman (Conferences) – Dr. JiangBiao He, University of Kentucky
- Secretary – Dr. Khorshed Alam, General Motors



IEEE IAS Transportation Systems Committee (TSC)



Please scan the QR code to join TSC. If you are an IEEE IAS member and interested in serving as any of the roles below, make sure to send your information to us:

- Topic Chair or Session chair for ECCE and APEC
- TSC Associate Editor or Reviewer
- TSC Standard Subcommittee Members
- Regional Liaison Volunteers

Regional Liaison Subcommittee Formation for 2025-2026

Regional liaison subcommittee for 2023-2024:

Regional Liaison Subcommittee Officers

- Asia: Prof. Zheng Wang, Southeast University, China
- Australia/Oceania: Prof. Rabiul Islam, University of Wollongong, Australia
- Europe: Prof. Yusuf Yasa, Istanbul Technical University, Turkey
- Africa: Not filled
- South America: Not filled

Purpose

- Help increase membership base for TSC
- Help publicize TSC activities within their regions
- Stay engaged with regional IAS activities

Term Duration

- Two years (January 2025 - December 2026)
- After two years a new liaison officer is appointed
- Next appointment will be in Jan 2027

Call for TSC Volunteers

- Please scan the QR code to update your affiliation and contact info, as well as mark your volunteer interest to serve for TSC at various positions.



Rakib Islam, Ph.D.
American Axle & Manufacturing
Vice Chair - Papers

IAS Transaction Paper Review

TSC Transaction Paper Submission Process:

- TSC started reviewing papers for IA transactions/magazines since 2012
- First conference policy
- You request for invitation to submit a paper to be considered by TSC
- At least 20% of change is expected with respect to conf. paper. Make it visible!
- Reach out to VC-Papers (rakibulislam2000@gmail.com) to request an invitation
- You may receive direct invitation from the Editor, IEEE Transactions on Industry Applications

Topic Areas for TSC Include:

- Transportation systems analysis (mobility, routing, etc.)
- Power electronics (traction, charging, etc.)
- Electric motors for transportation
- Grid integration analysis and solutions (low power, high power, wired, wireless, etc.)
- Energy storage systems used in transportation (battery, hydrogen and other alternative sources)
- Cyber/physical security applications that focus on transportation systems.

IAS Transaction Paper Review

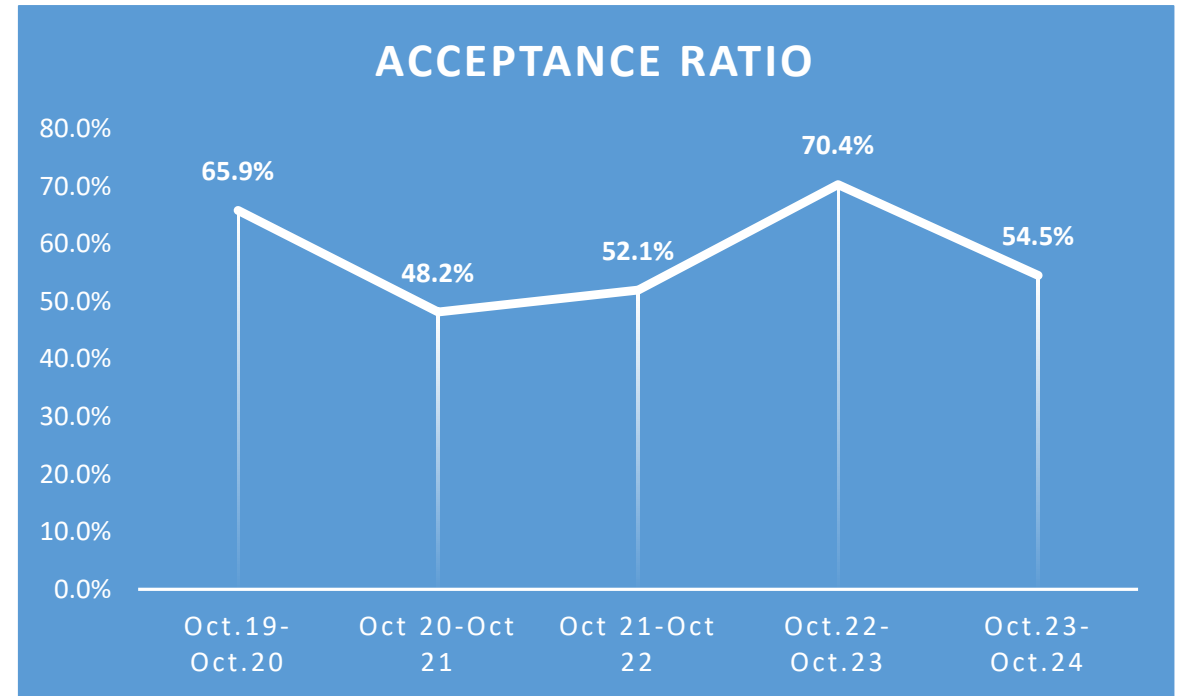
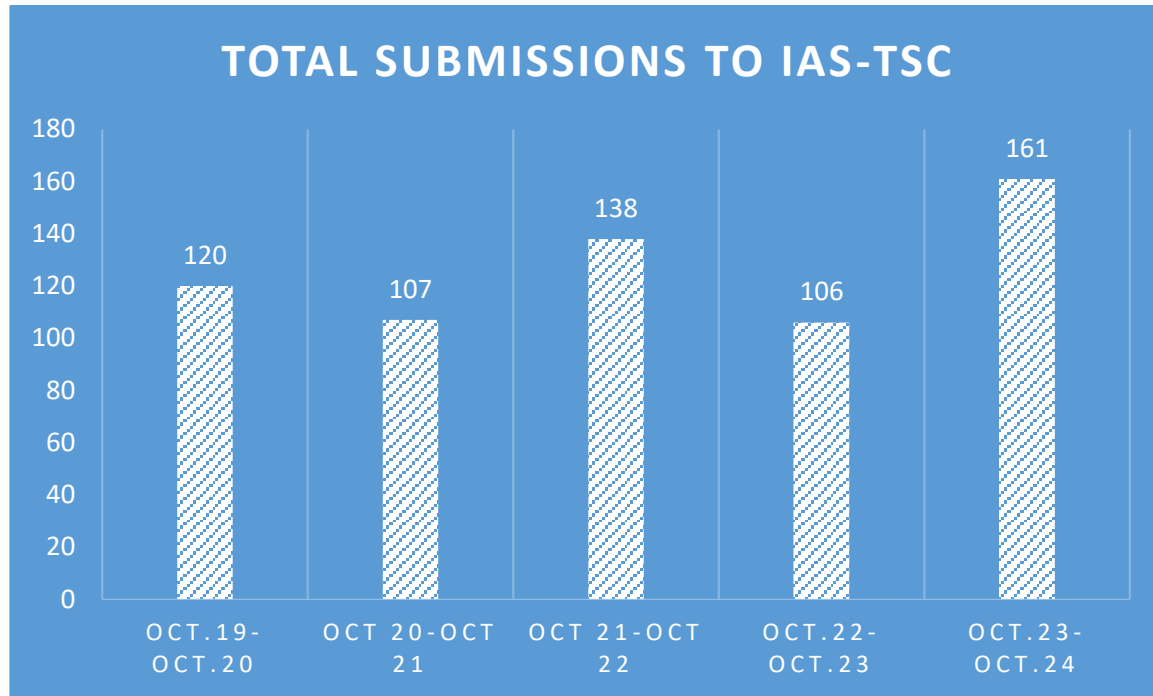
- TSC started reviewing papers for IA transactions/magazines since 2012
- **TCPRC:** Dr. Rakib Islam– Vice Chair (Papers)
- **Associate Editors**
 1. Prof. Mehdi Farasat, Louisiana State University, LA (2023-present)
 2. Dr. Zhaocai Liu, National Renewable Energy Laboratory, CO (2023-present)
 3. Prof. Di Zhang, Naval Postgraduate School, CA (2023-present)
 4. Prof. Hua Zhang, Rowan University, NJ (2023-present)
 5. Prof. Yue Cao, Oregon State University, OR (2022-present)
 6. Prof. Woongkul (Matt) Lee, Purdue University, IN (2022-present)
 7. Dr. Jianlin Li, Argonne National Laboratory, IL (2022-present)
 8. Prof. Deepak Ronanki, Indian Institute of Technology Roorkee, India (2022-present)
 9. Dr. Sajad Chowdhury, Oak Ridge National Lab, CO (2024-present)
 10. Dr. Liwei Zhou, University of Texas at Arlington, TX (2024-present)
 11. Dr. Subrata Saha, Aisin Corporation, Japan (2020-present)
- *Official term is two years with possible extension based on performance*

*If you are interested in being a reviewer or **associate editor** for TSC, please put your info in the link provided or visit the website for details.*

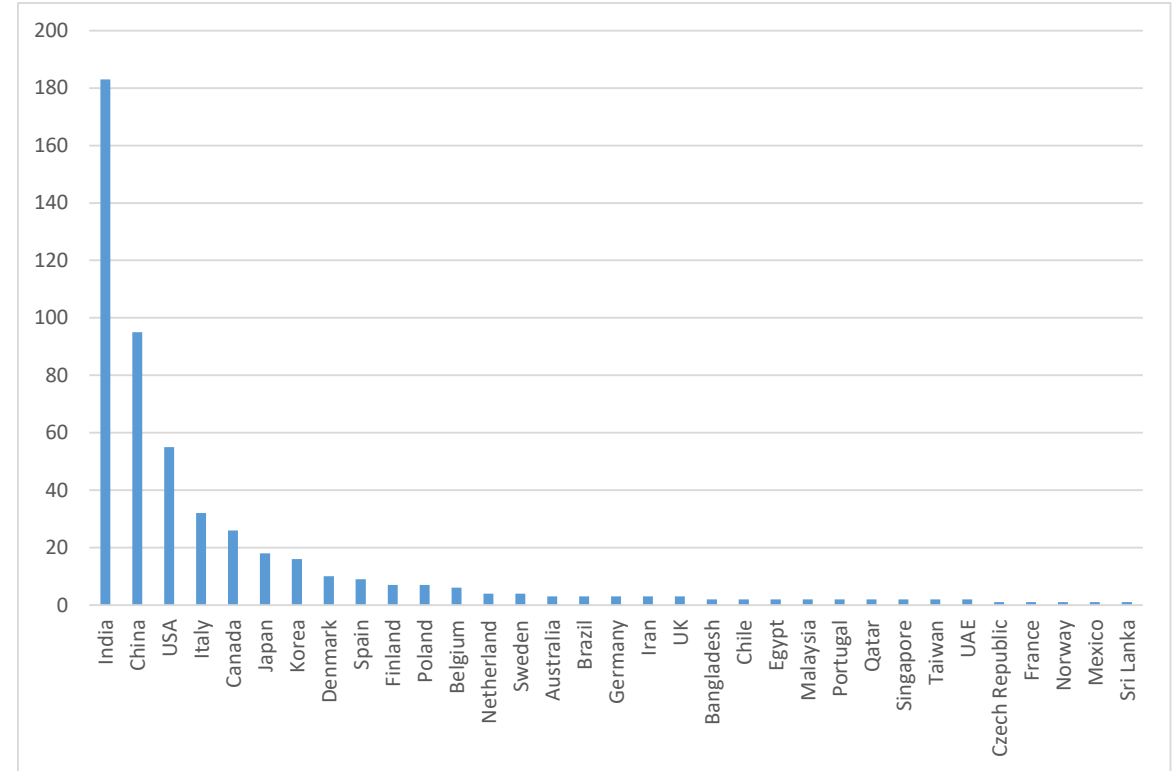
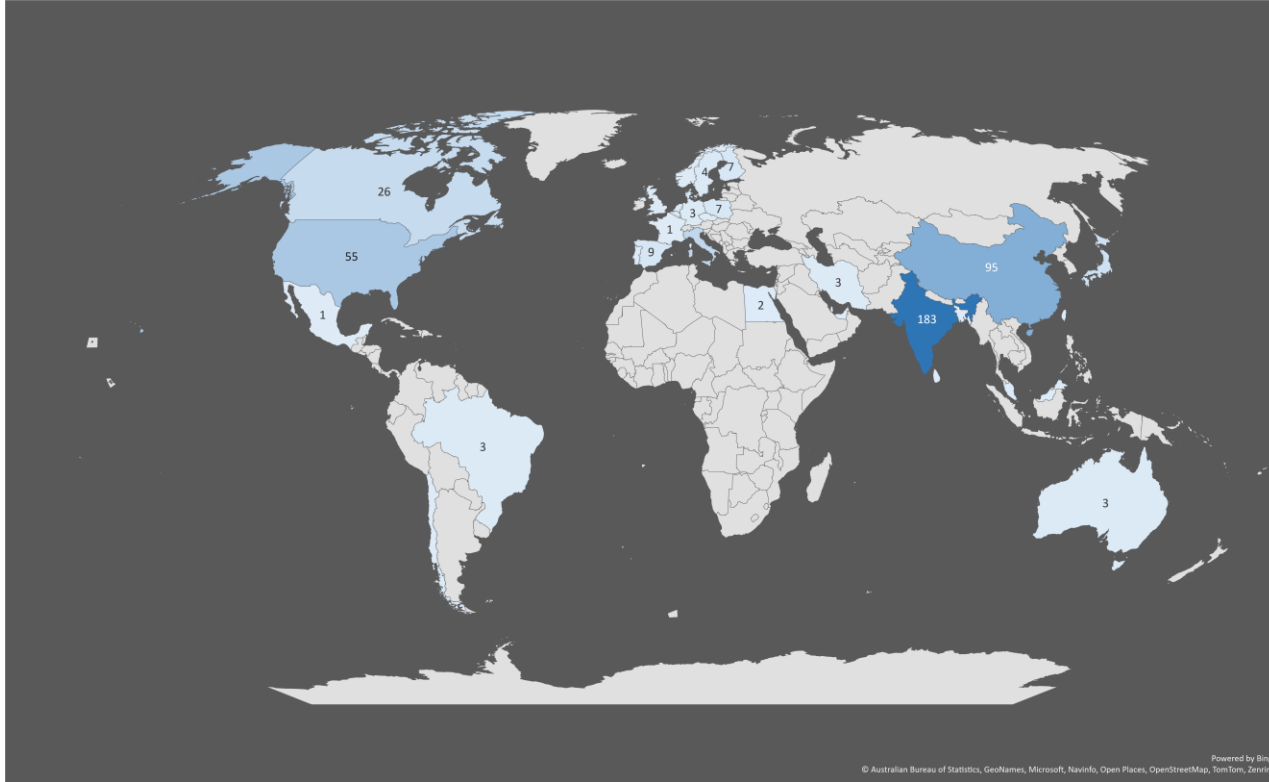


We appreciate our Associate Editors for their kind voluntary work

Transaction Paper Review: Manuscript Status (Last Five Years)



Transaction Paper Submission per Country (Last Four Years)



2024 TSC Awards

Dong Cao,
Ph.D.

University of Dayton
Chair

Khorshed Alam,
Ph.D.

General Motors
Vice Chair

Award Subcommittee

TSC ECCE Prize Paper Award - 2024

Award Committee

Chair – Dr. Dong Cao

Vice Chair – Dr. Khorshed Alam

Committee Members:

Name	Affiliation
Dr. Fei Lu	Drexel University
Dr. Anup Anurag	Delta Electronics
Dr. Arshan Khan	CNH Industrial
Dr. Woongkul (Matt) Lee	Michigan State University
Dr. Akm Arafat	Drive System Design



Fei Lu



Anup Anurag



Arshan Khan



Woongkul Lee



Akm Arafat

The award committee evaluated **8 top ranked** papers from ECCE 2023 Track D - Transportation System Applications. Total number of accepted papers under Track D was **96**.

TSC ECCE Prize Paper Award - 2024

Award Winners: First Prize

Improving EV Charging Resilience under a Device Fault Condition

Namwon Kim
Grid Systems Architecture
Oak Ridge National Laboratory
Oak Ridge, USA
kimn1@ornl.gov

Michael Starke
Grid Systems Architecture
Oak Ridge National Laboratory
Oak Ridge, USA
starkemr@ornl.gov

Benjamin Dean
Grid Systems Architecture
Oak Ridge National Laboratory
Oak Ridge, USA
deanbr@ornl.gov



TSC ECCE Prize Paper Award - 2024

Award Winners: Second Prize

Multi-mode Control of the Energy Transfer Unit in Capacitively-coupled Hybrid Battery Packs for Enhanced Auxiliary DC Bus Regulation

Marium Rasheed
Electrical and Computer Engineering
Utah State University
Logan, Utah - USA 84341
marium.rasheed@usu.edu

Craig Simpson
Electrical and Computer Engineering
Utah State University
Logan, Utah - USA 84341
craig.simpson@usu.edu

Hongjie Wang
Electrical and Computer Engineering
Utah State University
Logan, Utah - USA 84341
hongjie.wang@usu.edu

Regan Zane
Electrical and Computer Engineering
Utah State University
Logan, Utah - USA 84341
regan.zane@usu.edu



TSC ECCE Prize Paper Award - 2024

Award Winners: Third Prize

Outer Rotor Design of a High-Power Density Aviation Motor

Wenping Zhao
Raytheon Technologies Research Center
East Hartford, CT, USA
wenping.zhao@rtx.com

Huan Zhang
Raytheon Technologies Research Center
East Hartford, CT, USA
huan.zhang@rtx.com

Zaffir Chaudhry
Raytheon Technologies Research Center
East Hartford, CT, USA
zaffir.chaudhry@rtx.com

Andrzej Kuczek
Raytheon Technologies Research Center
East Hartford, CT, USA
andrzej.kuczek@rtx.com

Jagadeesh Tangudu
Raytheon Technologies Research Center
East Hartford, CT, USA
jagadeesh.tangudu@rtx.com



TSC Transaction Prize Paper Award - 2024

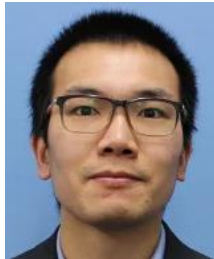
Award Committee

Chair – Dr. Dong Cao

Vice Chair – Dr. Khorshed Alam



Liwei Zhou



Zhaocai Liu



Mehdi Farasat



Hua Zhang



Shajjad Chowdhury



Deepak Ronanki



Woongkul Lee

Committee Members:

Name	Affiliation
D. Liwei Zhou	University of Texas Arlington
Dr. Zhaocai Liu	National Renewable Energy Laboratory
Dr. Mehdi Farasat	Louisiana State University
Dr. Hua Zhang	Rowan University
Dr. Shajjad Chowdhury	Oak Ridge National Laboratory
Dr. Deepak Ronanki	Indian Institute of Technology Madras
Dr. Woongkul (Matt) Lee	Purdue University

The award committee evaluated **5 top ranked** published from IEEE Transactions on Industry Applications Transportation System Committee in 2023. Total number of accepted papers published in Transportation System Committee in 2023 was 40.

TSC Prize Paper Award for IEEE Transactions on Industry Applications - 2024

Award Winners: First Prize

1184

IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, VOL. 59, NO. 1, JANUARY/FEBRUARY 2023

Design of a 35 kW Permanent Magnet Synchronous Motor for Electric Vehicle Equipped With Non-Uniform Air Gap Rotor

Feng Liu , Xiuhe Wang , *Member, IEEE*, and Zezhi Xing 



山东大学
SHANDONG UNIVERSITY









TSC Prize Paper Award for IEEE Transactions on Industry Applications - 2023

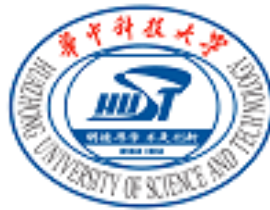
Award Winners: Second Prize

4584

IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, VOL. 59, NO. 4, JULY/AUGUST 2023

Shared Energy and Reserve Based Coordinated Operation Between Electric Vehicle Charging Stations and Distribution Power Network

Yuanzheng Li , Senior Member, IEEE, Xiao Ren, Zhixian Ni , Tianyang Zhao , Member, IEEE,
Leijiao Ge , Senior Member, IEEE, Xi Li , Yunfeng Luo, and Yong Zhao 



華中科技大學

HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY




TSC Prize Paper Award for IEEE Transactions on Industry Applications - 2022

Award Winners: Third Prize

1212

IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, VOL. 59, NO. 1, JANUARY/FEBRUARY 2023

Optimal Scheduling Strategy of Electric Vehicle Cluster Based on Index Evaluation System

Huanzhan Yue, Qian Zhang , Xiaosong Zeng, Wei Huang, Lan Zhang, and Jianjuan Wang



重慶大學
CHONGQING UNIVERSITY



TSC Conference Activities

JiangBiao He, PhD
University of Tennessee, USA

Vice Chair - Conferences

ECCE 2024 – Transportation Electrification Applications

- Our Track-D in ECCE-2024 received the most digest submission than ever before.
- 10 oral sessions are organized for Track-D, with each oral session having 5 papers.
- 4 poster sessions are organized for Track-D, covering the rest 63 papers.

	Accepted Oral	Accepted Poster	Withdrawn	Rejected	Total	Acceptance Rate
ECCE-2024	50	63	9	55	177	63.84%
ECCE-2023	40	56	3	41	137	70.10%
ECCE-2022	46	9	4	19	78	70.50%
ECCE-2021	44 (<i>virtual conf due to COVID</i>)		3	21	68	64.70%
ECCE-2020	67 (<i>virtual conf due to COVID</i>)		10	37	114	58.80%
ECCE-2019	25	32	7	23	87	65.50%

ECCE 2024 – Transportation Electrification Applications

Session topics:

1. Inductive Wireless Power Transfer for Transportation - (1 oral session, 5 papers)
2. Capacitive Wireless Power Transfer for Transportation - (1 oral session, 5 papers)
3. Battery Management Systems for Transportation - (1 oral session, 5 papers)
4. On-Board Battery Chargers (1 oral session, 5 papers)
5. EV Charging Infrastructure - (1 oral session, 5 papers)
6. Hydrogen Fuel Cell Traction and Infrastructure - (1 oral session, 5 papers)
7. Hybrid and Electric Powertrains - (1 oral session, 5 papers)
8. Applications of Electric Traction and Propulsion - (1 oral session, 5 papers)
9. Electric Aircraft Propulsion Technologies (1 oral session, 5 papers)
10. Other Topics in Transportation Electrification (1 oral session, 5 papers)
11. Transportation Electrification (I, II, III, and IV) (4 poster sessions, 63 papers)

ECCE 2024 – Transportation Electrification Applications

- Track-D Vice Chairs (from TSC): JiangBiao He, Khorshed Alam
- 9 Topic Chairs selected from our TSC members based on their voluntary interest.
- Many TSC members served as reviewers for the ECCE digests and papers.

Name	Affiliation	Research Area
Dr. Thomas Luo	General Motors, USA	Power electronics, EV powertrains
Dr. FNU Nishanth	GE Research, USA	Motor design and control
Dr. Athar Hanif	Ohio State University, USA	Control of motors and power converters
Dr. Appa Rao Dekka	Lakehead University, Canada	Power converters and controls
Dr. Sina Vahid	Miller Electric Technology Center, USA	Power converters and drives
Dr. Liwei Zhou	University of Texas Arlington, USA	Modeling and control of power converters
Dr. Deepak Ronanki	IIT Delhi, India	Power converters and motor drives
Dr. Pranoy Roy	Eaton Corporation, USA	Power converters and energy storage
Dr. Hao Chen	Zhejiang University, China	Electric machines and traction drives

ECCE 2024 – Transportation Electrification Applications

- **Session Chairs at ECCE-2024: We recommended 12 TSC members.**

Session	Session Chairs
Inductive Wireless Power Transfer for Transportation	Dr. Thomas Luo, Dr. Deepak Ronanki
Capacitive Wireless Power Transfer for Transportation	Dr. Shuai Shao, Dr. Sina Vahid
Battery Management Systems	Dr. Feng Guo, Dr. Fnu Nishanth
EV Charging Infrastructure	Dr. Athar Hanif, Dr. Thomas Luo
Hydrogen Fuel Cell Traction and Infrastructure	Dr. Deepak Ronanki, Dr. Feng Guo
Hybrid and Electric Vehicle Power Electronics	Dr. Khorshed Alam, Dr. Liwei Zhou
Applications of Electric Traction and Propulsion	Dr. AK Arafat, Dr. Sina Vahid
Electric Aircraft Propulsion Technologies	Dr. Tao Yang, Dr. Shuai Shao
On-board Battery Chargers	Dr. Thomas Luo, Dr. Athar Hanif
Other Topics in Transportation Electrification	Dr. AK Arafat, Dr. Fnu Nishanth

ITEC Global Series

ITEC North America (60% PELS, 20% IAS, 20% PES)

- ITEC'21: June 23-25, 2021, Virtual
- ITEC+'22: June 15-17, Anaheim, CA
- ITEC+'23: June 20-23, Downtown Detroit, MI
- ITEC'24: June 19-21, Rosemont, IL, USA
- ITEC+' 25, June 18-25, Anaheim, CA, USA

ITEC Asia & Pacific (36% IAS, 12% PELS, 12% PES, 40% Others) – Led by IAS

- May 8-11, 2019, Jeju, Korea
- 2020: Cancelled.
- 2021: Cancelled
- 2022: Oct 28-31: Zhejiang University International Campus, Haining, China
- 2023: Nov 28 - Dec 1: Chiang-Mai, Thailand
- 2024: Oct. 10-13, Xi'an, China
- 2025: Oct, Singapore

Other Future Conferences

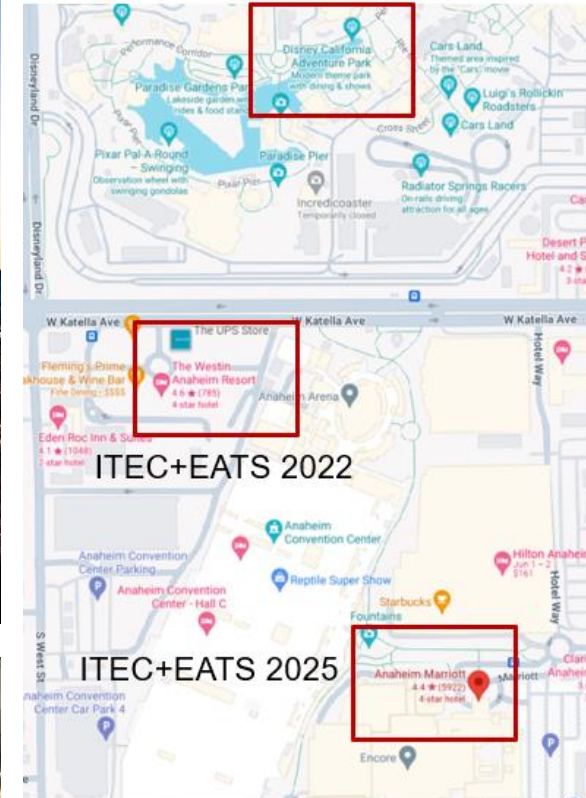
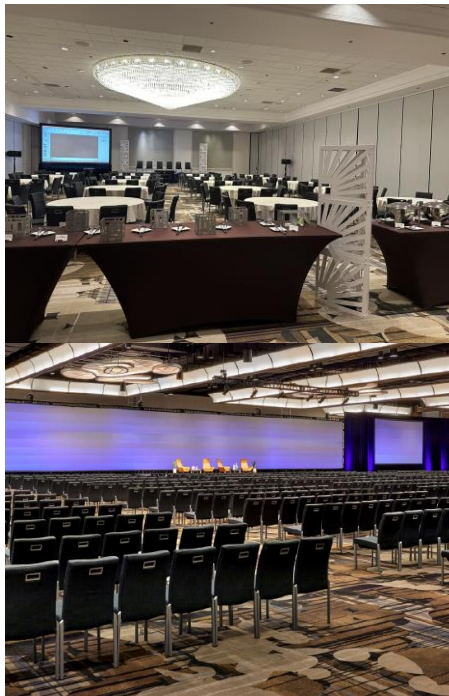
TSC has or will be involved in various conferences in 2025 at various capacities:

- **APEC 2025, March 16-20, Atlanta, GA, USA**
- **ECCE 2025, October 19-23, Philadelphia, PA, USA**
- **IEMDC 2025, May 18-21, Houston, TX, USA**
- **ITEC+EATS 2025, June 18-25, Anaheim, CA, USA**
- **ITEC Asia & Pacific 2025, Nov. 25-28, 2025**

2025 IEEE Transportation Electrification Conference & Expo + Electric Aircraft Technologies Symposium (ITEC+ 2025)



- **Location:** Anaheim, California
- **Venue:** Anaheim Marriott
- **Date:** June 18-20, 2025



2025 IEEE Transportation Electrification Conference & Expo + Electric Aircraft Technologies Symposium (ITEC+ 2025)



Organizing Committee

- **General Chair:** Liang Du (Temple U.)
- **General Co-Chair:** Herb Schlickemaier, (HS Advanced Concepts LLC, AIAA Rep.)
- **Program Chair:** Jennifer Bauman (McMaster U.)
- **Program Co-Chair:** Vincent Schultz (NASA)
- **Assistant Program Chair:** Ilker Sahin (AVL)
- **Treasurer:** Fei Lu (Lehigh U.)
- **Publication Chair:** Yan Li (Penn State University)
- **Publication Co-Chair:** Jinan Zhang (Eaton)
- **Short Courses/Tutorials Chairs:** Matilde D'Arpino (Ohio State) Nishanth (ORNL) Evgeni Ganey
- **Keynote Chair:** Gokcin Cinar (University of Michigan)
- **Women in Engineering activities Chair:** Sonia Martin (Stanford University)
- **Industry Liaison Chairs** Shobhit Gupta (GM) Shreshta Rajakumar Deshpande (SwRI)
- **Awards Chair:** Xiaofeng Yang (Beijing Jiaotong University)
- **Conference Coordinators:** Rebecca Krishnamurthy, Allison Castaneda (RNA Associates)

2025 IEEE Transportation Electrification Conference & Expo + Electric Aircraft Technologies Symposium (ITEC+ 2025)



Technical Tracks

1. Power Electronics and Motor Drives
2. Electric Machines and Actuators
3. Battery, Fuel Cell, Hydrogen, and Other Energy Storage
4. Superconducting and Cryogenic Systems and Components
5. System Dynamics, Modeling, and Control
6. Mission Operation: Energy, Cost, Emissions, and Thermal Management
7. Connected and Autonomous Vehicles, Smart Mobility, and Vehicle Functional Security
8. Powertrain Architectures: Design, Integration, Packing, and Optimization
9. Electrification of Heavy Duty and Off-Road Vehicles
10. Design and Optimization for Electrified Airplane, Space, Sea, and Undersea Transportation
11. Rapid Prototyping, Real-Time Simulation, HIL and SIL, Verification, Validation and Testing
12. Smart and Micro Grids, EV-Interacting Grids
13. Battery Chargers: Onboard, Wireless, Fast, and Ultra-Fast
14. Safety, Diagnostics, Reliability, Failure and Fault Mode Protection, and EMI
15. Codes, Certification, Standards, Policies, and Regulations and EcoCAR
16. Published IEEE PELS Transactions Papers in 2024 and 2025 (Poster Only)

2025 IEEE Transportation Electrification Conference & Expo + Electric Aircraft Technologies Symposium (ITEC+ 2025)



Key Dates

NOVEMBER 22, 2024
Paper proposal digest submission deadline

FEBRUARY 28, 2025
Author's notification of acceptance

APRIL 1, 2025
Final manuscript submission deadline

APRIL 1, 2025
Author Registration Deadline

Author Questions:

*Review preference: *pool would you prefer for reviewing your paper?*

*Will you need a USA travel visa? *accommodate expedited issuance of invitation letters*

2025 IEEE Transportation Electrification Conference & Expo + Electric Aircraft Technologies Symposium (ITEC+ 2025)



Expected Program:

- **6 to 8 Keynote presentations**
- **6 Regular panels + 2 (possible) follow-up plenary panels**
- **Technical training:**
 - 4 half-day short courses
 - 4 90-minute tutorials
- **6 Industry presentations & sessions**
- **300+ Technical Papers**
- **40+ Exhibitors**
- **Expected attendees: 800**

IEEE Transportation Electrification Conference and Expo, Asia-Pacific (ITEC-AP 2025)

Nanyang Technological University (NTU) Alumni House
Singapore, 25 Nov - 28 Nov 2025

CALL FOR PAPERS

ITEC Asia-Pacific is part of the global IEEE ITEC conference series which aims to provide a forum for sharing knowledge, experience, and ideas in electrical technologies for transportation. Technical sessions, tutorials, exhibitors, and industry activities are planned. This international conference is co-sponsored by the IEEE Industry Applications Society, the IEEE Power Electronics Society, the IEEE Power and Energy Society, and the IEEE Transportation Electrification Community.

Technical papers *accepted and presented* at the conference will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements. All of the accepted and presented papers will be eligible for further review for the possible publication in one of the IAS periodicals (IEEE Transactions on Industry Applications and IEEE Industry Applications Magazine) and other IEEE journals, subject to the conference paper submission rules of each journal.

You are cordially invited to submit your recent research work to the IEEE ITEC-AP 2025. Accepted papers will now be **included in IEEE Explore**. The interested technical fields include but are not limited to the following:

General Chair

Christopher H. T. Lee *NTU, Singapore*

General Co-chair

Jun Xu *Xi'an Jiaotong University, China*

Woongchul Choi *Kookmin University, Korea*

Uthane Supatti *Kasetsart University, Thailand*

Technical Program Chair

Yan Xu *NTU, Singapore*

Yi Tang *NTU, Singapore*

Jimmy Chih-Hsien Peng *NUS, Singapore*

Technical Program Co-Chair

TBC

Finance Chair

Yun Yang *NTU, Singapore*

Publication Chair

Hung Dinh Nguyen *NTU, Singapore*

Elsa Xue Feng *SIT, Singapore*

Local Arrangement Chair

Chek Sing Teo *SIMTech, Singapore*

Xiaocong Li *SIMTech, Singapore*

Dhivya Sampath Kumar *SIT, Singapore*



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

General Chair

Iqbal Husain

iqbal_husain@ncsu.edu

General Co-chair

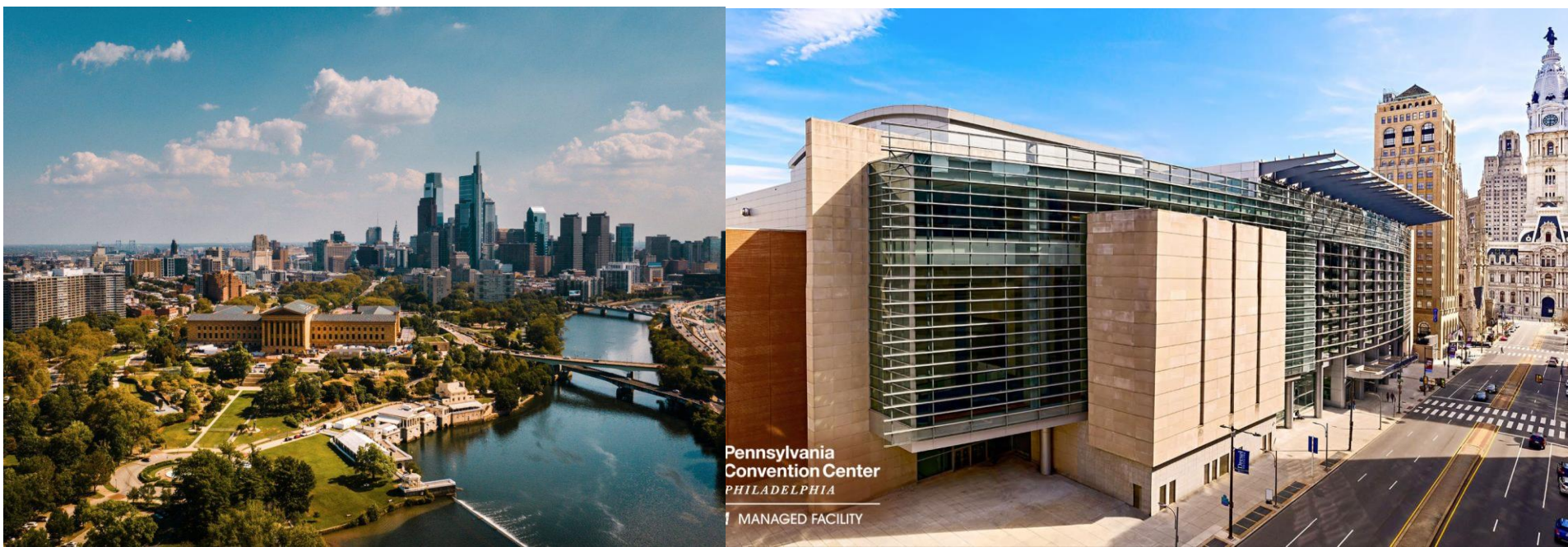
Giovanna Oriti

giovanna.oriti@ieee.org



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/>

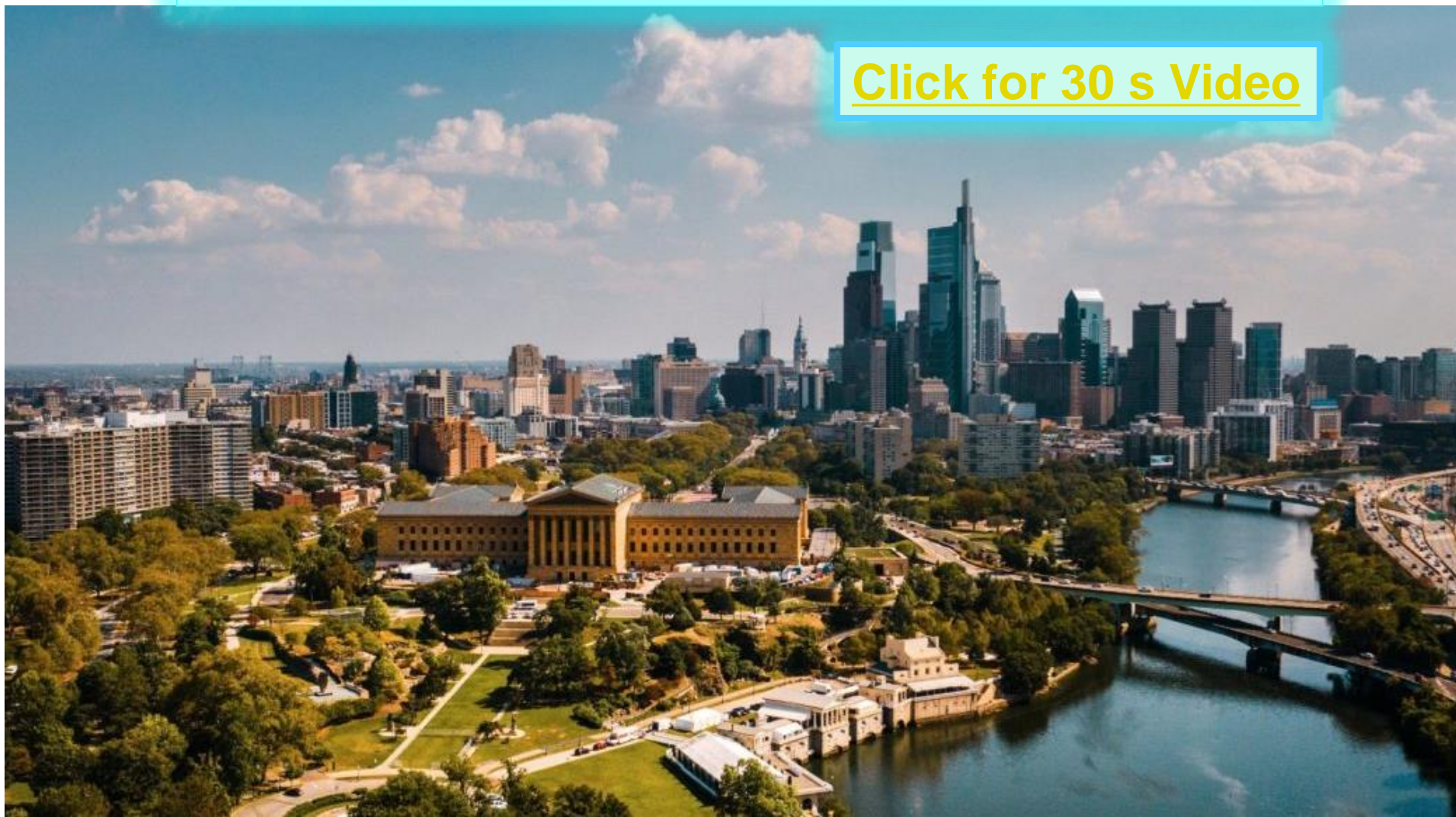
Organizing Committee

- 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

*Representatives from
Academia, Industry
and US National Lab*

See you in October 2025 - in Philly!!

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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/>



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- General Chair: [Avoki Omekanda](#), USA
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- Treasurer: [Tamas Ruzsanyi](#), Hungary
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- 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)



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See You in June 2025 in Taipei, Taiwan





Our Mission: Nagamori Foundation

Support research and development engineers in the technical fields of motors, power generators, actuators, and related technologies.

Nagamori Awards:

- Commend those who have made innovative technological development in the motor related technical fields.
- Will be given to approximately six people. The Grand Nagamori Award winner will receive a prize of 5 million yen, and each of the Nagamori Award winners will receive 2 million yen.
- Applicants must be entry to mid-career researchers and engineers.



Application Guideline for the 11th Nagamori Awards

Fields covered	Technical fields related to motors, actuators and power generators, and their control methods, application technologies, etc.
Applicant eligibility	Applicants must be entry to mid-career researchers or development engineers who have made an outstanding achievement in the fields covered by the Nagamori Awards. <u>Entry to mid-career – normally defined as no more than 30 years of research after obtaining the Bachelor’s degree.</u>
Application method	Self-nomination or nomination from academic institution are accepted. A recommendation letter by an expert in the field covered by the Awards, or a senior member of your Academic Society, organization, research department, etc. must be submitted.
Application period	November 01, 2024 - January 31, 2025 Applications must be postmarked on, or before, January 31, 2025
Application condition	Documents must be submitted in either English or Japanese.
Awards & prizes	Nagamori Awards will be given to approximately 6 people. The winner of the Grand Nagamori Award will be announced during the Awards ceremony. The Grand Nagamori Award winner will receive a prize of 5 million yen , and each of the Nagamori Award winners will receive 2 million yen .

*The 11th Nagamori Awards Ceremony will be held on **September 7, 2025, in Kyoto, Japan**



Winners of the 10th Nagamori Awards

Makoto Hagiwara

Associate Professor, Dept. of Electrical and Electronics Engineering, School of Engineering, Tokyo Institute of Technology

“Application of multilevel power conversion technologies to industrial drives and DC-DC converters moving vehicles”



Christopher H. T. Lee

Associate Professor, School of Electrical and Electronic Engineering, Nanyang Technological University

“For contributions to advancements in vernier motor drives and their industrial applications”



Kenji Nakamura

Professor, Department of Management Science and Technology, Graduate School of Engineering, Tohoku University

“Research and development on high-performance contactless magnetic gears and magnetic-gear machines”



Allison Okamura

Richard W. Weiland Professor in the School of Engineering, Department of Mechanical Engineering and, by courtesy, Department of Computer Science, Stanford University

“Soft growing robot actuation for navigation and exploration in constrained environments”



Sara Roggia

Head of magniDrive Project, Power Electronics Department, magniX

“Taking to the skies electric motors and propulsion units for electric aviation”



Peter Sergeant

Full Professor, Department of Electromechanical, Systems and Metal Engineering, Ghent University/ Core Lab MIRO, FlandersMake@UGent

“Design of sustainable axial and radial flux synchronous electric machines”



Grand Award

Affiliation and title: as of the day of winning the Award



From The 10th Nagamori Awards Ceremony

September 8, 2024 @Hotel Okura in Kyoto, Japan



It is an exciting time for transportation electrification! Please join us!

