

2024 Annual Report (June 2023 – May 2024)
Power and Energy Circuits and Systems Technical Committee (PECAS-TC)
IEEE Circuits and Systems Society

Chair: Giulia Di Capua
Chair-Elect: Xi Chen
Secretary: Junrui Liang

1. Technical Committee Meeting(s):

Please state the number of TC meetings in the past year, where held, TC meeting attendance rate, and was a quorum present.

The PECAS TC in the IEEE Circuits and Systems (CAS) Society usually organizes one annual TC meeting, in in-person and at a convenient conference venue. In particular, the annual meeting of the PECAS-TC is normally held in conjunction with the IEEE International Symposium on Circuits and Systems (ISCAS).

The last PECAS-TC annual meeting was held during the IEEE ISCAS 2023, on May 22nd 2023, in hybrid mode, due to the COVID-19 pandemic and relevant conference venue restrictions. A total number of 17 members (8 in person, 9 online) joined the 2023 meeting (list of attendees available in the minutes of the TC meeting held on May 2023).

The PECAS TC officers plan to have a hybrid meeting during May 2024, in conjunction with the IEEE ISCAS 2024 event (19-22 May 2024, Singapore).

2. Voting Members:

To date, the PECAS-TC counts 67 active members (*voting members*) and 2 corresponding members (*affiliate members, with no right to vote*). Details will be included ASAP on the PECAS-TC web pages:

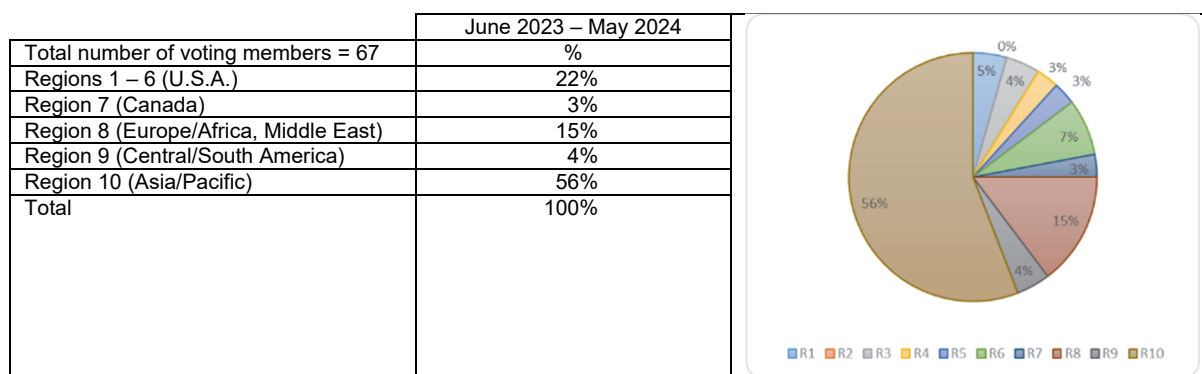
<https://iee-cas.org/technical-committee/PECAS/pecas-full-members>

<https://iee-cas.org/technical-committee/PECAS/pecas-corresponding-members>

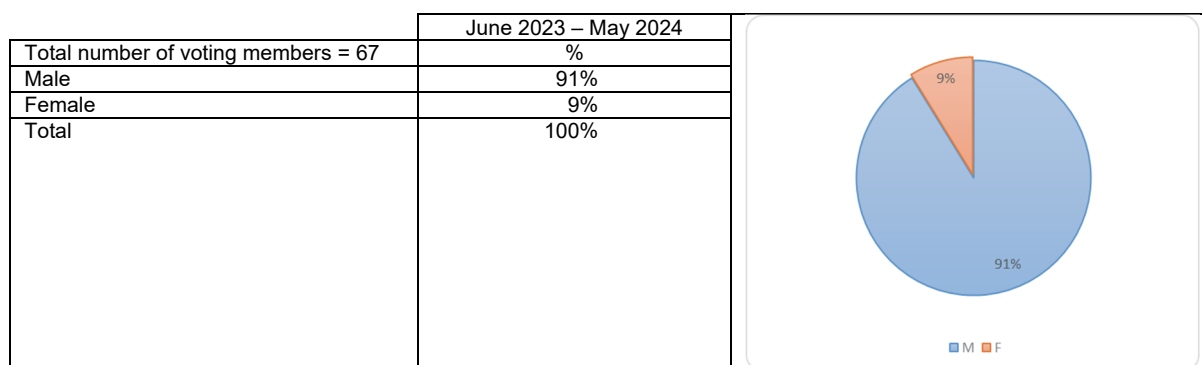
In the following, we listed the records of the members who replied to the annual report request (the list order just reflects the time the members provided their response to the report request).

#	First Name	Last Name	Affiliation	Email	IEEE Grade	IEEE Region
1	Wing-Kuen	Ling	School of Information Engineering, Guangdong University of Technology	yongquanling@gdut.edu.cn	Senior	R10
2	Tsong Juu Peter	Liang	EE Department, National Cheng Kung University	tjliang@mail.ncku.edu.tw	Fellow	R10
3	Hiroo	Sekiya	Graduate School of Informatics, Chiba University	hiroo.sekiya@ieee.org	Senior	R10
4	Adrian	Ioinovici	Department of Electrical Engineering, Nanjing Univ. of Aeronautics & Astronautics	ioinovici@gmail.com	Fellow	R8
5	Daniel	Molzahn	School of Electrical and Computer Engineering, Georgia Institute of Technology	molzahn@gatech.edu	Senior	R3
6	Hirota	Koizumi	Dept. of Electrical Eng., Tokyo University of Science	littlespring@ieee.org	Member	R10
7	Chi Tsun (Ben)	Cheng	Dept. of Manufact., Materials and Mech., RMIT University	ctcheng@ieee.org	Senior	R10
8	Guido	Torelli	Dept. of Electrical, Computer & Biomedical Eng., University of Pavia	guido.torelli@unipv.it	Life Senior	R8
9	Chia-Chi	Chu	Department of Electrical Engineering National Tsing Hua University	ccchu@ee.nthu.edu.tw	Senior	R10
10	Jingxi	Yang	Department of Electrical Engineering City University of Hong Kong	jyang264@cityu.edu.hk	Member	R10
11	Anmol	Sharma	Texas Instruments Inc.	anmol@ti.com	Senior	R1
12	Yang (Tim)	Jiang	State Key Laboratory of Analog and Mixed-Signal VLSI & Institute of Microelectronics University of Macau	timjiang@um.edu.mo	Member	R10
13	Xiaozhe	Wang	Dept. of Electrical and Computer Eng., McGill University	xiaozhe.wang2@mcgill.ca	Member	R7
14	Herbert	Ho-Ching lu	School of Electrical, Electronic & Computer Eng., University of Western Australia	herbert.lu@uwa.edu.au	Senior	R10
15	Yongxiang	Xia	School of Communication Engineering Hangzhou Dianzi University	xiayx@hdu.edu.cn	Senior	R10
16	Yan	Lu	Institute of Microelectronics University of Macau	yanlu@um.edu.mo	Senior	R10
17	Ke-Hong	Chen	Dept. of Electrical and Computer Eng. University of National Chiao Tung	khchen@cn.nctu.edu.tw	Senior	R10
18	Dong	Liu	Department of Electrical Engineering, City University of Hong Kong	adamlu@ieee.org	Member	R10
19	Xiaolu Lucia	Li	Hong Kong Productivity Council	xiaolu.li@connect.polyu.hk	Member	R10
20	Chi-Seng	Lam	State Key Lab. of Analog and Mixed-Signal VLSI & Inst. of Microelectronics, University of Macau	cslam@um.edu.mo	Senior	R10
21	Zhiyuan	Chen	School of Microelectronics Fudan University	chen_zy@fudan.edu.cn	Member	R10
22	Giulia	Di Capua	Dept. of Electrical and Information Eng. University of Cassino and Southern Lazio	giulia.dicapua@unicas.it	Senior	R8
23	Junrui	Linag	School of Information Science and Tech. ShanghaiTech University	liangjr@shanghaitech.edu.cn	Senior	R10
24	Denizar	Martins	Dept. of Electrical and Electronics Eng. Federal University of Santa Catarina	denizar.martins@ufsc.br	Life Senior	R9
25	Kamala Raghavan	Sadagopan	Qualcomm Technologies, Inc.	kamala@ieee.org	Member	R6
26	Lin	Cheng	School of Microelectronics, University of Science and Tech. of China	eecheng@ustc.edu.cn	Member	R10
27	Junmin	Jiang	Dept. of Electrical and Electronic Eng., Southern University of Science and Technology	jiangjm@sustech.edu.cn	Member	R10
28	Zhen (Daniel)	Li	School of Automation Beijing Institute of Technology	zhenli@bit.edu.cn	Senior Member	R10
29	Sijun	Du	Department of Microelectronics TU Delft	sijun.du@tudelft.nl	Senior Member	R8

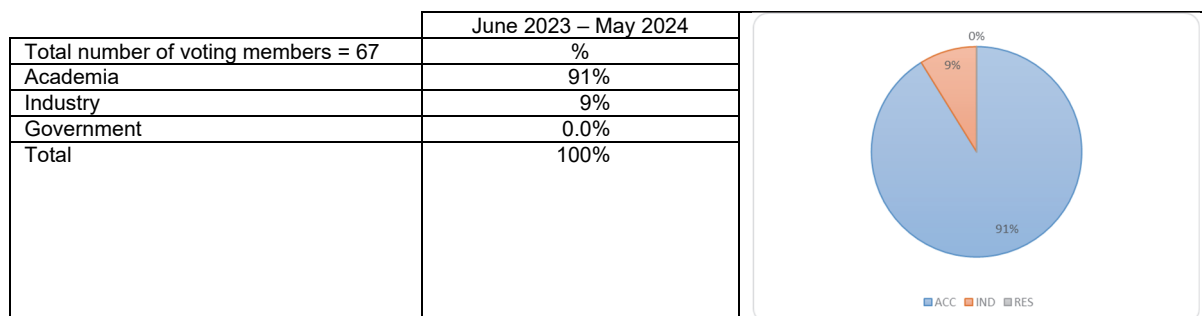
Geographical distribution of PECAS TC members (percentage of total)



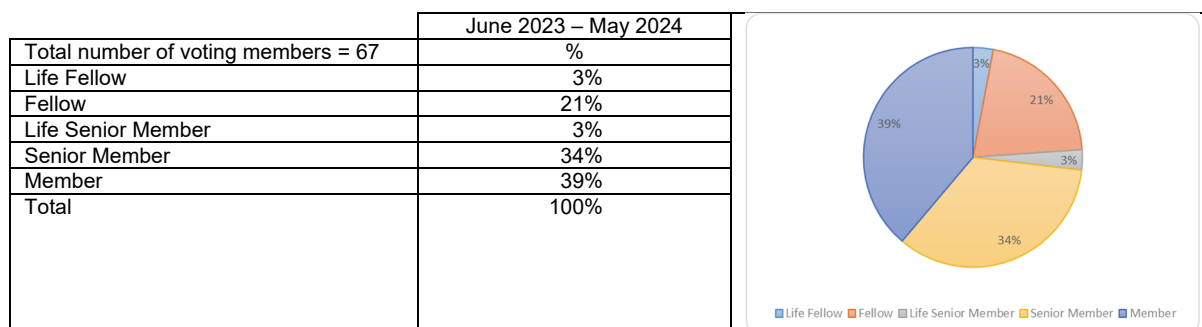
Gender distribution of PECAS TC members (percentage of total)



Distribution of PECAS TC members by affiliation (percentage of total)



Distribution of PECAS TC members by membership (percentage of total)



3. Accomplished Technical Activities

3.1. IEEE Conference/Event organizations (2023-2024):

Please highlight conference/events **technically and/or financially co-sponsored by the CAS Society**
 Don't report conference/events that are NOT sponsored by the CAS Society.

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Hirota Koizumi	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member
Jingxi Yang	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member
Yang (Tim) Jiang	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member Session co-chair
Xiaozhe Wang	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member
Herbert Ho-Ching lu	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member Special Session chair
Yongxiang Xia	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member Session co-chair
Yan Lu	IEEE CASS Xi'an Chapter	ICTA 2023 27-29 October 2023 Hefei, Anhui, China	<ul style="list-style-type: none"> Tutorial chair
Dong Liu	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member Session co-chair
Xiaolu Lucia Li	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member
Chi-Seng Lam	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member Session co-chair WiCAS-YPCAS event panelist
Zhiyuan Chen	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member Session co-chair
Giulia Di Capua	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member
Giulia Di Capua	IEEE CASS	ICECS 2024 18-20 November 2024 Nancy, France	<ul style="list-style-type: none"> International Advisory Committee
Giulia Di Capua	IEEE CASS	SMACD 2024 2-5 July 2024 Volos, Greece	<ul style="list-style-type: none"> Review Committee Member Publication chair
Junrui Liang	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Track chair
Lin Cheng	IEEE CASS Xi'an Chapter	ICTA 2023 27-29 October 2023 Hefei, Anhui, China	<ul style="list-style-type: none"> TPC co-chair
Junmin Jiang	IEEE CASS	ISICAS 2023 24-25 October 2023 Jeju, Korea	<ul style="list-style-type: none"> Session chair
Kamala Raghavan	IEEE CASS	ISCAS 2024 19-22 May 2024 Singapore	<ul style="list-style-type: none"> Review Committee Member
Sijun Du	IEEE CASS	ICECS 2024 18-20 November 2024 Nancy, France	<ul style="list-style-type: none"> Track co-chair

3.2. IEEE Journal Editorships:

Please highlight journals that are **(co-)sponsored by the CAS Society**, cf., <https://ieee-cas.org/publications>
 Don't report journals that are NOT sponsored by the CAS Society.

Your Name	Journal Sponsors	Journal Title	Your Role
Hiroo Sekiya	IEEE CASS	IEEE Journal on Emerging and Selected Topics in Circuits and Systems (JETCAS)	Senior Editor
Chi-Tsun (Ben) Cheng	IEEE CASS	IEEE Trans. On Circuits and Systems I: Regular Papers	Associate Editor
Chi-Tsun (Ben) Cheng	IEEE CASS	IEEE Transactions on Circuits and Systems II: Express Briefs	Associate Editor
Chi-Tsun (Ben) Cheng	IEEE CASS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Chi-Tsun (Ben) Cheng	IEEE CASS	IEEE Journal on Emerging and Selected Topics in Circuits and Systems (JETCAS)	Associate Editor
Anmol Sharma	IEEE CASS	IEEE Trans. On Circuits and Systems I: Regular Papers	Associate Editor
Yang (Tim) Jiang	IEEE CASS	IEEE Trans. On Circuits and Systems I: Regular Papers	Associate Editor

Yang (Tim) Jiang	IEEE CASS	IEEE Transactions on Circuits and Systems II: Express Briefs	Associate Editor
Xiaozhe Wang	IEEE CASS	IEEE Trans. On Circuits and Systems I: Regular Papers	Associate Editor
Herbert Ho-Ching lu	IEEE CASS	IEEE Journal on Emerging and Selected Topics in Circuits and Systems (JETCAS)	Editor-in-Chief
Yongxiang Xia	IEEE CASS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Giulia Di Capua	IEEE CASS	IEEE Trans. On Circuits and Systems I: Regular Papers	Associate Editor
Giulia Di Capua	IEEE CASS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Junrui Liang	IEEE CASS	IEEE Transactions on Circuits and Systems II: Express Briefs	Associate Editor
Zhen (Daniel) Li	IEEE CASS	IEEE Trans. On Circuits and Systems I: Regular Papers	Associate Editor

3.3. Awards, Honors, and Recognition

2023-24 Fellow elevation, Distinguished Lecturer currently in service, Outstanding Service, CAS conferences/journals Best Paper Awards, etc., assigned by the CAS Society

Your Name	Awards / Honors / Recognition	Period
Chi-Tsun (Ben) Cheng	IEEE Transactions on Circuits and Systems II, one of the three Best Associate Editors in 2022	June 2023
Herbert Ho-Ching lu	2023-2024 IEEE CASS Distinguished Lecturer	January 2023
Ke-Horng Chen	IEEE Fellow	2023

3.4. Keynote Speeches/Invited Talks:

Please highlight speeches and/or talks held in (co-)sponsored CAS events, or promoted by CAS chapters/sections.

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Herbert Ho-Ching lu	IEEE CAS Region 10	IEEE DL talk at the University of Technology, Sydney, Australia	"Neuromorphic Dynamics of Chua Corsage Memristor"	June 2023
Yan Lu	Conference organizers. Among patrons: IEEE CAS Xi'an Chapter	ICTA 2023 27-29 October 2023 Hefei, Anhui, China	Hybrid DC-DC Converter Topologies and Applications	October 2023

3.5. Other distinguished IEEE services

For example, CAS BoG, region/chapter leadership, TC chairs/secretary, in the frame of CAS society.

Your Name	Organization	Position/Activities	Period
Hiroo Sekiya	IEEE CASS	CAS BoG	2023-2025
Yang (Tim) Jiang	IEEE CASS	Young Professionals in CAS (YPCAS) co-Chair	2023-2024
Yang (Tim) Jiang	IEEE CASS	CASS DEI committee member	2023-2024
Xiaozhe Wang	IEEE CASS	Women in Circuits and Systems (WiCAS) co-Chair	2023-2024
Xiaozhe Wang	IEEE CASS	CASS DEI committee member	2023-2024
Chi-Seng Lam	IEEE CASS	Young Professionals in CAS (YPCAS) Chair	2023-2024
Chi-Seng Lam	IEEE CASS	CASS DEI committee member	2023-2024
Giulia Di Capua	IEEE CASS	PECAS-TC chair	2023-2025
Giulia Di Capua	IEEE CASS	CASS DEI committee co-chair	2023-2024
Junrui Liang	IEEE CASS	PECAS-TC secretary	2023-2025

4. TC Significant Technical Leadership and Innovations

Please list 5 (or less) most significant TC activities in the past year, for example, but not limited to

- Established/organized new CASS journals/conferences/workshops. Please include title, scope, status (e.g., submissions, published papers)
 - none
- Organized special issues in CASS journal, special sessions/tutorials in CASS conferences, CASS seasonal schools, CASS industrial forums, or CASS competitions. Please include title, the guest editors/organizers, the year, and the month, the number of submissions, the number of papers published, and the impacts (e.g., the total number of citations/full text views so far or the total number of attendees)
 - Special Issue on Circuits and Systems for Industry X.0 Applications, published on IEEE Journal on Emerging and Selected Topics in Circuits and Systems (JETCAS), Chi-Tsun (Ben) Cheng, *leading guest editor*
 - Special Session on "Intelligent & Data Analytics to Real-Life Complex Networks & Nonlinear Systems", ISCAS 2024, Singapore – 19-22 May 2024 (2 sessions)
Yongxiang Xia, organizer and session chair

- (3) Organized new CASS initiatives
- "CASS students exchange among Vietnam-Korea-Japan", Hiroo Sekiya, organizer
- (4) Established cross-TCs/SIGs collaborations (none)
- none
- (5) Awards received by the TC or the TC members
- Best paper award for the 2023 IEEE Transactions on Circuits and Systems Guillemin-Cauer Award, Herbert Ho-Ching lu, award recipient.
 - Outstanding Research Award, Pan Wen Yuan Foundation, April 2024
Ke-Horng Chen, award recipient.
 - The Hsing Yun Award for Education, Venerable Master Hsing Yun Public Education Trust Fund, June 2023
Ke-Horng Chen, award recipient.
 - IEEE ISSCC Takuo Sugano Award for Outstanding Far-East Paper, December 2023
Ke-Horng Chen, award recipient.
 - Outstanding Reviewer of IEEE SSCS, January 2024,
Ke-Horng Chen, recipient.
 - IEEE TPEL Outstanding Reviewer, January 2024,
Ke-Horng Chen, recipient.
 - IEEE TPEL AE Excellence Award, October 2023,
Ke-Horng Chen, recipient.

5. New plans for the next year

Are there any new initiatives, workshops, journal special issues, conference special sessions, etc., that your TC or TC members are planning for the next year?

- None at this moment: to be discussed during the next TC meeting.