

**IEEE Power Electronics Society Technical Committee on
Electrical Machines, Drives, and Automation
TC3 Meeting Minutes**

Location:

Georgia World Congress Center, Atlanta, Georgia, Room Grand E; option: online via Webex platform.

Date:

Monday March 17th, 2025.

Time:

11:30 a.m. -13:00 p.m., Eastern time (US and Canada)

Agenda

- 1. Welcome and Introduction**
- 2. Approval of ECCE 2024 TC3 Meeting minutes**
- 3. Approval of 2026 budget**
- 4. Conference Updates**
 - **SDEMPED 2025**
 - **IDCD 2026**
 - **IEMDC 2025**
 - **IEMDC 2027**
 - **PRECEDE 2025**
 - **PRECEDE 2027**
 - **SLED 2025**
 - **ECCE 2025**
 - **ECCE EUROPE 2025**
- 5. Call for Webinar Speakers and Workshops**
- 6. Technical Achievement Award**
- 7. Call for volunteers**
- 8. Other business**
- 9. Meeting Adjournment**

1. Welcome and Introductions of Members

Prof. Giacomo Scelba, in the role of TC3 Chair, opened the meeting to order at 11:35 a.m. and welcomed all participants. Then, all the participants in presence and connected online were invited to briefly introduce themselves.

2. Approval of Minutes from ECCE 2024 TC3 Meeting

Minutes of ECCE 2024 TC3 meeting were electronically circulated among the members by the secretary prior to the APEC 2025 meeting. No comments or suggestions came from the attendees. The motion for approval were moved by Prof. Ralph Kennel and seconded by Prof. Ali Bazzi. Minutes were unanimously approved by voting members.

3. Approval of 2026 budget

The Chair showed the budget proposal for 2026. No comments or suggestions came from the attendees. The motion for approval was moved by Prof. Philip T. Krein and seconded by Prof. Ali Bazzi. The 2026 budget proposal was unanimously approved by voting members.

4. Conference Updates

The Chair briefly introduced to the committee the conferences that are sponsored or co-sponsored by PELS, where the TC3 is mainly involved:

- **SDEMPED 2025**: International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives.
- **IDCD 2026**: International Conference on Intelligent Design and Control of Automation and Drive Systems.
- **IEMDC 2025**: International Electric Machines and Drives Conference.
- **IEMDC 2027**: International Electric Machines and Drives Conference.
- **PRECEDE 2025**: International Conference on Predictive Control of Electrical Drives and Power Electronics.
- **PRECEDE 2027**: International Conference on Predictive Control of Electrical Drives and Power Electronics.
- **SLED 2025**: International Symposium on Sensorless Control for Electrical Drives.
- **ECCE 2025**: IEEE Energy Conversion Congress & Expo.
- **ECCE EUROPE 2025**: IEEE Energy Conversion Congress & Expo EUROPE

Members attending the meeting and interested in hosting one of those conferences in the future should first contact the conference steering committee. Then, they should reach out to the TC3, which will provide feedback and support for the candidature.

The brief introduction to the conferences was followed by the following updates:

- **SDEMPED 2025**: Prof. Ali Bazzi is the General Chair of the event that will be held in Grapevine, Embassy Suites Hilton Dallas (TX, USA), in August 24-27, 2025. During the meeting the General Chair illustrated the most recent updates regarding the organization of this event, including details about organizing committee, paper submissions, sponsors, keynote speakers, call for papers, and registration rates. No comments or suggestions came from the attendees.
- **IDCD 2026**: The General Chair of the first edition, Prof. Ali Bazzi, presented the updates

of the first TC3 flagship conference, the **International Conference on Intelligent Design and Control of Automation and Drive Systems (IDCD)**. The topics of the flagship conference are as follows:

- Intelligent control of electric drives (IM, PMSM, SRM, other machines) for efficiency, reliability, and fault-tolerance.
- Inverter-fed machine design assisted with machine learning.
- Automation coordination and intelligent control among multi-drive systems.
- Robotic actuators, machines, and drives.

The conference will be held in even years with the first edition tentatively scheduled on 23th-24th April 2026, in Chicago (IL, USA). Prof. Bazzi showed the proposed budget and the registration fees. Prof. Bazzi requested a first motion to approve budget and dates, moved first by Prof. Giacomo Scelba and seconded by Prof. Ralph Kennel. Then, he proposed a second motion to approve a \$10,000 loan from PELS, moved first by Prof. Ralph Kennel and seconded by Prof. Philip T. Krein. The motion received unanimous approval.

- **IEMDC 2025:** Dr. Yao Duan from Toshiba is the General Chair of the event that will be held in Houston (TX, USA) on May 18-21, 2025. Prof. Jiangbiao He illustrated the latest updates of the event, including the organizing committee, keynote speakers, tutorials, student demos, and special sessions.
- **IEMDC 2027:** Prof. Jiangbiao He, University of Tennessee at Knoxville is the General Chair of the event that will be held in Milwaukee (WI, USA) on May 17-20, 2027. Prof. He illustrated the latest updates of the event and the motion for budget approval, which was moved by Prof. Ali Bazzi, and seconded by Prof. Giacomo Scelba. The motion passed unanimously.
- **PRECEDE 2025:** Prof. Shihua Li, Southeast University, Jiangsu Association of Automation, is the General Chair of the event that will be held in Nanjing, China. in June 5-8, 2025. Prof. Ralph Kennel illustrated the latest updates of the event, including the most important dates for paper submission, plenary speakers, venue, and security advises for visitors.
- **PRECEDE 2027:** Prof. Ralph Kennel mentioned that there are currently two candidates for hosting the event, and a final decision will be taken at ECCE EUROPE 2025.

At the end of the presentation, Prof. Kennel mentioned an extra point, related to the growing interest and importance of predictive control in industries, academia, and even governmental institutions. The major challenge relates to the proof of stability for non-linear systems, while some colleagues in Australia have done some steps for that, but for linear systems only. To support progresses in this area, Prof. Kennel proposes to praise a one-time reward of \$10,000, for researchers who can successfully develop or discover a procedure to proof stability of non-linear model predictive control. One comment came from the audience, asking for the need to prove the above through experimental results. Prof. Kennel confirmed that experimental results are needed.

- **SLED 2025:** The symposium will be held in August 15-17, 2025 in Sun Island Garden Hotel, Harbin, China. The General Chair is Prof. Gaolin Wang from the Harbin Inst. Technology, China. Prof. Ting Dong provided information on key dates, changes in the hosting venue, organizing committee, plenary speakers, website, and call for papers.
- **ECCE 2025:** Prof. Iqbal Husain, North Carolina State University, USA, is the General Chair of the event that will be held in Philadelphia (PA, USA) on October 19-23, 2025. Prof. Giacomo Scelba, one of the Technical Program Chair of ECCE 2025, presented an overview of the next edition of the conference highlighting location, venue, hotels, organizing committee, and important dates.
- **ECCE EUROPE 2025:** Prof. Pat Wheler, University of Nottingham, UK, is the General Chair of the event that will be held in Birmingham (UK) from August 1 to September 4, 2025. Prof. Wheeler illustrated the latest updates of the event, including venue, paper submission, and program at glance.

5. Call for Webinar Speakers and Workshops

The Chair invited TC3 members to present webinars, which are broadcast globally and receive thousands of viewers. Members interested in presenting a webinar whose area of expertise would be beneficial to members of PELS, can contact the TC3 leadership team for support. The Chair showed recently held and upcoming webinars.

Participants were also encouraged to submit proposals for organizing technical workshops, which TC3 supports with some funding. For 2025, TC3 will host a Special Session at IEEE CPERE, organized by Prof. Ali Bazzi.

6. Technical Achievement Award

The IEEE PELS Electrical Machines, Drives, and Related Automation Technical Achievement Award was illustrated to the participants by the Secretary, along with its eligibility conditions and award items. In 2024, the award was given to Prof. Ayman EL-Refaie for his significant contributions to “development of advanced electrical machines for transportation electrification”. The Secretary encouraged the members to submit their nomination, as the portal was recently opened.

7. Call for Volunteers

TC3 committee leadership invited members to support TC3 activities by serving as reviewers, topic chairs, and session chairs for conferences. Interested members can contact Prof. Stefano Nuzzo (stefano.nuzzo@unimore), specifying their preferred position.

8. Other Business

The Chair called for any other business, but none was forthcoming.

9. Meeting Adjournment

As a closing remark, the Chair thanked all the present attendees for their participation and requested a motion to adjourn the meeting. The motion was moved by Prof. Ali Bazzi. The meeting was adjourned at 12:40.

2025-2026 PELS TC3 officers:

Chair: Prof. Giacomo Scelba (giacomo.scelba@ieee.org)

Secretary: Prof. Stefano Nuzzo (stefano.nuzzo@unimore)

Minutes prepared by Stefano Nuzzo