



Industrial Power Converters Committee Meeting

Virtual Meeting October 24th, 2020



Agenda



- Virtual Meeting Basic Rules
- Approval of the Agenda and Approval of 2019 Meeting Minutes (http://sites.ieee.org/ipcc/minutes)
- Officers Report
 - ECCE 2020
- Reports from Subcommittees
 - Standards
 - Fellow and awards nomination
 - Special activities
- IAS Transactions
 - Associate Editors acknowledgment
 - IAS Transactions review statistics
 - IEEE Open Journal of Industry Applications
 - IPCC prize paper awards

Promotion for IAS sponsored 2021 conferences

- Conferences with Technical Co-sponsorship
- Conferences with Financial Co-sponsorship
- Planning of ECCE 2021
 - Call for Tutorials
 - Volunteers as Topic Chairs and Session Chairs
- Closing remarks & Motion to adjourn

Call for industry participation in subcommittees



IPCC Chairman Report Luca Solero



- Virtual Meeting Basic Rules
 - keep microphones off, write in chat if you would like to talk;
 - during the approval process of the different points the Committee Chair will ask for first and second moves, eventual objections and abstentions;
 - attendees are asked to write in chat if they either object or abstain.
- Agenda approval
- Approval of 2019 Minutes

(http://sites.ieee.org/ipcc/minutes)



Membership



- Membership roster is at 426 (+17 people since last meeting)
 - Online registration at http://sites.ieee.org/ipcc/
 - Attending the IPCC meeting held every year at ECCE (usually)
 - Several non active members, an email message will be sent to all the members asking a reply in case they would like to be removed from the members' list.
- Spread the word to friends, colleagues, and students.

Becoming an Active Member

- Reviewer, track chair, officer.
- Active within IEEE
- Publishing at IAS sponsored conferences



Committee for 2020



Committee Officers

Chairman	Luca Solero	luca.solero@uniroma3.it
Vice-Chairman	Xiaonan Lu	xiaonan.lu@ieee.org
Secretary	Yongsug Suh	ysuh@jbnu.ac.kr
Past Chairman	Grant Pitel	gpitel@magna-power.com

Industrial Power Converter Subcommittees

Transactions Review Chair	Pericle Zanchetta	pericle.zanchetta@nottingham.ac.uk
Transactions Review Co-Chair	Stefano Bifaretti	stefano.bifaretti@uniroma2.it
Fellow and Award Nominating Chair	Po-tai Cheng	ptcheng@ieee.org
Standards Chair	Lixiang Wei	lixiangw@ieee.org
Special Activity Chair	Rostan Rodrigues	rostan.rodrigues@us.abb.com
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	Shafiq Odhano	shafiq.odhano@newcastle.ac.uk





ECCE 2020

ECCE2020 virtual is a Great Success

- Virtual platform launch on Friday Oct 9:
 - Over 1000 videos on demand through Nov 16, 2020.
 - 959 accepted papers into 62 oral sessions and 36 digital poster sessions
 - Only one paper without video and considered no show.
 - ECCE proceeding was already submitted to IEEE on Oct 21.
 - 14 tutorial sessions (from 55 proposals)
 - 20 special sessions (simulive)
 - All paper and tutorial sessions have ZOOM based live "meet the authors" and "meet the instructors" sessions during the week (Oct 11-15).
 - 4 plenary speakers (live on Oct 12) free
 - WIE events/sessions, student events, award sessions free

Budget:

- 980 paid registrations so far. Over 1300 total registrations including those for free sessions and exhibitions.
- Registration system will open till Nov 16.
- 6 sponsors
- Revenue as of today: registration \$456,910, sponsorship: \$20,000

OWER Expected surplus – over 30%

ECCE2020 Organizing Committee

General Chair

Yunwei (Ryan) Li

TPC Chairs
Emmanuel Agamloh
Henry Chung
Navid Zargari
Martin Ordonez

Finance Chair Mark Scott Industrial Partnership Chair

Peter Wung Avoki Omekanda Plenary Session Chairs

Liuchen Chang
Tomy Sebastian

Exhibit & Partnership Chairs

David Morrison

Grant Pitel

Kevin Taylor

Publicity Chairs
Kai Sun
Yongheng Yang

Special Session Chairs

Bulent Sarlioglu

Xiongfei Wang

Publication Chairs Xiaonan Lu Carl Ho

Xu She

Awards Chair John Shen Tutorial Chairs
Xinbo Ruan
Ali Khajehoddin

Local Arrangement Chairs

Al-Thaddeus Avestruz Abraham Gebregergis Webmaster Chairs
Jennifer Vining
Dong Cao
Yuan Li

WIE Chairs
Norma Anglani
Jin Ye
Moya Dai

Student
Activities
Chairs
Zheyu Zhang
Minjie Chen

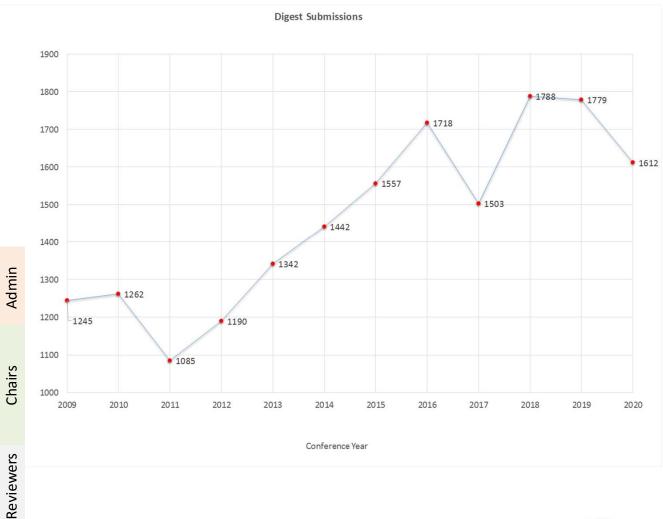
Mobile App & Multimedia Chairs

Anant Singh





ECCE2020 Technical Papers



4 TPCs

22 Vice Chairs (VCs) (1/2 from IAS + 1/2 from PELS)

188 Topic Chairs (TCs)

Reviewers ~ 6254 submitted reviews





ECCE2020 Technical Papers

First author Countries (top 10)

- Total = 70 Countries
- Authors = 4572

No.	Countries	Authors	All Papers
1	United States	1401	589
2	China	916	257
3	Japan	253	77
4	United Kingdom	195	64
5	Canada	192	94
6	Korea (South)	162	69
7	Italy	158	52
8	India	151	69
9	Brazil	141	71
10	Spain	112	36







ECCE 2020



Power Converter Topologies

Vice Chair: Yongsug Suh, Jeonbuk National University

Vice Chair: Luca Solero, Roma Tre University

Vice Chair: Gerry Moschopoulos, Western University

Manuel Arias, *University of Oviedo, Spain*Dong Cao, *University of Dayton, USA*Petar Grbovic, *University of Innsbruck, Austria*

Wenkang Huang, Infineon Technologies

Diego Lamar, University of Oviedo, Spain

Santanu Mishra, Indian Institute of Technology Kanpur, India

 ${\it Shafiq\ Odhano}, {\it University\ of\ Newcastle,\ UK}$

Grant Pitel, Magna-Power Electronic, USA

Gabriele Rizzoli, University of Bologna, Italy

Li Zhang, Nanyang Tewchnological University, Singapore

Pritam Das, Binghamton University, USA

Brian Cheng, Texas Instruments

Mohamed Youssef, *University of Ontario Institute of Technology, Canada*

Zhiliang Zhang, Nanjing University of Aeronautics and Astronautics, China

Shangzai Pan, Wuhan University, China Leila Parsa, University of California at Santa Cruz, USA Majid Pahlevani, Queen's University, Canada
Mehdi Narimani, McMaster University, Canada
Mahshid Amirabadi, Northeastern University, USA
Stefano Bifaretti, Univ. of Rome Torvergata, Italy
Young-Hun Cho, Konkuk National University, Korea
Marco di Benedetto, University Roma Tre, Italy
Jun-ichi Itoh, Nagaoka University of Technology, Japan
Kyo-Beum Lee, Ajou University, Korea
Roberto Petrella, University of Udine, Italy
Sebastian Rosado, UTRC, Ireland
Jon Are Suul, SINTEF, Norway
Lixiang Wei, Rockwell Automation, USA

Submitted 252

Accepted (final) 155

Percentage 61.5%



ECCE 2020



Control, Modelling and Optimization of Power Converters

Vice Chair: Xiaonan Lu, Temple University
Vice Chair: Khurram Afridi, Cornell University
Vice Chair: Laili Wang, Xi'an Jiaotong University

Andrea Formentini, *University of Nottingham* Alessandro Lidozzi, *ROMA TRE University* Vito Giuseppe Monopoli, *Politecnico di Bari*

Marcello Pucci, INM-CNR

Yuhua Du, Temple University

Ghanshyamsinh Gohil, University of Texas, Dallas

Fei Lu, Drexel University

Jin Tan, National Renewable Energy Laboratory

Arash Khoshkbar-Sadigh, Penn State University, University Park

Dongbo Zhao, Argonne National Laboratory

Sheng Zheng, Oak Ridge National Laboratory

Jiangbiao He, University of Kentucky

Malik Elbuluk, University of Akron

Dehong (Mark) Xu, Zhejiang University

Bilal Akin, University of Texas at Dallas

David Perreault, Massachusetts Institute of Technology

Elisabetta Tedeschi, Norwegian University of Science

and Technology

Ali Khajehoddin, University of Alberta

Daniel Costinett, University of Tennessee Knoxville

Luca Corradini, University of Padavo

Saad Pervaiz, Texas Instruments

Rostan Rogriguez, ABB

Samantha Gunter, General Motors

Ali Bazzi, University of Connecticut

Madhav Manjrekar, University of North Carolina at Charlotte

Li Ran, Chongqing University

Feng Gao, Shandong University

Zhenbin Zhang, Shandong University

Xiong Du, Chongqing University

Min Chen, Zhejiang University

Cungang Hu, Anhui University

Haitao Hu, Southwest Jiaotong University

Li Zhang, Hohai University

Liu, Zeng, Xi'an Jiaotong University

Yi, Hao, Xi'an Jiaotong University

Submitted 262

Accepted (final) 162

Percentage 61.8%





IPCC Fellow and Award Nominating Chair

Po-tai Cheng

- Andrew W. Smith Outstanding Young Member Achievement Award (Deadline: March 15)
- Outstanding Young Member Service Award (Deadline: March 15)
- Distinguished Service Award (Deadline: March 15)
- Outstanding Achievement Award (Deadline: March 15)
- Kliman Award (Deadline: June 1)
- IAS Distinguished Lecturers (Deadline: March 31)
- IEEE Fellow (Deadline: March 1)





IEEE IAS Andrew W. Smith Outstanding Young Member Award (Deadline: March 15)

- Established in 1996, renamed in 2009 and 2015.
- Recognizes outstanding achievement and contribution to the profession through involvement in IEEE IAS activities by an IAS member less than 35 years of age.
- Prize: \$2,500, Plaque and travel expenses to attend an IAS sponsored conference for presentation and recognition.
- Eligibility: Nominees must be age 35 or less at the specified award nomination due date. To be considered as a nominee, a one page form must be completed describing IAS activities and associated contributions made by the nominee. The form must be submitted and received by the IAS President before the specified due date of March 15. Self nomination is not permitted for this award.
- Basis for Judging: Outstanding contribution to the profession in the form of IEEE/IAS activities such as (but not limited to) authorship of technical papers, IAS chapter leadership, IAS committee work, conference leadership, and standards working groups.





IAS Outstanding Young Member Service Award (Deadline: March 15)

- Recognizes outstanding service and contribution to the profession through involvement in IEEE IAS activities by an IAS member less than 35 years of age.
- Prize: \$2,500, Plaque and travel expenses to attend an IAS sponsored conference for presentation and recognition. Funded by the IEEE Industry Applications Society.
- Eligibility: Nominees must be less than age 35 at the specified award nomination due date. To be considered as a nominee, a one page form must be completed describing IAS activities and associated contributions made by the nominee. The form must be submitted and received by the IAS President before the specified due date of March 15. Self nomination is not permitted for this award.
- Basis for Judging: Outstanding contribution to the profession in the form of IEEE/IAS
 activities such as (but not limited to) authorship of technical papers, IAS chapter
 leadership, IAS committee work, conference leadership, and standards working groups.





IAS Outstanding Achievement Award (Deadline: March 15)

- Honors an individual who has made an outstanding contribution in the application of electricity to industry in accordance with the scope of the IEEE Industry Applications Society.
- Prize: \$5,000 and engraved statuette, Funded by the IEEE Industry Applications Society.
- Basis for Judging. Any of the following criteria apply: invention in the field as
 exemplified by issued patents; contribution to the general engineering or
 scientific basis of the technologies found within the scope of the IAS;
 executive or managerial contribution in the organization or operation of
 enterprises as associated with the scope of the IAS. Self nomination is not
 permitted for this award.





IAS Distinguished Service Award (Submission Deadline is March 15)

- Recognizes an individual for dedication and service to the IEEE Industry Applications Society.
- Prize: \$5,000 and Plaque, Funded by the IEEE Industry Applications Society.
- Basis for Judging. Exceptional administrative, managerial and leadership achievement; proposal and/or implementation of innovative new Society programs; dedication to the growth and advancement of the Society and/or its geographic and technical entities. Self nomination is not permitted for this award.





IAS Distinguished Lecturer (Deadline: March 31)

- Nominator and Candidate contact informations must be provided
- One page BIO of the Candidate with a colour photo in the upper left corner and contact email address
- List of the lecture topics with the titles and short abstracts (max. 600 characters each)





IEEE Fellow (Deadline: March 1)

- 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 at least three, but no more than 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.





- Congratulations to Fang Z. Peng, an IPCC Member, for being awarded the IAS Outstanding Achievement Award - "... to honor an individual who has made an outstanding contribution in the application of electricity to industry in accordance to the scope of the IEEE Industry Applications Society"
- Congratulations to Yue Zhao, an IPCC Member, for being awarded the Andrew W. Smith Outstanding Young
 Member Achievement Award "... to encourage membership and involvement in IEEE/IAS activities through annual recognition of outstanding contribution by a young member less than 35 years of age"





- Congratulations to Kevin Lee, an IPCC Member, who was elevated to the IEEE Fellow grade, Class of 2020. Congratulations to his Nominator, too.
- Congratulations to Burak Ozpineci, an IPCC Member, who was elevated to the IEEE Fellow grade, Class of 2020. Congratulations to his Nominator, too.
- Congratulations to Mahinda Vilathgamuwa, an IPCC Member, who was elevated to the IEEE Fellow grade, Class of 2020.
 Congratulations to his Nominator, too.
- Congratulations to Keith Corzine, an IPCC Member, who was elevated to the IEEE Fellow grade, Class of 2020. Congratulations to his Nominator, too.
- Congratulations to Yun Wei (Ryan) Li, an IPCC Member, who was elevated to the IEEE Fellow grade, Class of 2020. Congratulations to his Nominator, too.



Reports from subcommitteesSpecial Activities



Special Activities Chair

Rostan Rodrigues

Main purpose

To enhance the collaboration between IPCC and regional power electronics societies in the world

Strategies

To initiate IAS-IPCC webinar series and increase its global participation



Reports from subcommittees Special Activities



Actions

- Held a meeting with IEEE-IAS program specialists for webinar organization training
- Prepared guidelines for organizing IEEE-IAS Webinars
- Scheduled a webinar to be presented by Prof. Dong Jiang on 'Variable switching frequency PWM for converters', on 11/4/2020
- Reviewing and finalizing webinar proposals from three more presenters as described below:
- Very High Frequency Power Conversion Technology, by Yueshi Guan (Dec'20)
- Partial Power Processing Converters: A Way to go Beyond the Limits, by Petar Grbovic (Jan'21)
- Topic under discussion.., by Sanjeevikumar Padmanaban (Feb '21)



Reports from subcommitteesSpecial Activities



- Interested IPCC members are invited to sign in to IAS IPCC Webinars
- Promote IAS IPCC Webinars among your potentially interested students and colleagues
- Proposals of Webinars from Industry People are very welcome!!!!!
- IPCC Call for Webinars published on https://site.ieee.org/ipcc/news/

Submissions: If you are interested in presenting a webinar or know someone who's area of expertise would be beneficial to members of IPCC please submit to rostan.rodrigues@us.abb.com (copy to luca.solero@uniroma3.it) the following information:

- Title of presentation. Abstract of approximately 150 words
- A draft of your presentation at the time of application
- Who would benefit by / who should attend this webinar
- Specify category: technical / professional development / current issues or hot topics in power electronics
- Presenter bio, approximately 125 words, for website
- Photo suitable for website
- A resume or curriculum vitae may be requested



Reports from subcommittees Standards Chair



Standards Chair

Lixiang Wei / Puneeth S. Murthy

During 2020, discussed with Professor Emmanuel Agamloh on the potential IPCC involvement of standards activity. Here is the feedback received.

"We are looking for committees to initiate these activities to start new projects as opposed to joining existing ones. This is the goal that we are trying to work towards. Standards are typically in direct response to a need in industry."

We are looking for potential standard project proposal from IPCC committee members from this ECCE 2020 committee meeting.

Please send any new proposal (<u>lixiangw@ieee.org</u> and <u>psrikan@ra.rockwell.com</u>) and we will start to kick off this activity.

IEEE Transactions on Industry Applications

Industrial Power Converter Committee

Pericle Zanchetta **IEEE IAS IPCC Paper Review Chair**

October 24, 2020





IPCC Associate Editors

- Vivek Agarwal, India
- Stefano Bifaretti, Italy
- Huang-Jen Chiu, Taiwan
- Dong Jiang, China
- Surin Khomfoi, Thailand
- Xiaonan Lu, USA
- Ke Ma, Denmark
- Santanu Mishra, India
- Marcello Pucci, Italy
- Luca Solero, Italy
- Xue She, USA
- Yongsug Suh, Korea
- Petros Karamanakos,Finland

- Xiongfei Wang, Denmark
- Zhiqiang Wang, USA
- Junming Zhang, China
- Maurizio Cirrincione, Fiji
- Andrea Formentini, UK
- Vito Giuseppe Monopoli, Italy
- Babak Parkhideh, USA
- Jiangbiao He, USA
- Liang Du, USA
- Xibo Yuan, UK
- Dong Dong, USA
- Zheyu Zhang, USA
- Alessandro Lidozzi, Italy





Submitting a manuscript to IPCC

- Paper first must be presented at an IAS-sponsored conference (within the last 12 months)
- Send an email to <u>pericle.zanchetta@nottingham.ac.uk</u> with the request to submit a paper:
 - Paper title
 - List of authors and corresponding author's email & institution
 - Conference and date when paper presented
- An email will be sent to you from S1M with instructions on uploading your paper for review (usually within 1 - 2 weeks)





Submitting a manuscript to IPCC

- You must reference (cite) the conference paper version in your Trans. submission reference list.
- Change title and Update/add new material to conference version. Papers needs to be different from the conference ones. There is no fixed amount of difference, it is at the discretion of the transaction chair. Be reasonable.

Please cite TIA papers!





All time submission by committee

Manuscripts Submitted to Committee (All Time)		All Time	12 Months
Cement Industry Committee		242	27
Codes and Standards Committee		53	13
Electric Machines Committee		2,037	189
Electrical Safety Committee		226	28
Electrostatic Processes Committee		384	28
Energy Systems Committee		501	73
Industrial Automation and Control Committee		1,132	154
Industrial Drives Committee		994	94
Industrial Lighting and Display Committee		245	14
Industrial Power Converter Committee		1,776	198
Metal Industry Committee		166	14
Mining Industry Committee		158	7
Petroleum and Chemical Industry Committee		734	24
Power Electronic Devices and Components Committee		340	69
Power Systems Engineering Committee		1,009	34
Power Systems Protection Committee		263	141
Pulp and Paper Industry Committee		272	40
Renewable and Sustainable Energy Conversion Systems Committee		745	139
Rural Electric Power Committee		180	14
Transportation Systems Committee		269	55
	Total	11,726	1,355





Average 1st Decision time

	Average First	Average First
	Decision Time All	Decision Time 12
Average First Decision Time	Time	Months
Cement Industry Committee	175	
Codes and Standards Committee	170	105
Electric Machines Committee	70	70
Electrical Safety Committee	101	76
Electrostatic Processes Committee	91	
Energy Systems Committee	106	107
Industrial Automation and Control Committee	65	51
Industrial Drives Committee	65	66
Industrial Lighting and Display Committee	45	39
Industrial Power Converter Committee	78	75
Metal Industry Committee	137	27
Mining Industry Committee	180	
Petroleum and Chemical Industry Committee	141	
Power Electronic Devices and Components Committee	105	125
Power Systems Engineering Committee	90	88
Power Systems Protection Committee	126	93
Pulp and Paper Industry Committee	110	
Renewable and Sustainable Energy Conversion Systems Committee	86	75
Rural Electric Power Committee	211	
Transportation Systems Committee	71	76



Decision for 1st submission is 79 days for IPCC (was 65 in 2018)



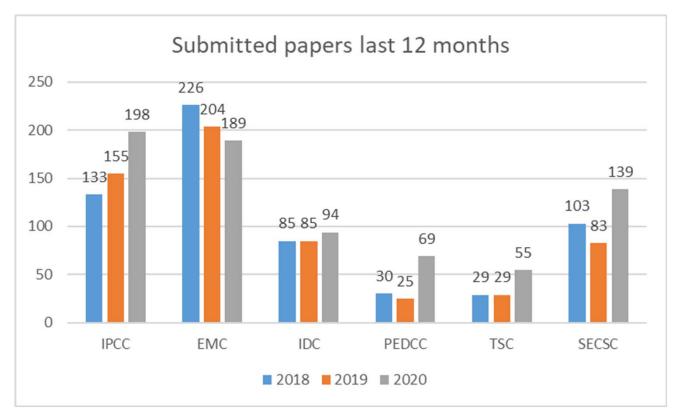
Average final decision time

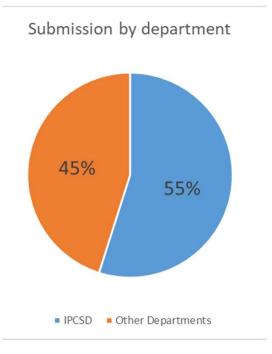
Average Final Decision Time	All Time	12 Months
Average	211	215
Cement Industry Committee	172	
Codes and Standards Committee	250	102
Electric Machines Committee	133	140
Electrical Safety Committee	125	132
Electrostatic Processes Committee	268	350
Energy Systems Committee	161	163
Industrial Automation and Control Committee	259	240
Industrial Drives Committee	122	140
Industrial Lighting and Display Committee	206	236
Industrial Power Converter Committee	134	145
Metal Industry Committee	225	303
Mining Industry Committee	246	200
Petroleum and Chemical Industry Committee	160	337
Power Electronic Devices and Components Committee	186	189
Power Systems Engineering Committee	135	138
Power Systems Protection Committee	207	184
Pulp and Paper Industry Committee	117	
Renewable and Sustainable Energy Conversion Systems Committee	155	148
Rural Electric Power Committee	213	
Transportation Systems Committee	146	193





Regular papers submission



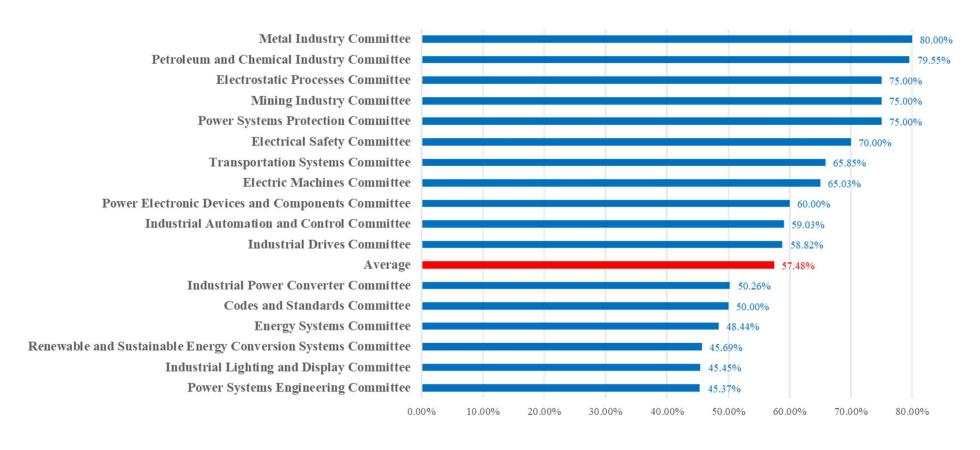




All submissions are 'post-presentation. Special issues paper are excluded.



Acceptance rates (past 12 months)

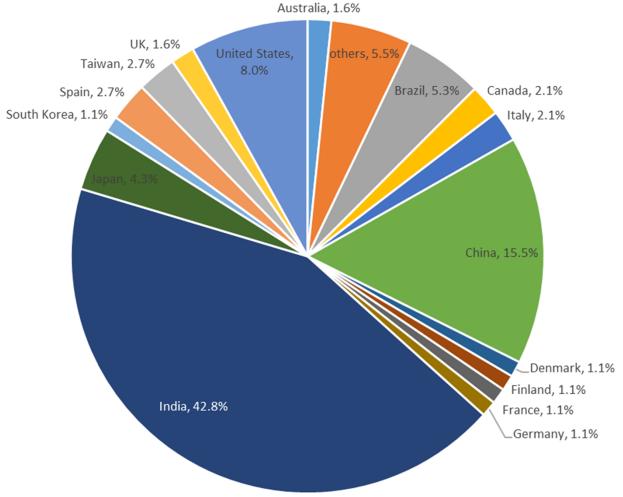




 Acceptance rate 50.26% in the past year Below average (was 57.42 in 2019 and 53% in 2018)



Percentage of submissions by country



Others (below 1%):

Belgium

Chile

Kazakhstan

Iran

Russian Federation

Singapore

South Africa

Saudi Arabia

Poland

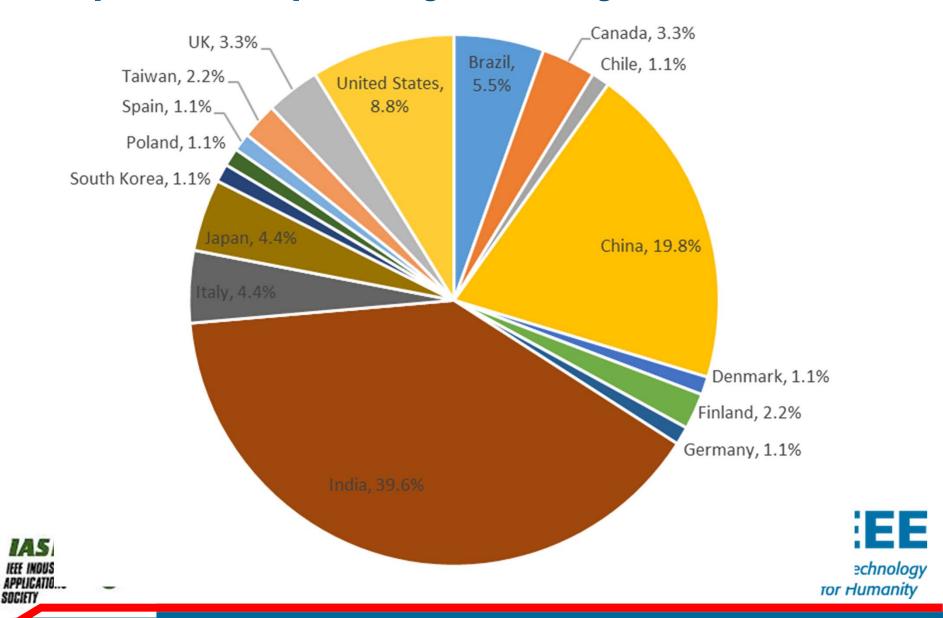
Norway

Malaysia





Papers accepted by country



Summary data for 2020 – IEEE IAS IPCC

- 198 Regular papers Submissions in Last 12 months completed Increase of 27.7% from 2019 (155). Increase of 48.9% from 2018 (133). IPCC is for the first time the committee with more transactions submissions in IAS (Historically it has always been the EMC).
- Average review time for initial submission 75 days. It was 79 days in 2019, but 65 days in 2017. Still space for improvement.
- Accepted 50.26% in the past 12 months. It was 57.42% in 2019, 53% in 2018 and 49% in 2017). We are almost back to 2017 rate of acceptance. Considering there is the filter of conference presentation first, I believe an acceptance rate around 50% is reasonable.









IEEE Open Journal of Industry applications







Summary

- Web Only Journal
- No Conference Requirement
- EiC: Prof. Pericle Zanchetta University of Nottingham (UK) IEEE Fellow

Report Updated on 30th September 2020







Governance

Editorial Board

- Prof. Pericle Zanchetta, University of Nottingham, UK (Editor in Chief)
- Prof. Luca Solero, Università Roma Tre, Italy (Deputy Editor in Chief)
- Dr. Emmanuel Agamloh, Baylor University, USA
- Prof. Fernando Briz, Universidad de Oviedo, Spain
- Dr. Chiara Boccaletti, Sapienza Università di Roma, Italy
- Dr. Shafiq Odahno, University of Nottingham, UK
- Dr. Giovanna Oriti, Naval Postgraduate School, USA
- Prof. Jean Luc Schanen, Grenoble Institute of Technology, France
- Dr R. Sudharshan Kaarthik, Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram
- Dr Petros Karamanakos, Tampere University, Finland
- Prof. Kim Hag Hone, Korea National University of Transportation, South Korea
- Dr Luigi Martirano, University of Rome La Sapienza, Italy

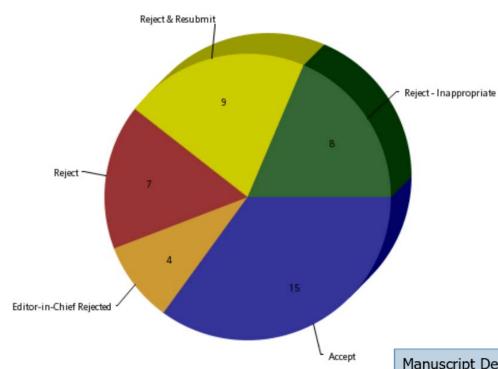
Steering Committee

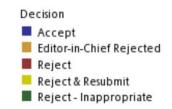
- Prof. Andy Knight,
 - (Publications Dept Chair, IEEE IAS)
- Prof. Pericle Zanchetta
 - (Editor in Chief)
- Prof. Luca Solero
 - (Deputy Editor in Chief)
- Prof. Fernando Briz
- Prof Jean Luc Schanen





Summary of decisions



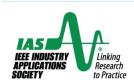


Total of 59 submissions up to September 30th 2020.

43 decided 1 withdrawn

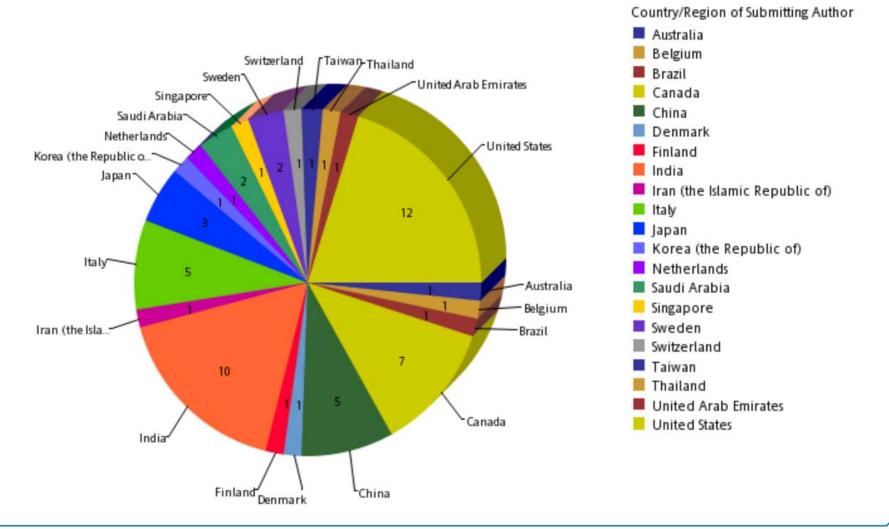
15 still under the review process

Manuscript Decision	Number of Manuscripts	Percentage of Total
Accept	15	34.9 %
<u>Reject</u>	28	65.1 %
Total	43	100%





Submitted manuscripts by country







Special issue IEEE Open Journal of Industry Applications Model Predictive Control of Power Electronic Systems in Industrial Applications

FREE PUBLICATION – NO APC

All manuscripts must be submitted through Manuscript Central at https://mc.manuscriptcentral.com/oj-ia. Authors should select, during the submission stage, the option "Special Issue on Model Predictive Control of Power Electronic Systems in Industrial Applications". Refer to https://ias.ieee.org for general information about electronic submission through Manuscript Central. Manuscripts submitted for the special issue will be reviewed separately and will be handled by the guest editorial board noted below. Accepted manuscripts will have their APC waived.

Deadline for Submission of Manuscripts: 31/12/2020

Guest Editor: Petros Karamanakos, Tampere University, Finland,

p.karamanakos@ieee.org

Editor-in-Chief: Pericle Zanchetta, University of Nottingham, UK,

pericle.zanchetta@nottingham.ac.uk





Prize Paper Awards for ECCE 2019

Industrial Power Converter Committee

Stefano Bifaretti
IEEE IAS IPCC Paper Review Co-Chair

October 24, 2020 Virtual Meeting







Coordinator of the Committee

Stefano Bifaretti, Transaction co-Chair, University of Rome Tor Vergata, Italy

Committee

- Ke Ma, Shanghai Jiao Tong University, China
- Liang Du, Temple University, USA
- Petros Karamanakos, Tampere University, Finland
- Vito Monopoli, Politecnico di Bari, Italy
- Xiaonan Lu, Argonne National Laboratory, USA
- Xiongfei Wang, Aalborg University, Denmark
- Xu She, United Technologies Corporation, USA
- Yongsug Suh, Chonbuk National University, Korea



The role of the coordinator has been focused on the selection of the committee members and the collection of the evaluation scoresheets.

The coordinator did not participate to the evaluation.

The committee members have been selected from the list of the TIA Associate Editors for IAS-IPCC, excluding those who:

- are co-authors of the papers in competition;
- have the same affiliation of co-authors of the papers in competition;
- did not reply to the invitations in previous editions.



- The papers presented at ECCE 2019 in Baltimore, submitted to IAS Transactions before December 31, 2019 and successively accepted were taken into consideration for the IPCC prize paper ballot.
- Only 8 papers have been identified and included in the ballot
- Remember to submit your ECCE 2020 paper before December 31, 2020 to be included in the award evaluation





First IPCC Prize Paper Award

Marco di Benedetto, Alessandro Lidozzi, Luca Solero, Fabio Crescimbini, Petar J. Grbović

Failure Mode Analysis of the 3-Phase 5-Level E-Type Converter

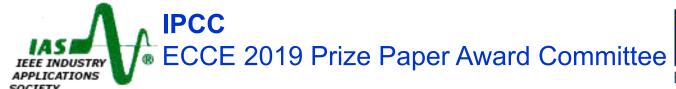




Second IPCC Prize Paper Award

Ville Pirsto, Jarno Kukkola, F. M. Mahafugur Rahman, Marko Hinkkanen

Real-time Identification Method for LCL Filters used with Grid Converters





Third IPCC Prize Paper Award

Luca Tarisciotti, Alessandro Costabeber, Francesco Tardelli, Roberto Cardenas

A multilevel chain-link topology for low voltage, variable frequency applications

In Memoriam – Dr. Alessandro Costabeber



Alessandro Costabeber, IEEE Member, passed away on June 20, at age 36. He received the master's degree with honors in electronic engineering and the Ph.D. degree in information engineering from the University of Padova, Italy, in 2008 and 2012, respectively, on energy efficient architectures and control techniques for the development of future residential microgrid. In 2012, he started a two-year research fellowship with the University of Padova. In 2014, he joined the PEMC group, Department of

Advancing Technology

for Humanity

Electrical and Electronic Éngineering, University of Nottingham, UK, as Lecturer in power electronics. In 2019 he joined again the University of Padova as Associate Professor. Alessandro was one of the most gifted engineers of the last decades. His research interests included HVSC converters topologies, high power density converters for aerospace applications, control solutions and stability analysis of ac and dc microgrids, control and modeling of power converters, power electronics, and control for distributed and renewable energy sources. Dr. Costabeber was the recipient of the IEEE Joseph John Suozzi INTELEC Fellowship Award in power electronics in 2011.



Call for Volunteers Call of Nominations



- Starting December 31, position of Special Activities Chair is vacant.
- Rostan Rodrigues, due to his very busy schedule of next year, resigned from the role.
- I would like to thank Rostan very much for the work done this year and in particular for starting the IPCC Webinars business.



Call for Volunteers Call of Nominations



- Industry Power Converter Committee NEEDS industry representation!!!!
 - Desire to contribute back to community
 - Attend ECCE regularly
- Accepting nominations and recommendations for 2021.
 Submit by December 1st to <u>luca.solero@uniroma3.it</u>, decisions made before December 31st.
 - Special Activities Chair
- Special Activities responsible for promoting special events aimed at promoting and disseminating knowledge in the field of interest of IPCC and favor Industry-Academia links (panel groups, tutorials, special session at IAS sponsored conferences, etc.). The special activities subcommittee chair will be supported by two European Liaison officers and two Asian Liaison officers





IAS Sponsored 2021 Conferences



Sponsored Conferences 2021 (USA)



2021 IEEE Power and Energy Conference at Illinois (PECI), <u>Link</u>

Champaign, IL USA

Digest Submission Date: Dec 20, 2020



2021 IEEE Transportation Electrification Conference & Expo (ITEC), <u>Link</u>

Chicago, IL USA

Abstract Submission Date: Dec 1, 2020



2021 IEEE International Electric Machines & Drives Conference (IEMDC)

Hartford, CT USA

2021 IEEE Texas Power and Energy Conference (TPEC), <u>Link</u>

College Station, TX USA

Full Paper Submission Date: Nov 20th, 2020



2021 IEEE Green Technologies Conference (GreenTech), <u>Link</u>

Virtual Conference

Paper Submission: Dec 5, 2020



2021 IEEE Green
Technologies Conference
April 7-9, 2021 | Virtual Conference

2021 IEEE 13th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED)

Dallas, TX USA

Manuscript Submission: March 1, 2021

https://ias.ieee.org/events-conferences/conference-schedule.html



Sponsored Conferences 2021 (Asia)



1st International Conference on Power Electronics and Energy (ICPEE) Bhubaneswar, India Jan. 2-3, 2021



5th International Conference on Power Electronics and their Applications (ICPEA) Hail, Saudi Arabia

IEEE 12th Energy Conversion Congress & Exposition - Asia (ECCE-Asia)
Singapore, Singapore
Digest Submission Date: Oct 21, 2020



33rd International Symposium on Power Semiconductor Devices and ICs (ISPSD) Nagoya, Japan Digest Submission Date: Nov 6, 2020



Sponsored Conferences 2021 (Europe)



2021 IEEE International Workshop of Electronics, Control, Measurement, Signals and their application to Mechatronics (ECMSM) Liberec, Czech Republic

Digest Submission Date: Feb 22, 2020

2021 International Conference on Smart Energy Systems and Technologies (SEST) Vaasa, Finland Digest Submission Date: Dec 15, 2020

2021 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM) Adler, Sochi, Russia

Digest Submission Date: Dec 31, 2020



Flagship Conference IPEC 2022 (Asia)



IPEC2022 ECCE-ASIA
(International Power Electronics Conference)
May 15-19, 2022
Himeji, Japan

Abstract Submission Oct. 12, 2021











Flagship Conference APEC 2021 (USA)



IEEE's 36th annual APEC will highlight the latest news in power electronics technology

- Phoenix, AZ, from June 9-13, 2021
- The conference and exposition previously scheduled to take place in March
- > The exposition will take place at the start of the conference
- ➤ The location of APEC 2021 remains, as originally planned, at the Phoenix Arizona Convention Center
- Submission process for Technical Papers, Industry Session Presentations, and Professional Education Seminars is re-opened
- Detailed updates about the conference at <u>www.apec-conf.org</u>





Flagship Conference APEC 2021 (USA)



- Since IAS is a co-sponsor of the APEC conference, IPCSD is interested in getting more involved in its organization.
- ➤ Volunteers from IPCC are invited to propose themselves as Potential Track Chairs.
- ➤ Candidates should have experience in similar roles and be well-known experts in the field. It is preferably if they are already active (authors, reviewers) in APEC and attend the conference.
- Volunteers are invited to select Topics of their Interest and to send a short CV to

luca.solero@uniroma3.it





Flagship Conference APEC 2021 (USA)



Topics of Interest

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















Organizing Committee



- General Chair: Giovanna Oriti
- Finance Chair: Shanelle Foster
- TPCs: Jean-Luc Schanen, Luca Zarri, Mark Scott, Gianmario Pellegrino, Michael Harke, Elisabetta Tedeschi
- Publication Chairs: Brian Welchko, Norma Anglani
- Local Chairs: Jennifer Vining, Jonathan Bird
 - ➤ Vancouver IEEE Chapter: Francisco Paz, Hamed Valipour, Franco Degioanni
- Exhibit Chairs: David Morrison, Grant Pitel
- Industry Liaison: Brian Zahnstecker
- > Tutorial Chairs: Yue Cao, Katherine Kim
- Special Session Chairs: Xiaonan Lu, Fei Ding
- Publicity Chairs: Jiangbiao He, Zheyu Zhang
- Plenary Session Chair: Sara Roggia, Tom Kirk
- Student Activities Chair: Xiu Yao
- Electronic Media Chairs: Anant Singh, Sumit Chhabria, Jyothis Joseph
- > Women in Engineering Chair: Lijun He
- Webmaster: Dong Cao
- Awards Chair: Christina DiMarino

12 from industry, 17 from academia, 1 US gov. lab





Vancouver Convention Center - West

• Sustainable building (double LEED® Platinum certified facility), six-acre living roof

Waterfront views from every window











Hotels



- Marriott Pinnacle Downtown
- Fairmont Waterfront





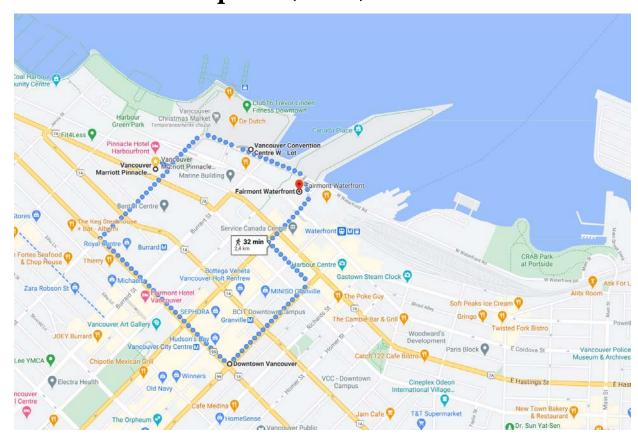




Live Vancouver!

Click for a 90s Video

- Hotels, convention center and downtown at hand
- Vancouver Inter. Airport (YVR) 20 min. from downtown







Important Dates

- Jan. 15th, 2021 Deadline for <u>digest</u> submissions
- Feb 12th, 2021 Deadline for Tutorials
- Mar 31st, 2021 Deadline for Special Sessions
- April 2nd, 2021 Tutorial decision notification
- May 1st, 2021 Digest and Special Sessions decision
- Jun. 30th, 2021 Final papers with copyright forms

For details visit our website: http://www.ieee-ecce.org/2021/



Planning of ECCE 2021



Tutorial and special session suggestions/proposals for ECCE 2021

Volunteers and subjects:

Submit proposals to the committee chair by January 31st luca.solero@uniroma3.it



Planning of ECCE 2021



Topic chairs and session chairs needed for ECCE 2021

- 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) to the Committee Secretary by November 15th ysuh@jbnu.ac.kr
- Names and email addresses will be collated



Adjournment



Motion to Adjourn.

THANK YOU MEMBERS!



THANK YOU VOLUNTEERS!



FAREWELL!

SEE YOU IN VANCOUVER!!!!

