

## IEEE Estonia Section

**Dmitri Vinnikov, Chair**

### Section Vitality

Last elections of the IEEE Estonia Section Board have been conducted in December 2022. In September 2023, due to relocation to UK Roya Ahmadiyahangar resigned from the position of the Section Secretary. The elections of the IEEE Estonia Section Secretary have been conducted in November 2023; as a result Andrii Chub was elected by the majority of voters. From December 1, 2023 the Section Board is represented by the following volunteers:

- Dmitri Vinnikov, Chair
- Vladimir Kuts, Vice-Chair
- Urmet Jänes, Treasurer
- Andrii Chub, Secretary

Starting from the beginning of 2023 the ExCom meetings are organized quarterly. Spring meeting (typically, mid-March) is conducted online and attended by most of the section members. Twice a year (June and December) the extended ExCom meetings are organized in person for better interaction between the members. The largest ExCom meeting is hosted during the annual seminar of the IEEE Estonia Section in September. In 2021, for achieving both the recruitment and retention goals the Estonia Section was recognized by the golden medal. Also, in 2023 the Section was recognized for the Outstanding Recruitment and Retention Performance. At the moment (22.02.2024) the total number of members in the Section is 299.



### Students

Student Branches of the IEEE Estonia Section:

1. Tallinn University of Technology and Tallinn University – 82 (22.03.2024) student & graduate student members, Chair: Arqum Shahid (elected in 2023).
2. University of Tartu – 41 (22.03.2024) student & graduate student members, Chair: Junming Ke (elected in 2021)
3. Tallinn University of Technology Industrial Electronics Society Student Branch Chapter – 14 (22.03.2024) student & graduate student members, Chair: Sayeed Hasan (appointed in February 2024).

IEEE Estonia Section actively supports all students and YP activities, both technically and financially. Student branches demonstrated an outstanding performance and greatly helped the section in the following actions:

1. Promotion of the section and chapters activities to students through social media channels and the IEEE.EE webpage.
2. Providing technical assistance to the chapter members for using the IEEE Section webpage.
3. Organization of guest lectures, webinars, visits to the research labs and industrial companies.

**Affinity Groups** - IEEE Estonia Section Young Professionals AG – 134 members, Chair: Aleksei Tepljakov, Vice-Chair: Edivan Carvalho.

### Chapters

1. Education [E25 (CH08649)], Chair: Valery Vodovozov. 11 members in February 2024.
2. Computer/Communications/Information Theory [C16/COM19/IT12 (CH08494)], Chair: Tõnu Trump. 41 members in February 2024.
3. Instrumentation and Measurement/Electron Devices/Engineering in Medicine and Biology [IM09/ED15/EMB18 (CH08500)], Chair: Paul Annus. 17 members in February 2024.
4. Signal Processing/Circuits and Systems/Solid-State Circuits [SP01/CAS04/SSC37 (CH08269)], Chair: Gert Tamberg. 19 members in February 2024.
5. Industrial Electronics / Power Electronics / Industry Applications / Power & Energy Joint Societies Chapter [PE31/IA34/PEL35/IE13], Chair: Andrii Chub, Vice-Chair: Andrei Blinov. 45 members in February 2024.
6. Robotics and Automation Society Chapter [CH08521], Chair: Vladimir Kuts. 32 members in February 2024.

## Industry

Dr. Jüri Joller was elected as Industry Ambassador of the Section in September 2022. Recently we are refreshing our contacts with industry, widening the awareness, improving the dissemination and information exchange with the local industrial companies, which will allow them to take the advantages of the opportunities given by the IEEE.

## Activities since the last report

- June 13, 2023: Guest lecture by prof. F. Z. Peng “The Current Research Projects: PV-Battery Hybrid Power Plant and DC Hybrid Circuit Breakers”
- June 17, 2023: Ph.D. Student Training and Mentoring in the field of Power Electronics
- June 14, 2023: The 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2023)
- June 19, 2023: Seminar on Power Electronics Research in the University of Bologna (Inter-Chapter Event)
- August 24, 2023: IEEE-IES Students & Young Professionals’ Night
- September 8, 2023: Annual Seminar of the IEEE Estonia Section
- October 1, 2023: Workshop: Presenting Estonian IEEE Section in Ariel University, Israel.
- October 5, 2023: IEEE IAS Distinguished Lecture “New Era of Fuel Cell Electric Vehicles”
- October 6, 2023: IEEE IAS Mentoring Event for Students and Young Professionals (Seminar on IEEE Transactions operation, with special emphasis on IEEE Transactions on Transportation Electrification)
- October 10, 2023: Estonian-Latvian IEEE Education Society Chapters Joint Meeting
- November 22, 2023: The 4th Estonian DC Innovation Workshop - Enhancing Energy Performance of Buildings
- December 6, 2023: Autumn-23 Student Workshop: Amazing Robotics
- December 3, 2023: Joint Seminar on Linear Systems and Orthogonality
- December 19, 2023: Estonian IEEE IES Seminar “Industrial Electronics Technologies for Niche Applications”
- December 21, 2023: Ex-Com Meeting of the Section and Christmas Dinner (Multi-chapter event)
- January 18, 2024: Workshop on TI C2000 Fundamentals and Code Composer Studio
- February 5, 2024: IEEE IES SYP Webinar “New and Emerging Applications of Dual-Active Bridge (DAB) Converters”
- February 16, 2024: Seminar “The Role of Power Electronics in Energy Transition”.

The list of events is available at <https://iee.ee/events/> and <https://vtools.ieee.org/>.

## Planned activities for Spring-Summer’2024

- The Section will be continuously focusing on boosting the members’ activity, which has been rather moderate. To this end, we are actively experimenting with several kinds of social events to have closer interactions between the members.
- IEEE PELS Lecture on “High-Power Medium-Voltage Solid-State Conversion” by Prof. Drazen Dujic, March 6, 2024
- Infineon STEM Workshop on Next Generation of EV Chargers [IEEE SYP Members], April 11, 2024.
- Technical co-sponsorship of the 14th International Conference on Cyber Conflict (CyCon’2024) which will be held in Tallinn, Estonia from May 28 to 31, 2024.
- Technical co-sponsorship of the 8th International Summer Seminar "Intelligent and Efficient Energy Management for Zero Energy and Resource Efficient Smart Buildings and Districts" from June 14 to 16, 2024.



Attendees of the Annual Seminar of the IEEE Estonia section in Nelijärve Spa and Recreation Centre (September 8, 2023)