



IEEE Industry Applications Society Renewable and Sustainable Energy Conversion Systems Committee – **IEEE RSECSC**

Annual Meeting

22 October 2024

Chair – **Ke Ma**, China

Vice Chair and TCPRC – **Eduard Muljadi**, USA

Vice Chair of Conferences – **Behrooz Mirafzal**, USA

Secretary – **Dinesh Kumar**, Denmark

Immediate Past Chair – **Akshay Kumar Rathore**, Singapore

Agenda

- Introduction of the attendees
- Approval of 2023 Meeting Minutes
- TCPRC Report (TIA)
- ECCE 2023 Engagement
- Membership and Management
- Issues and motions
- ECCE 2024



Introduction of the attendee



Approval of 2023 Meeting Minutes



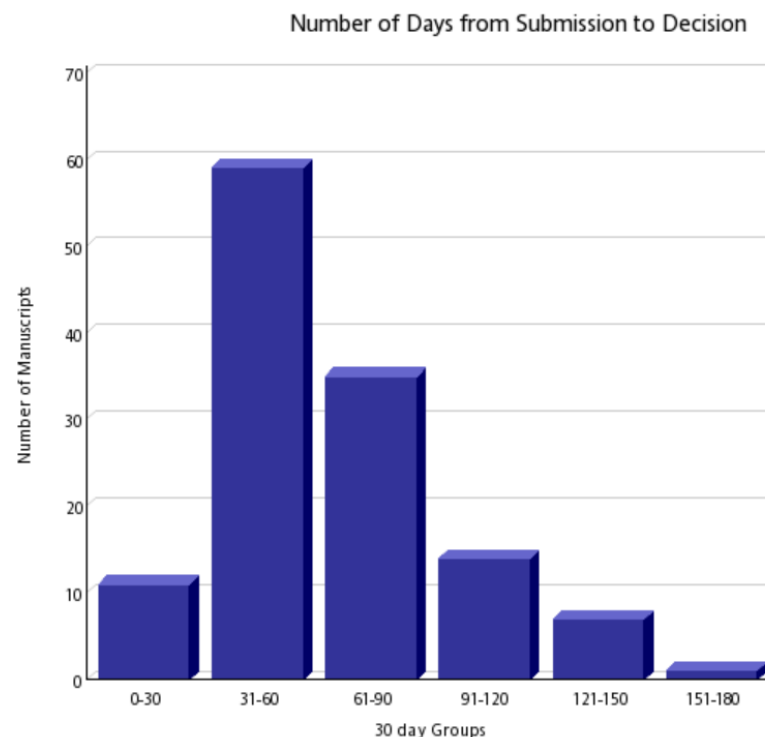
TCPRC Report (TIA)

Eduard Muljadi

Publications Chair Report

- New Manuscripts submission to Renewable and Sustainable Energy Conversion Systems Committee:
 - **54 original + 24 revised = Total 78 (Oct. 2023 to Oct. 2024)**
 - **29 with decisions**
- Average Submission to First Decision Time: **77 days** (76 days last year)

Eduard Muljadi
Took over since Oct.
2023



Comparison RSECS to other committees

All Time and 12 Month Submission IPCSD

Manuscript Type	Submissions (All Time)	Submissions (12 Months) 2022-2023	Submissions (12 Months) 2023-2024
Electric Machines Committee	2,873	183	256
Industrial Drives Committee	1,408	73	112
Industrial Power Converter Committee	2,646	202	197
Power Electronic Devices and Components Committee	460	38	37
Renewable and Sustainable Energy Conversion Systems Committee	1,099	27	85
Transportation Systems Committee	564	46	81

RSECS Acceptance Rage

Submission to Renewable and Sustainable Energy Conversion Systems Committee

Oct. 2023 to Oct. 2024

Industrial Power Conversion Systems Department	Accepted in Magazine	Accepted in Transactions	Reject	Acceptance Rate	Total
Renewable and Sustainable Energy Conversion Systems Committee	1	36	43	46.25%	80

.

RSECS Decision Time - 1st Decision and Final Decision

First Decision Time by RSECS (All Time and last 12 Months)

Manuscript Type	First Decision (All Time) 2022-2023	First Decision (All Time) 2023-2024	First Decision (12 Months) 2022-2023	First Decision (12 Months) 2023-2024
Renewable and Sustainable Energy Conversion Systems Committee	83	83	76	77

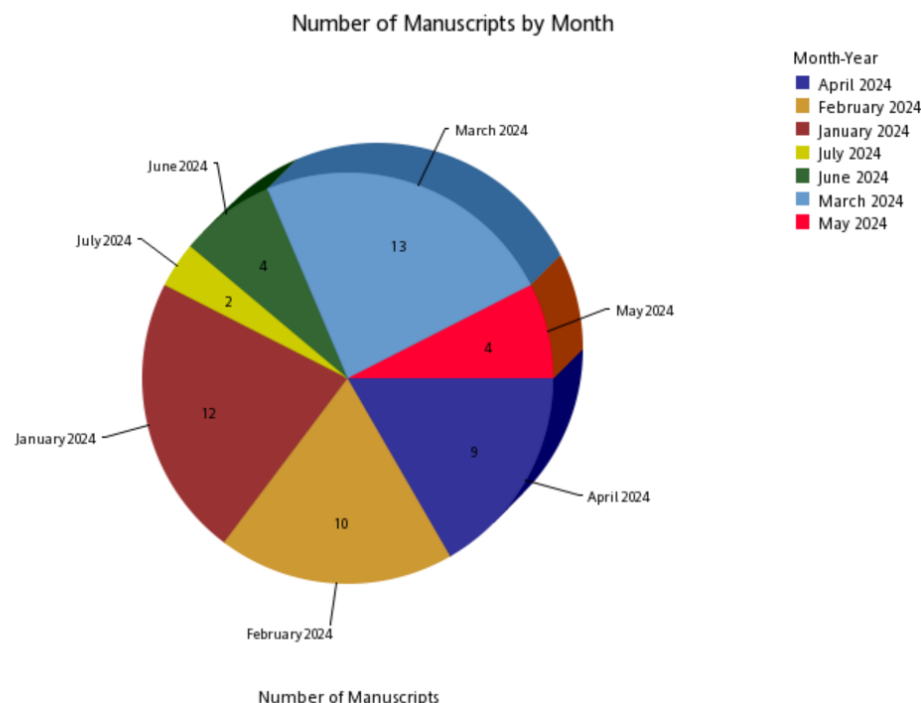
Final Decision Time by RSECS (All Time and last 12 Months)

Manuscript Type	Final Decision (All Time) 2022-2023	Final Decision (All Time) 2023-2024	Final Decision (12 Months) 2022-2023	Final Decision (12 Months) 2023-2024
Renewable and Sustainable Energy Conversion Systems Committee	153	153	166	149

RSECS Decision Ratio – overall

Submission to Renewable and Sustainable Energy Conversion Systems Committee

Grouped by: Month Of Submission



Oct 2023 to Oct. 2024

Manuscript Decision	Number of Manuscripts	Percentage of Total
Accept for publication in Magazine	1	1.60%
Administrative Rejection	1	1.60%
Annual Meeting Paper Returned to Allow Author Revisions	5	8.10%
Reject	22	35.50%
Return to author for mandatory revisions (to address reviewer comments)	33	53.20%
Total:	62	100.00%

The decision for original papers

Paper submission statistics by country and month

Country/Region	Total	Percentage
Canada	1	2.7%
China	4	10.8%
India	15	40.5%
Iran (the Islamic Republic of)	1	2.7%
Korea (the Republic of)	1	2.7%
Malaysia	6	16.2%
Pakistan	1	2.7%
Singapore	1	2.7%
South Africa	1	2.7%
Spain	1	2.7%
Taiwan	1	2.7%
UK and Northern Ireland	1	2.7%
United States	3	8.1%
Total	37	100.0%

**India 40.5%, Malaysia 16.2%,
China 10.8%**

Decision date is Between Sep 30, 2023,
and Oct 1, 2024

Month-Year	Number of Manuscripts	Percentage of Total
April 2024	14	17.3%
August 2024	5	6.2%
February 2024	10	12.3%
January 2024	12	14.8%
July 2024	10	12.3%
June 2024	8	9.9%
March 2024	14	17.3%
May 2024	8	9.9%
Summary	81	100%

**1st submission:
Oct.+Nov. 22%, June 12%**

Thanks to Associate Editors under RSECS

- Dinesh Kumar (Denmark) , since 2017
- Yongheng Yang (China), since 2020
- Dao Zhou (Denmark), since 2022
- Liyan Qu (USA), since 2023
- John Lam (Canada), since 2023
- Donghai Zhu (China), since 2022
- Hengzhao Yang (China), since 2024
- Necmi Altin (Turkey) , since 2024
- Saban Ozdemir (Turkey), since 2024
- Satarupa Bal (USA), since 2022
- Rajeev Kumar Singh (India), since 2024
- Sumit Paudyal (USA), since 2024
- Kalpana R (India), since 2024
- Gab-su Seo (USA), since 2024

Outgoing Associate Editor: Xiaofeng Yang (China) since 2020

◆ **Call for AEs in the fields of [Microgrids](#), [Renewable energy systems](#), [Storage](#), [Machines](#)**

JESTPE Special Issues Activities

- **Call for Papers - IEEE Journal of Emerging and Selected Topics in Power Electronics (coming soon) – Medium Voltage Power Converter for Grid Electrification**
- **This special issue explores the latest advancements, challenges, and future directions in medium-voltage power converter technologies for grid electrification.**

Topics of interest include, but are not limited to:

- Medium-voltage converters for renewable energy (solar PV, wind, etc.)
 - Medium-voltage converter technologies for energy storage systems (battery, supercapacitor)
 - Grid integration and smart grid applications of medium-voltage converters
 - Medium-voltage drives for industrial applications (motors, compressors, pumps)
 - Applications of medium-voltage converters in electric transportation (railways, marine, electric aircraft)
 - Converter topologies and control strategies for medium-voltage systems
 - Fault-tolerant designs and reliability improvements for medium-voltage power converters
 - Power quality improvement and harmonic mitigation in medium-voltage systems
 - Medium-voltage DC systems (MVDC) for grid and industrial applications
 - Emerging trends in medium-voltage power converter technologies (wide-bandgap devices, modular converters, hybrid AC-DC grids)
- **Guest Editors: Eduard Muljadi and Adel Nasiri**

Paper Selection committee and criteria

- Chair – Ke Ma (China)
- Vice Chair & TPC – Eduard Muljadi (USA)
- Vice Chair (Conferences) – Behrooz Mirafzal (USA)
- Secretary – Dinesh Kumar, Denmark (Industry, Europe)
- Past Chair – Akshay Kumar Rathore (Singapore)

RSECS Committee Paper Awards - Transactions

Third Prize

**Xuhui Feng, Ramchandra Kotecha, Sreeekant Narumanchi,
Akanksha Singh, Barry Mather, Ke Wang, Boxue Hu, and Jin Wang**

**“Multiscale Electrothermal Design of a Modular Multilevel
Converter for Medium-Voltage Grid-Tied Applications”**

Second Prize

Tareq Hossen, Behrooz Mirafzal

“Hidden Modes of Instability for Inverters in Weak Grids”

RSECS Committee Paper Awards- Transactions

First Prize

**Byambasuren Battulga, Muhammad Faizan Shaikh,
Sang Bin Lee, and Mohamed Osama**

**“Automated Identification of Failures in Doubly-Fed Induction
Generators for Wind Turbine Applications”**



ECCE 2023 Engagement

Behrooz Mirafzal

IEEE IAS RES Committee Participations

Track A - Renewable and Sustainable Energy Applications	Track B - Smart Grid and Utility Applications
Vice Chairs: Gab-Su Seo, Liliana De Lillo, and Behrooz Mirafzal	Vice Chairs: Joseph Benzaquen, Giovanni De Carne, and Panda, and Sanjib Kumar Panda
Topic Chairs: 14 in total: Rahul Mallik, Vikram Roy Chowdhury, King Man Siu, Giacomo Sala, Aswad Adib, Fahmid Sadeque, Luca Vancini, Beeond M. Saleh, Fatma Khera, Azlia Abdul Rahman, Zaid Parry, Norma Anglani, Xiaojie Shi, Cristina Terlizzi	Topic Chairs: 14 in total: Sante Pugliese, Muhammad Umair, Vikram Roy Chowdhury, Qianwen Xu, Angel Navarro, Tan Nadia, Hadidi Ramtin, Bhaskar Karanki Srinivas, Kaushik Basu, Vishal Anand, Satish Belkhode, Riccardo Liuzzi, Wei Du, Mariko Shirazi
Total Digest Submission: 173	Total Digest Submission: 259

Track A - Renewable and Sustainable Energy Applications

Vice Chairs: Gab-Su Seo, Liliana De Lillo, and Behrooz Mirafzal

Topic Chairs: 14 in total, Rahul Mallik, Vikram Roy Chowdhury, King Man Siu, Giacomo Sala, Aswad Adib, Fahmid Sadeque, Luca Vancini, Beeond M. Saleh, Fatma Khera, Azlia Abdul Rahman, Zaid Parry, Norma Anglani, Xiaojie Shi, Cristina Terlizzi

Track A	Subtrack Description	Submitted
A01	Wind	12
A02	Solar	22
A03	Power converters	80
A04	Energy Storage	26
A05	Hybrid sources	5
A06	Power to heat	3
A07	power to hydrogen	21
A08	Others	7

Track B - Smart Grid and Utility Applications

Vice Chairs: Joseph Benzaquen, Giovanni De Carne, and Panda, Sanjib Kumar Panda

Topic Chairs: 14 in Total; Sante Pugliese, Muhammad Umair, Vikram Roy Chowdhury, Qianwen Xu, Angel Navarro, Tan Nadia, Hadidi Ramtin, Bhaskar Karanki Srinivas, Kaushik Basu, Vishal Anand, Satish Belkhode, Riccardo Liuzzi, Wei Du, Mariko Shirazi

Track B	Subtrack Description	Submitted
B01	Renewable energy grid integration	37
B02	Distributed energy integration	12
B03	Grid forming technologies	45
B04	FACTS devices and technologies	4
B05	Energy islands, offshore energy hub, and other emerging electronic power grid sys	0
B06	AC and DC microgrids and active distribution networks	20
B07	DC Grids and Hybrid AC and DC Grids	12
B08	Electronic transformer and other electronic grid infrastructure	12
B09	Vehicle-to-Grid (V2G) and Grid-to-Vehicle (G2V)	22
B10	Grid stability and power quality	22
B11	Smart buildings and appliances, data centers power supply systems	2
B12	Energy efficiency for residential, commercial, and industrial applications	9
B13	Other topics in smart grid and utility applications	9

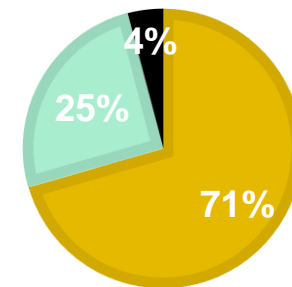
Track A - Renewable and Sustainable Energy Applications

Statistic:

Paper Status	Count	Percentage
Final Accepted	122	70.5%
Rejected	44	25.5%
Withdrawn	7	4.0%
Total Submission	173	100%

TRACK A

Accepted Rejected Withdrawn



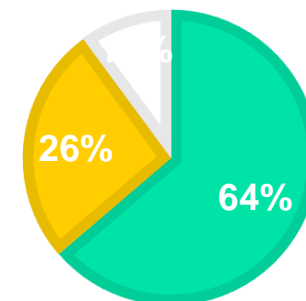
Track B - Smart Grid & Utility Applications

Statistic:

Paper Status	Count	Percentage
Final Accepted	165	63.71%
Rejected	68	26.25%
Withdrawn	26	10.04%
Total Submission	259	100%

TRACK B

Accepted Rejected Withdrawn



2024 IEEE IAS RES Committee Third Conference Paper Award

Title:

*Development of a High Power, Medium Frequency
Transformer for Medium Voltage Applications*

Authors: A. El Shafei, S. Ozdemir, N. Altin and A. Nasiri

Presented at: 2023 IEEE Energy Conversion Congress and
Exposition (ECCE), Nashville

2024 IEEE IAS RES Committee Second Conference Paper Award

Title:

A Transformer Design with PCB Litz Wire Concept for Solid State Transformer

Authors: Z. Li, F. Jin, X. Lou, Y. -H. Hsieh, Q. Li and F. C. Lee

Presented at: 2023 IEEE Energy Conversion Congress and Exposition (ECCE), Nashville

2024 IEEE IAS RES Committee First Conference Paper Award

Title:

An Integrated Bidirectional Tri-port Microconverter for Hybrid Solar Plants

Authors: S. Belkhode, J. Benzaquen and D. Divan

Presented at: 2023 IEEE Energy Conversion Congress and Exposition (ECCE), Nashville



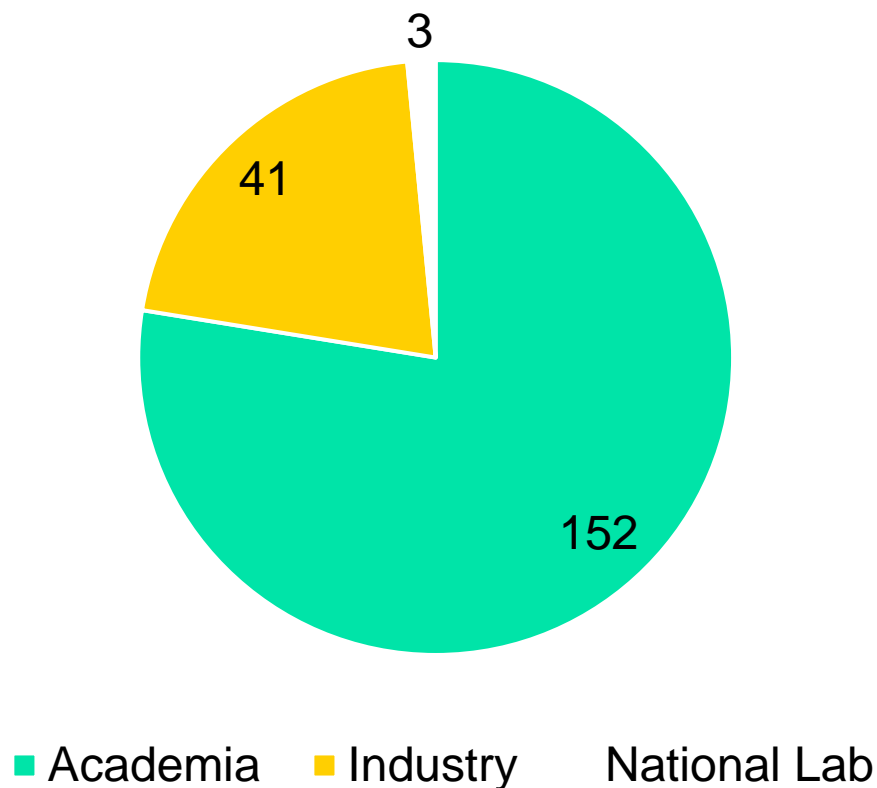
Membership and Management

Dinesh Kumar

Member overview

- A membership campaign is currently underway to invite new members to join the committee.
- A total of 196 members have registered so far.

Committee members



Committee Website

- The committee's website is currently being updated: <https://site.ieee.org/ias-crsecs/>
- Recent committee news can be found at: <https://site.ieee.org/ias-crsecs/news/>

[IEEE.org](#) | [IEEE Xplore Digital Library](#) | [IEEE Standards](#) | [IEEE Spectrum](#) | [More Sites](#)

IEEE IAS Committee on Renewable and Sustainable Energy Conversion Systems



ORGANIZATION

WELCOME

PAPERS FOR IEEE IAS TRANSACTIONS

NEWS

OPERATING GUIDE

MEETING MINUTES

The IEEE IAS Renewable and Sustainable Energy Conversion Systems (RES) Committee has been established in 2011 and is responsible for all matters within the scope of the IAS in which the emphasis or dominant factor specifically relates to the design, analysis, manufacture and use of electric devices and systems for renewable and sustainable energy conversion industrial applications. Topics include, but are not limited to, electric generators and drives for wind turbines, ocean/marine and other renewable and sustainable energy harvesting systems, photo-voltaic, energy storage and micro-grid devices and associated electrical energy conversion systems.

Committee Shared Folder

- To enhance communication and collaboration among committee governing members, a shared folder has been created to store all records.

The screenshot displays the Google Drive interface. On the left sidebar, the 'My Drive' section is expanded, showing the 'IEEE IAS RESECS' folder. Below it, a list of files is visible: 'Annual Meeting Slid...', 'Bylaws and Guides', 'Chair', 'Committee Acronym', 'ECCE Paper Review', 'Meeting Minutes', 'Members database', 'Secretary', and 'Technical Committe...'. The main area shows a 'Welcome to Drive' message and a 'Suggested folders' section with the 'IEEE IAS RESECS' folder. Below this is a 'Suggested files' table.

Name	Reason suggested	Owner	Location
IAS-IPCS Editorial Meeting_RSESC 2023.ppt	You opened • 14:37	me	ECCE 2023 IAS meeting
RSECS Annual Meeting 2023.ppt	You created • 13 Sept 2024	me	ECCE 2023 IAS meeting
RSECS Annual Meeting 2023 km.ppt	You created • 13 Sept 2024	me	ECCE 2023 IAS meeting
RECS-Database-Oct_2024.xlsx	You uploaded • 6 Oct 2024	me	Members database
RECS-Database-2024.xlsx	You edited • 17 Sept 2024	me	Members database
How to login and edit this Drive.docx	You opened • 13 Sept 2024	me	IEEE IAS RESECS
Website login	You opened • 12 Sept 2024	me	Chair
IAS RES Annual Report ECCE 2021_Yilmaz.ppt	You uploaded • 13 Sept 2024	me	RESC meeting 2021.10
IAS RES Annual Report ECCE 2020.ppt	You uploaded • 13 Sept 2024	me	RESC meeting 2021.10



Issues and Motions

Ke Ma

Tasks clarification of committee officers

- **Chair (Ke Ma):**
 - Operation, Strategy, Report to IPCSD
- **Vice Chair and TCPRC (Eduard Muljadi):**
 - Transaction papers review, TIA paper award, Special issue, Report to TIA editorial board
- **Vice Chair of Conferences (Behrooz Mirafzal):**
 - Conference papers review (ECCE track A&B, IAS annual meeting), Conference paper award
- **Secretary (Dinesh Kumar):**
 - Notification, Membership, Website, Google Drive

Problem in committee name and acronyms

- **Current:** Renewable and Sustainable Energy Conversion Systems Committee (RSECSC, RSECS, RECSC, RES,...)
- **Suggested:** Renewable Energy Systems Committee (**RESC**)
- Reported to IPCSD, motion initialized, approval pending.

Committees under IAS Industrial Power Conversion Systems Department (IPCSD):

- Electric Machines Committee (EMC)
- Industrial Drives Committee (IDC)
- Industrial Power Converter Committee (IPCC)
- Power Electronics Devices and Components Committee (PEDCC)
- Transportation Systems Committee (TSC)
- Renewable and Sustainable Energy Conversion Systems Committee (RSECSC)
- Renewable Energy Systems Committee (RESC)



Motion

Committee name change from:

**Renewable and Sustainable Energy Conversion
Systems Committee**

to:

Renewable Energy Systems Committee (RESC)

Call for new RESC officer - Secretary

- Term: 2026.1-2027.12
- Continuous service as Secretary, Vice Chair (Conference), Vice Chair(TCPRC), and Chair.
- Send CV to:
 - Ke Ma, kema@sjtu.edu.cn
 - Dinesh Kumar, dineshr30@ieee.org



Adjourn

Thank You