

IEEE
IAS Industrial Drives Committee
Minutes of the 2016 Committee Meeting

Milwaukee Convention Center, Room 102D
Milwaukee, Wisconsin, USA
Tuesday, September 20, 2016, 6:00 pm – 7:00 pm

Meeting called to order at 6:05 PM by Michael Harke.

The following committee officers were present:

Michael Harke, Chair of the IAS Industrial Drives Committee (IDC)
Fernando Briz, IDC Vice-chair Papers
Mahesh Swami, IDC Vice-chair Programs
Luca Zarri, IDC Secretary
Yen-Shin Lai, Past Chair IDC

1. Introduction of members and recognition of IEEE fellows

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

The attendance was about 80 people. Twelve (12) people signed up as new members. The total number of IDC members, including the new ones, is currently 404.

2. Old business/reports

a. Approval of the 2015 meeting minutes.

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

b. Review Report by the Vice Chair for Papers

Prof. Fernando Briz presented the vice-chair papers report summarizing the statistics of the papers submitted to the IDC for publication in the Transactions on Industry Applications.

A total of 51 papers had been submitted for review during the previous 12 months: 9 papers had been accepted (17.6%), 19 papers had been rejected (37.3%) and 23 papers were in process (45.1%).

The time to decision was between 81 and 201 days, with an average value of 81 days. According to the year-to-date submission statistics, the submitting countries were USA (4 papers), Republic of Korea (3 papers), India, Italy, Tunisia, Taiwan (2 papers each), Canada, China, Finland, Lebanon and Kuwait (1 paper each).

In comparison to the other IAS committees, IDC was third in terms of number of submissions, behind EMC and IPCC, but the submission trend was increasing. As concerns the performance indicators, the acceptance rate of IDC was around 40%, which was aligned with the acceptance rates of the other IAS committees.

c. Review Report by the Vice-Chair for Programs

Mahesh Swamy presented the vice-chair programs report focused on the results of Track-H at ECCE 2016.

The appointed vice-chairs for Track H were Mahesh Swamy (IAS representative), and Prof. Fabio Giulii Capponii (PELS representative).

A total of 162 papers had been received (compared to 150 submissions of the previous year), two papers had been withdrawn and 78 had been accepted, thus leading to an acceptance rate of 48.15%. The papers were selected purely on the merit of the digests and the Technical Program Committee of the conference had put no pressure to meet a target.

The Topic Chairs that had managed the review process were Uday Deshpande, Rukmi Dutta, Stefan Schroeder, Jul-Ki Seok, Giacomo Scelba, Mazharul Chowdhury, Nicola Bianchi, Shih-Chin Yang, Gianmario Pellegrino, Di Pan, Ali M. Bazzi, Roberto Petrella, Marko Hinkkanen, Rashmi Prasad, A.J. Marques Cardoso, Ramakrishnan Raja, Davide Barater, David Diaz Reigosa, Rakib Islam, Pinjia Zhang, Yue Zhao, Wenping Cao, Dong Jiang, Takahiro Suzuki, and Prerit Pramod.

Most of them were session chairs as well.

The most trending sub-tracks were PM Motor Drives, Control of Electric Drives (35 papers each), Sensorless drives (20 papers), and Induction Motor Drives (15 papers).

The distribution of the papers based on the country of the first author placed USA first (26%) among the submitting countries, followed by China (19%), Italy (10%) and other 20 countries. The distribution of the accepted papers based on the country of the first author was quite similar - USA (26%), China (18%), Italy (18%) and other 14 countries -, although some submitting countries did not have papers accepted into the final program.

The papers with a student as the first author were 63 out of 162 but the accepted papers were only 29. Most of them came from China (28%), followed by USA (21%) and Italy (14%).

It was worth noting that 62.8% of all the accepted papers came from industry (or collaboration between industry and academia).

A total of 65 paper were distributed into 15 oral sessions, the remaining papers were distributed into 2 poster sessions.

The committee recognized the effort of Mahesh and Fabio as ECCE vice chairs.

d. Report on SLED 2016

The report was presented by Marcello Pucci, ISSIA-CNR, Italy. The 7th IEEE International Symposium on Sensorless Control for Electrical Drives was held in Nadi, Fiji, on the 5th and 6th of June 2016. The General Chair was Maurizio Cirrincione, Head of the School of Engineering and Physics, University of the South Pacific, Suva, Fiji.

The report showed the details of the organizing committee, the technical committee and the international steering committee. The symposium had received 20 papers, and 16 of them had been accepted. The expenses had been fully covered by the revenue, which was about 38000 Fijian dollars.

2. Awards and Recognitions

a. Conference awards

Fernando Briz presented the ECCE'15 awards. The papers considered were those presented at ECCE'15, submitted to IEEE Transactions on Industry Applications upon IDC invitation, which had passed the first round of review (with a recommendation of acceptance or revision) by February 10, 2016.

A total of 17 papers qualified. The three best papers, chosen by the Awards Subcommittee after a two-round procedure, were

- 1) "State Observer for Sensorless Control of a Grid-Connected Converter Equipped With an LCL Filter: Direct Discrete-Time Design," by Jarno Kukkola, Marko Hinkkanen
- 2) "Permanent Magnet Temperature Distribution Estimation in PMSMs Using BEMF Harmonics," by David Diaz, Daniel Fernandez, Tsutomu Tanimoto, Takashi Kato, Fernando Briz
- 3) "Hall-Effect Sensor Fault Detection, Identification and Compensation in Brushless DC Drives," by Giacomo Scelba, Giulio De Donato, Mario Pulvirenti, Fabio Giulii Capponi, Giuseppe Scarcella

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

The members of the Awards Subcommittee were:

Stefan Schröder, GE Global Research Europe, Germany (Chair)
Mario Javier Durán Martínez, University of Malaga, Spain
Rangarajan M. Tallam, Rockwell Automation, USA
Long Wu, John Deere, USA
Sun Kai, Tsinghua University, China
Brij N. Singh, John Deere / North Dakota State University, USA
Wim van der Merwe, ABB, Switzerland
Bingsen Wang, Michigan State University, USA

The IDC Committee congratulated Stefan and the other members of the Awards Subcommittee for their excellent work and gave them appreciation certificates.

b. Associate editors

The Associate Editors of IEEE Trans. on Industry Applications for IDC in 2016 were recognized with appreciation certificates. They were

Ranga Tallam, Rockwell Automation, USA
Satish Rajagopalan, EPRI, USA
Jul-Ki Seok, YeungNam University, Korea
Giuseppe Scarcella, University of Catania, Italy
Mario Pacas, University of Siegen, Germany
Joseph Song-Manguelle, GE Global Research, USA
Fernando Briz, University of Oviedo, Spain
Shen-Ming Yang, National Taipei University of Technology, Taiwan

Gui-Jia Su, Oak Ridge National Laboratory, USA
Mahesh Swamy, Yaskawa America, USA
Marcello Pucci, ISSIA-CNR, Italy
Giacomo Scelba, University of Catania, Italy

4. New Business

a. IDC Slate of Officers

The Past IDC Chair, Prof. Yen Shin Lai, presented the slate of the IDC officers, and requested that they be kept unchanged for 2017:

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

Prof. Prof. Bob Lorenz moved the motion first, which was then seconded by Prof. Ralph Kennel. The motion was unanimously approved.

b. Chair of the Awards Subcommittee

Fernando Briz informed the audience that the term of Dr. Stefan Schroeder, who was the chair in charge, had been renewed for 2017.

c. New Associate Editor

Fernando Briz announced that he was looking for a new associate editor for IEEE Trans. on Industry Applications with experience in the field of high power drive Applications. He requested interested members to forward their CV, by email (to Fernando Briz).

d. ECCE 2017

The details of ECCE 2017 were presented by Prof. Andy Knight, University of Calgary, Canada. Andy informed the audience that ECCE 2017 would take place in Cincinnati, Ohio, from the 1st to the 5th of October 2017, and that he would be the general chair.

The members were encouraged to get involved and volunteer as topic chairs and reviewers. Business cards were collected by the Secretary Luca Zarri.

Where: Cincinnati, OH

When: October 1-5 2017

General Chair: Prof. Andy Knight

Website: <http://www.ieee-ecce.org/2017/>

e. IEMDC 2017

Details of IEMDC 2017 were presented by Prof. Akira Chiba, Secretary of the IAS Electric Machine Committee. The members were warmly encouraged to attend this unique event in the field of electric machines and drives.

Where: Miami, FL

When: May 21-24 2017
General Chair: Prof. Dan Ionel
Website: <http://iemdc.org/>

f. SDEMPED 2017

Luca Zarri presented the details of SDEMPED 2017. The focus of the conference was diagnostics for power converters, electric machines and drives. The sponsors of the conference were IAS, IES and PELS.

Where: Tinos, Greece
When: 29 August - 1 September 2017
General Chair: Prof. Elias Strangas
Website: <https://www.egr.msu.edu/sdemped2017/home>

g. SLED 2017

Michael Harke explained that PELS will organize the SLED Symposium in 2017, since there is an agreement between the IAS and PELS that they will alternate organizing SLED each year. SLED provides a specific forum for international experts to present and discuss the latest developments in the field of sensorless electrical drives.

The upcoming edition of SLED was presented by Giacomo Scelba, Catania, Italy.

Where: Catania, Italy
When: 18-19 September 2017
General Chairs: Prof. Giuseppe Scarcella and Prof. Mario Cacciato
Website: <http://sites.ieee.org/sled2017>

h. IAS Online Tutorials Program

This point of the agenda was not discussed, since no speaker was present. Fortunately, the same topic had been already presented in previous committee meetings (e.g. EMC meeting) on the same day.

i. Presentation of TC3

Uday Deshpande presented TC3, the PELS Motor Drives and Actuators Committee, which aspires to become a point of reference for PELS members. People interested in becoming members of TC3 can send an email to Antonio Marquez Cardoso, University of Beira Interior, who is the secretary in charge.

j. IDC/PELS joint meeting

It was noted that differently from the past editions of the ECCE, this IDC meeting was not publicized as a joint IAS/PELS meeting.

Andy Knight reported that the issue of joint meetings had already been matter of discussion and there was an official IAS position. Thus, although IAS and PELS members are encouraged to promote joint activities, the meetings of the IAS committees cannot be joint with those of the PELS committees, because the attendants are formally allowed to take part only in the decisions of the societies where they are members.

5. Adjournment

A call to adjourn the meeting was moved by Bob Lorenz, seconded by Andy Knight, and unanimously approved.

Submitted by Luca Zarri
December 10, 2016