

Finland Section

Mahdi Pourakbari Kasmaei, chair

Section Vitality

- The last Section election took place in Dec. 2023, and the new officers started their roles on January 15, 2024. We do not have a mandatory practice of Vice-Chair becoming the next Section Chair, we carry out elections, and any candidate can be nominated. We had 2 section board meetings in 2023. In our meetings, we discussed our plan to bid for some Region 8 flagship conferences, support local conferences in Finland, arrange joint events at the time of the conferences, and support elevation to Senior or Fellow membership.
- We update the news on the IEEE Finland website very actively and also have a LinkedIn page where we communicate with our followers.
- With the National Society Agreement (NSA) made between IEEE Finland and the Finnish Society of Automation (FSA), the joint activities with FSA in activities for 2022-2023 were
 - Side event at International Symposium on Industrial Electronics (ISIE2023)
 - Student & young professional Get together at Automation Days 2023
 - Joint publication with Finnish Society of Automation to Automaatioväylä professional magazine
- We aim at organizing the Best Paper Award for papers published in 2023 (no financial prize, just recognition). The submission will be open during April. We have this topic in our upcoming meeting on March 6th.

Ideas to organize social events for students in cooperation with Automaatioseura (speakers from industry + time to get to know each other)!

Students

No student branches, but the student representative was very active, e.g., in organizing social events in Automaatiopäivät 2023.

Affinity Groups

We have a very active young professionals affinity group in Finland and a young professionals representative in the Finland Section Board. A very nice in-person meeting for young professionals took place in Jyvaskyla, on 20.12.2023.

We exchanged some nice ideas to form the Life Member Affinity Group (LMAG) in Finland Section. We found a potential volunteer and need to organize some more meetings with them to facilitate the process and finally stablish the LMAG in the IEEE Finland Section.

Chapters

- Finland Section Jt. Chapter of Signal Processing/Circuits and Systems (CH08056 Finland Section Jt. Chapter, SP01/CAS04)
 - o IEEE FINLAND SP/CAS COMPETITIONS
 - 9 board meetings
- IEEE Nordic Countries Nanotechnology Council Chapter (CH08067 Finland,Sweden,Denmark,Norway Jt Sec. Chap,NANO42)
 - WORKSHOP: ENVIRONMENTAL AND ECONOMICAL FEASIBILITY TO RECOVER GLASS FIBERS.
 - 48-HOURS HACKATHON ON RESIDUE GLASS FIBER MATERIAL CIRCULAR USE AND ECONOMY
- CH08037 Finland Section Jt. Chapter, AP03/ED15/MTT17
 - o DISTINGUISHED LECTURER IN THE IEEE AP/MTT/ED FINLAND CHAPTER: PROF. JOHN THOMPSON, SCHOOL OF ENGINEERING, THE UNIVERSITY OF EDINBURGH TITLE: ROBUST WIRELESS CHANNEL ESTIMATION USING MACHINE LEARNING
 - o GUEST TALK IN THE IEEE AP/MTT/ED FINLAND CHAPTER: DR. CAMILLA TOSSI, ITALIAN INSTITUTE OF TECHNOLOGY, PISA, ITALY



- o GUEST TALK IN THE IEEE AP/MTT/ED FINLAND CHAPTER: PROF. BHASKARAN MURALIDHARAN, DEPARTMENT OF ELECTRICAL ENGINEERING IIT BOMBAY
- DISTINGUISHED LECTURER (DL) TALK IN IEEE AP/MTT/ED FINLAND CHAPTER: PROF. ALBERT WANG, EDS DL
- IEEE Finland Joint IES&PES Chapter (CH08486 Finland Sect Chap, IE13/PE31/IA34/PEL35)
 - SPEECH ON "OPTIMIZATION AND LEARNING ENABLED SUSTAINABLE AND RESILIENT ENERGY SYSTEMS" BY PROF. JIE ZHANG
 - o SUMMER COURSE: PARAMETER IDENTIFICATION AND SELF-COMMISSIONING TECHNIQUES FOR AC MOTOR DRIVES (3 ECTS)
 - SPEECH ON "POWER ELECTRONICS, ARTIFICIAL INTELLIGENCE (AI), AND REAL-TIME MODELING SIMULATION AND CONTROL FOR THE TRANSITION TOWARDS A RENEWABLE ENERGY ECONOMY" BY PROF. MARCELO GODOY SIMÕES
 - Rebate: Yes
- IEEE Finland Section Communications and Information Theory Joint Societies Chapter (CH08196 Finland Section Jt. Chapter, COM19/IT12)
 - o WAVE-CONTROLLED METASURFACE-BASED RECONFIGURABLE INTELLIGENT SURFACES
- CH08267 Norway/Denmark/Finland/Sweden Jt. Chapter, E25
- CH08746 Finland Section Jt. Chapter, CS23/RA24/SMC28
 - IEEE-ENGINEERING STUDENT'S VISIT
 - \circ SMART MOBILITY AND ROBOTICS SEMINAR FUTURE OF ROBOTICS IN FINLAND SEMINAR 2023

Industry

- We were involved in organizing the ISIE 2023 conference where we had a great industry involvement.
- Joint activities with the Finnish Society of Automation (FSA) at International Symposium on Industrial Electronics (ISIE2023).
- In our upcoming meeting in March, we will discuss about organizing some industry visits, and organizing some conferences (to be informed later).

Diversity, Equity and Inclusion

We agreed to have more WIE activities and include some recognition. Also happily for 2024-2025 we have a female volunteer in our IEEE Finland Section board that helps us to make a good progress.

Activities since the last report

The following types of activities, in our opinion, are the most attractive and we can recommend those to the other sections:

- A licentiate 3-credit courses for our IEEE Section members on "PARAMETER IDENTIFICATION AND SELF-COMMISSIONING TECHNIQUES FOR AC MOTOR DRIVES". We received participants from other countries for this course, and the participants recommended this course.
- Organizing a webinar on "POWER ELECTRONICS, ARTIFICIAL INTELLIGENCE (AI), AND REAL-TIME MODELING SIMULATION AND CONTROL FOR THE TRANSITION TOWARDS A RENEWABLE ENERGY ECONOMY". We had 94 participants for this webinar.
- Organizing webinar on "OPTIMIZATION AND LEARNING ENABLED SUSTAINABLE AND RESILIENT ENERGY SYSTEMS" by an invited professor from USA, Prof. Jie Zhang; we received a very good feedback for this webinar.
- Organization of side events with large conferences where local IEEE members and conference participants can exchange information and establish new connections; this happened in ISIE 2023, in which our IES chapter was heavily involved, and the section also helped in technical activities.



- Cooperation with other local professional societies.
- Organizing young professional activity; the meeting was hybrid and we had 30 participants.

Planned activities

- Organizing a Side Event for students and young professionals: Getting to know industry; the event is together with the Finnish Society of Automation (FSA); takes place on April.
- Call for new round of the **Best IEEE Finland Section Student Paper Award** for papers published during 2023.
- Together with the Finnish Society of Automation (FSA), we are planning a student and young professionals side event for ISIE2023 and the Finnish Automation days.
- Organizing keynote speeches.
- Organizing a summer course (August 19th to August 23rd)

How Region 8 can be of help to your Section, members, and activities

That would be nice to learn more about organizing student branches in Finland, and how to motivate the students to be a part of such activities, and also to be involved in region 8 humanitarian, diversity, etc., activities.

Any other issues of interest