



IEEE IAS Industrial Drives Committee Minutes of the 2018 Annual Committee Meeting

Oregon Convention Center, Room B114
Portland, Oregon, USA
Tuesday, September 25, 2018, 6:00 pm – 7:00 pm

Meeting called to order at 6:00 PM by IDC Chair Fernando Briz.

The following committee officers were present:

Fernando Briz, Chair of the IAS Industrial Drives Committee (IDC)
Mahesh Swamy, IDC Vice-chair Papers
Luca Zarri, IDC Vice-chair Programs
Jul-Ki Seok, IDC Secretary
Michael Harke, Past Chair IDC

1. Introduction of members and recognition of IEEE fellows

- a. Firstly, the present slate of IDC officers was introduced. IEEE fellows were recognized.
- b. The IDC roster was circulated and the members were encouraged to sign.

The attendance was about 90 people. Twenty-six (26) people signed up as new members. The total number of IDC members, including the new ones, is currently 456.

2. Old business/reports

a. Approval of the 2017 meeting minutes.

The approval of the meeting minutes was moved by Prof. Fabio Giulii Capponi, seconded by Prof. Bob Lorenz, and unanimously approved.

b. Review Report by the Vice Chair for Papers

Mahesh Swamy presented the vice-chair papers report summarizing the statistics of the papers submitted to the IDC for publication in IEEE Transactions on Industry Applications.

About 61 papers had been submitted for review during the past 12 months. Most papers are from ECCE2017 (23 papers) but ICEMS2017 scores the second highest number (13 papers) this year. The accepted papers are from ECCE2017 that is followed by ICEMS2017.

According to the submission statistics, the submitting countries were USA (20 papers), China (12 papers), India and Italy (8 papers each), followed by many others (in total, 16 countries from all over the world).

The acceptance ratio is nearly 40% during the past 12 months but is increased to 67.4% for the year-to-date time window. The average time taken from submission to the first decision is 48 days during the past 12 months and is increased to 55 days for year-to-date.

One thing to note is the number of this year's submissions (85 papers) is quite small compared to EMC (104 papers) and IPCC (171 papers). The reason is not clearly explained yet but Mahesh Swamy supposes that a certain amount of improvement requirement before the submission to IEEE Trans. on Industry Applications or IEEE Industry Applications Magazine might influence this result. He also encourages the IDC members to submit more papers to Industrial Drives Committee.

c. Review Report by the Vice-Chair for Programs

Luca Zarri presented the vice-chair programs report on the results of Track-H at ECCE 2018.

21 Topic Chairs, who had managed the review process, were Di Pan, Ali Bazzi, Michele Mengoni, David Reigosa, Rakib Islam, Lei Hao, Wei Xu, Yue Zhao, Yukai Wang, Juan Manuel Guerrero Muñoz, Alireza Fatemi, Davide Barater, Fabio Giulii Capponi, Roberto Petrella, Shafiq Ahmed Odhano, Jiangbiao He, Pinjia Zhang, Liang Du, Athanasios Karlis, and Lijun He.

Ali Bazzi, Alireza Fatemi, Athanasios Karlis, Chowdhury Mazharul, David Diaz Reigosa, Du Liang, Fabio Giulii Capponi, Fernando Briz, Francesco Cupertino, Giacomo Scelba, Giulio De Donato, Islam Rakib, Jesus Doval, Jimmy Pellegrino, Juan Manuel Guerrero, Jul-Ki Seok, Kyo-Beum Lee, Lei Hao, Luca Zarri, Mahesh Swamy, Marcello Pucci, Mario Pacas, Marko Hinkannen, Maurizio Cirrincione, Michael Harke, Pan Di, Pinjia Zhang, Prasad Rashmi, Radu Bojoi, Roberto Petrella, Sang Bin Lee, Shafiq Odhano, Thomas Wolbank, and Zhao Yue (34 persons) are served as a Session Chair in ECCE2018.

A total of 222 papers had been received to Track H: Electric Drives (15 sub-tracks) and the number of submissions has risen by nearly 50% compared to 150 submissions of the previous year. The number of digests received was almost constant from 2015 to 2017.

The acceptance ratio is 63% which is the second lowest rate in all tracks ranging from A to K and 70 papers were assigned to 17 oral sessions. The average number of reviews per paper was around 4.5.

The distribution of the papers based on the country of the authors placed USA first (78 digests) among the submitting countries, followed by China (75 digests), Italy (13 digests), and other 20 countries.

The papers with a student as the first author were 107 (50 last year). The number of papers from a female author was 14, from Industry was 18 (11 last year), and the papers written in collaboration between industrial and academia were 32 (13 last year).

d. New IDC website

Luca Zarri introduced the new IDC website which is online at the following link:

<http://sites.ieee.org/ias-idc/>

e. Standard Subcommittee by the Vice Chair for Papers

Mahesh Swamy presented the Standard Subcommittee members as:

Pinzia Zhang – Tsinghua University
Liang Du – Temple University
Fang Luo – University of Arkansas
Yue Zhao – University of Arkansas
Joseba Arza – Ingeteam Power Technology

The title of Standard Subcommittee is “Measurement and Quantification of Efficiency of an Electrical System Comprising of Variable Frequency Drives Operating AC Motors”. Mahesh Swamy emphasized the above standard aims to deal with “System Efficiency” rather than Component Efficiency because system efficiency is more relevant to end user compared to drive or motor efficiency.

The Standard Subcommittee needs to bring in a person from Industry and wants to join other working groups to collaborate with new or existing standards.

f. Report on SLED 2017

The report was presented by Marko Hinkkanen, Aalto University, Italy. The 9th IEEE International Symposium on Sensorless Control for Electrical Drives was held in Helsinki, Finland, on the 13th and 14th of September 2018. The General Chairs were Marko Hinkkanen and Jorma Kyra. During the symposium, 26 papers, distributed in 7 technical session, were presented. There were 80 attendees from 17 countries. The 3 keynote speakers were invited as Frede Blaabjerg, Lennart Harnefors, and Matti Kauhanen.

3. Awards and Recognitions

a. Conference awards

Prof. Fabio Giulii Capponi, University of Rome “La Sapienza”, presented the ECCE’17 conference awards. The papers considered were those presented at ECCE’16, submitted to IEEE Transactions on Industry Applications upon IDC invitation, which received a non-negative review by End of November were considered. A total of 15 papers qualified.

Evaluation criteria were as follows:

- a. Readability
- b. Use of Figures and Graphics
- c. Education
- d. Broad Interest
- e. Significance
- f. Impact

The review was conducted as follows:

- 1) According to the above criteria, each reviewer was requested to define his preferred ranking list of the 15 papers.
- 2) A score was given to each paper according to its position in each ranking list. For example, if a paper ranked #1, it received 14 points (because it was better than the remaining 14 papers, according to the reviewer's opinion), if it ranked #15, it received no point.
- 3) The scores resulting from the reviewers' opinions were summed to find the final score of each paper (this number has a very practical meaning - if we suppose to compare the papers with each other, this final score represents the number of comparisons won by each paper).

The members of the Awards Subcommittee were:

Prof. Fabio Giulii Capponi (University of Rome “La Sapienza”), Chair
Dr. Richard Lukaszewski (Allen-Bradley)
Prof. Ion Boldea (University Politehnica Timisoara)
Dr. Pierluigi Tenca (Phase Motion Control)
Prof. Seung-Ki Sul (Seoul National University)
Dr. Rakib Islam (Nexteer Automotive)
Dr. Jun Koo Kang (LG Electronics)
Dr. Semyon Royak (Rockwell Automation).

The three best papers were

- 1) “Optimal Control of Synchronous Motors: Plug-and-Play Method,” by Hafiz Asad Ali Awan, Zhanfeng Song, Seppo E. Saarakkala, Marko Hinkkanen
- 2) “A Novel Active Damping Scheme for Use with Regenerative Converters,” by Mahesh Swamy
- 3) “Automatic Tuning for Sensorless Commissioning of Synchronous Reluctance Machines Augmented with High Frequency Voltage Injection,” by Paolo Pescetto, Gianmario Pellegrino

The awards certificates were given to the authors who were present at the meeting.

For the Prize Paper Awards 2019, it was announced that the papers submitted to IEEE Trans. on Industry Applications that receive a non-negative review by the end of February will be considered for the prize paper awards.

The IDC Committee congratulated the members of the Awards Subcommittee for their excellent work.

b. Associate editors

The Associate Editors of IEEE Trans. on Industry Applications for IDC in 2018 were recognized. They were

Giacomo Scelba, University of Catania, Italy
Davide Barater, University of Parma, Italy
Roberto Petrella, University of Udine, Italy
David Diaz, University of Oviedo, Spain
Long Wu, John Deere, USA
Pinjia Zhang, Tsinghua University, China
Marcello Pucci, INM-CNR, Italy
Yue Zhao, University of Arkansas, USA
Ramakrishnan Raja, Halla Mechatronics, USA
Kevin Lee, Eaton Corporation, USA

4. New Business

a. IDC Slate of Officers

The Past IDC Chair, Dr. Michael Harke, presented the nomination of 2019 IDC slate of officers:

Chair: Fernando Briz, University of Oviedo, Spain
Vice Chair - Papers: Mahesh Swamy, Yaskawa America Inc., USA
Vice Chair - Programs: Luca Zarri, University of Bologna, Italy
Secretary: Jul-Ki Seok, Yeungnam University, Republic of Korea
Past Chair: Michael Harke, UTC AEROSPACE SYSTEMS, USA

Prof. Fabio Giulii Capponi moved the motion first, which was then seconded by Prof. Bob Lorenz. The motion was unanimously approved.

b. Submission to papers to Transactions on Industry Applications

Fernando Briz informed the audience that the authors should ask for an invitation email to IDC Publications Chair Mahesh Swamy (mswamy@ieee.org) within one year after the conference.

c. ECCE 2019

The details of ECCE 2018 were presented by Prof. Yan-Fei Liu, Queens University, Canada. Yan-Fei Liu informed the audience that ECCE 2019 would take place in Baltimore, Maryland, USA, from the Sep. 29th to the Oct. 3rd 2019, and that he would be the general chair.

Where: Baltimore, Maryland
When: September 29- October 3, 2019
General Chair: Prof. Yan-Fei Liu
Website: <http://www.ieee-ecce.org/2019/>

d. EPE ECCE-EUROPE 2019

Pascal Mousion presented that details of EPE ECCE-Europe, which will be held in Genova(Genoa), Italy, on Septempber 2-6, 2019. The conference website is linked at <http://www.epe2019.com/>.

e. SDEMPED 2019

Luca Zarri presented SDEMPED 2019, which will be held in Toulouse, France, on August 27-30, 2019. The conference website is linked at <http://inpact.inp-toulouse.fr/SDEMPED2019/welcome.html>.

f. IEMDC 2019

Fernando Briz presented information about IEMDC 2019, to be held in San Diego on May 12-15, 2019. Deadline for submission of digests is December 2, 2018. The conference website is linked at <http://iemdc-conference.org/Authors/Call-for-Papers>.

g. Volunteer for ECCE 2019, IEMDC 2019, and APEC

The members were encouraged to get involved and to volunteer as topic chairs and session chair for IAS-sponsored conferences. Business cards were collected by Luca Zarri.

5. Adjournment

A call to adjourn the meeting was moved by Dr. Michael Harke, seconded by Prof. Fabio Giulii Capponi, and unanimously approved.

Submitted by Jul-Ki Seok
November 01, 2018