

## IEEE Estonia Section

**Dmitri Vinnikov, Chair**

### Section Vitality

The last elections of the IEEE Estonia Section Board have been conducted in December 2022. After the election of a new Secretary in November 2023 the Section Board is represented by the following volunteers:

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

The elections of the new IEEE Estonia Section Board will be carried out in November 2024. The call for candidates for the position of Section Chair was issued on August 1, 2024. It was followed by the open debates between candidates at the Annual Meeting of the Section on September 6, 2024. It was only one candidate showed up to the debates (Andrii Chub) who presented his vision and mission for the section and who was unanimously supported by the section members.

Starting from 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. Later, in 2023 the Section was recognized for the Outstanding Recruitment and Retention Performance. For the last year we have been able to increase the number of members in the section from 223 (September 2023) to 265 (September 2024) thus surpassing the goals for new member recruitment for the year 2024 membership.



### Students

Student Branches of the IEEE Estonia Section:

1. Tallinn University of Technology and Tallinn University – 68 (06.09.2024) student & graduate student members, Chair: Arqum Shahid (elected in 2023).
2. University of Tartu – 20 (06.09.2024) student & graduate student members, Chair: Junming Ke (elected in 2021, new elections will be held in December 2024)
3. Tallinn University of Technology Industrial Electronics Society Student Branch Chapter – 10 (06.09.2024) 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 with 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 – 120 members (06.09.2024), Chair: Aleksei Tepljakov, Vice-Chair: Edivan Carvalho. New elections will be held in December 2024.

### Chapters

1. Education [E25 (CH08649)], 8 members (06.09.2024). Chair: Valery Vodovozov. New elections will be held in December 2024.
2. Computer/Communications/Information Theory [C16/COM19/IT12 (CH08494)], 33 members (06.09.2024). Chair: Tõnu Trump, Vice-Chair: Alar Kuusik. New elections will be held in December 2024.

3. Instrumentation and Measurement/Electron Devices/Engineering in Medicine and Biology [IM09/ED15/EMB18 (CH08500)], 13 members (06.09.2024). Chair: Paul Annus, Vice-Chair: Margus Metshein. New elections will be held in December 2024.
4. Signal Processing/Circuits and Systems/Solid-State Circuits [SP01/CAS04/SSC37 (CH08269)], 16 members (06.09.2024). Chair: Gert Tamberg. New elections will be held in December 2024.
5. Industrial Electronics / Power Electronics / Industry Applications / Power & Energy Joint Societies Chapter [PE31/IA34/PEL35/IE13], 45 members (06.09.2024). Chair: Andrii Chub, Vice-Chair: Andrei Blinov. New elections will be held in December 2024.
6. Robotics and Automation Society Chapter [CH08521], 33 members (06.09.2024). Chair: Vladimir Kuts, Vice-Chair: Karl Kruusamäe.

### Industry

Dr. Jüri Joller was elected as Industry Ambassador of the Section in September 2022. Recently we have been actively refreshing our contacts with industry, organizing industry seminars and workshops, widening awareness, improving the dissemination and information exchange with the local industrial companies, which will allow them to take advantage of the opportunities given by the IEEE. We are also organizing regular technical visits to different Estonian enterprises and startups and running several industrial initiatives, such as “i3DC- Widening the Awareness and Boosting Innovation in Sustainable Electrification Technologies”).



*IEEE Estonia ExCom site visit to the Solarstone factory (June 20, 2024)*

### Activities since the last report

1. March 1, 2024: IEEE Estonia Section YP Initial Meeting for 2024: Estonia Section Affinity Group, YP (Tallinn, Estonia)
2. March 6, 2024: IEEE PELS Lecture on “High-Power Medium-Voltage Solid-State Conversion”: Estonia Section Jt. Chapter, PE31/IA34/PEL35/IE13 (Tallinn, Estonia)
3. March 8, 2024: Workshop: Presenting Estonian IEEE Education Society Chapter: Estonia Section Chapter, E25 (Chennai, Tamil Nadu, India)
4. March 26, 2024: Utilizing LORAN in IoT infrastructure : Baltic Affinity Group, LM (Vilnius, Lithuania)
5. April 2, 2024: IEEE RAS Estonia: Industrial Robotics in Estonian Higher Education: Estonia Section Chapter, RA24 (Online)
6. April 11, 2024: Infineon STEM Workshop on Next Generation of EV Chargers [IEEE SYP Members]: Estonia Section Jt. Chapter, PE31/IA34/PEL35/IE13 (Tallinn, Estonia)
7. April 11, 2024: Infineon Industry Workshop on Next Generation of EV Chargers: Estonia Section Jt. Chapter, PE31/IA34/PEL35/IE13 (Tallinn, Estonia)
8. April 22, 2024: Organizing the May event on Academic Publishing in the age of AI: Estonia Section Affinity Group, YP (Online)
9. April 23, 2024: Amazing Robotics: Estonia Section Chapter, E25 (Tallinn, Estonia)
10. April 25, 2024: TalTech IVAR and IEEE RAS (TalTech) "roll a ball" Spring teamwork event: Estonia Section Chapter, RA24 (Tallinn, Estonia)
11. May 6, 2024: Estonian-Greek IEEE Education Society Chapters Joint Meeting 2024: Estonia Section Chapter, E25 (Kos, Aegean Islands)
12. May 28-31, 2024: Technical co-sponsorship of the conference “16th International Conference on Cyber Conflict: Over the Horizon” (Tallinn, Estonia)
13. June 14, 2024: 8th International Summer Seminar "Industrial Electronics Technologies Enabling Energy Efficiency in Buildings" : Estonia Section Jt. Chapter, PE31/IA34/PEL35/IE13 (Kose vald, Estonia)
14. June 20, 2024: Midsummer's Eve ExCom meeting of the Section and site visit to the Solarstone Factory (Viljandi, Estonia).
15. July 1, 2024: Presenting Education Chapter of Estonian IEEE Section in Valencia, Spain: Estonia Section Chapter, E25 (Valencia, Spain)
16. September 4, 2024: Digital Twins across various research topics: Estonia Section Chapter, RA24 (Tallinn, Estonia)
17. September 6, 2024: Annual Seminar of the IEEE Estonia Section (Viinistu, Estonia)



18. September 25, 2024: IEEE IES Student Branch Chapters Forum among the Baltic Sea Region Countries (Tallinn, Estonia)
19. October 2-4, 2024: Technical co-sponsorship of the conference “19th Biennial Conference on Electronics and Embedded Systems BEC’24” (Tallinn, Estonia)
20. October 2, 2024: Robotics and Computer Engineering students gathering at Researchers' Night: Estonia Section Chapter, RA24 (Tartu, Estonia)
21. October 3, 2024: IEEE Student and Young Professional session in Baltic Electronics Conference (BEC) 2024: University of Tartu (Tallinn, Estonia)
22. October 4, 2024: Special Session “Sustainable Industrial Electronics Systems Development in Ukraine” as a part of the IEEE IES Society initiative "SYP Members in Need" (online)

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

#### Planned activities for October-December’2024

- The Section will be continuously focusing on boosting the members’ activity. To this end, we are actively experimenting with different kinds of social events to have closer interactions between the members.
- The elections of the new IEEE Estonia Section Board will be carried out in November 2024.
- The elections of the Chapter Chairs will be carried out in December 2024.
- IEEE IES Distinguished Lectures series “AI-Enabled Battery Management Systems for E-Mobility” by Prof. Sheldon Williamson (Canada), October 9, 2024.
- Co-organization of the IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTU CON’24), Riga, Latvia, October 10-11, 2024.
- Technical co-sponsorship of the 5<sup>th</sup> Estonian DC Innovation Workshop, November 27, 2024, Tallinn.
- Christmas ExCom meeting of the Section, December 20, 2024.



*Attendees of the Annual Seminar of the IEEE Estonia Section in Viinistu, Estonia (September 6, 2024)*



*Attendees of the 8<sup>th</sup> International Summer Seminar "Industrial Electronics Technologies Enabling Energy Efficiency in Buildings" (June 14, 2024)*