

# **Sweden Section**

# Qinghua Wang and Andrei Gurtov

### Section Vitality

We held the Annual General Meeting (AGM) in a hybrid format (online and in Linköping University) in March 2025. The signed minutes and other reports are available on our web site <u>https://r8.ieee.org/sweden/archive/</u>.

The Nomination committee has conducted a vote for the new section board on Autumn 2024. The election results are updated by the nomination committee during AGM. 186 members voted. The new executive committee, effective after the AGM, including Qinghua Wang as the Chair, Ambra Sannino as the Vice Chair, Gurjot Gaba as the Secretary and Christian Bohm as the Treasurer have been appointed. During the AGM, the other board members are also appointed. Andrei Gurtov will sit on the board as the Past Chair to smooth the transition.

A remarkable value-add during AGM 2025 is a technical lecture "Title: Towards optimal pilot spacing in multi-antenna systems operating over aging channels" by IEEE Fellow Prof. Gabor Fodor, a renowned expert in the field of wireless systems. He is a Master Researcher at Ericsson Research and adjunct faculty member at KTH.

The IEEE Sweden Section board was active in 2024 and held online meetings at every month (except the summer break). The IEEE Sweden Section also holds an annual workshop for all Chapter chairs affiliated with the section. The board meetings and chapter chair workshop have been reported as events in IEEE VTool. One special event was the section's Strategic Workshop held in Stockholm, October 2024, where the executive committee, past chairs, and invited chapter chairs meet physically to discuss the vision of Sweden Section.

The IEEE Sweden Section has regained its lost members during the pandemic, and the total number of members have reached 1985 (January 2025). To promote IEEE Sweden, the board and affinity chairs will be now wearing "IEEE Sweden" logo shirts on special occasions.

#### Students

The section has three active student branches (KTH, Chalmers and Linköping). Linköping student branch is particularly active in 2024 by organizing a visit to Toyota, a keynote talk on cybersecurity, a visit to a supercomputer center, a MATLAB workshop. The current chair, however, wished to step down, and a new election is thus needed.

## **Affinity Groups**

Young Professional and Women in Engineering Affinity Groups are present in the Section. WiE was quite active and the Chair Amleset and another member will attend the Int. Leadership Conference in San Francisco in May 2025. The Section has now formed a new LM AG. This process was led by the past Section Chair and past R8 Director Margaretha Eriksson and the current Section Treasurer Christian Bohm.

### Chapters

The Section has 16 registered chapters. The largest and most active societies are: COMSOC/VT, Computer, Signal

Processing, Power and Energy, Microwave theory, Antennas and Propagation (over 100 members each).

The Annual Chapter Chairs workshop (held October) is a forum for all chapters, affinity group, student branch chairs to discuss events that could be done in collaboration. The meeting has been tradition since 2016 and is a reason for successful

operation of the chapters. During the meeting, chapters are also briefed about the budget process for the coming years,

making sure the budget is submitted, approved at the right time and the section treasurer has all the input needed to submit

to the IEEE HQ. The presentations from the 2025 workshop can be found at https://r8.ieee.org/sweden/archive/.

PS chapter regularly publishes quarter news. The PS chapter annual report 2024 made the IEEE Photonics Society invite the PS chapter to publish on their IEEE-PS Newsroom. Here is a link to the publication <u>Advancing Photonics Through</u> <u>Collaboration: Best Practices from the IEEE Photonics Sweden Chapter - The IEEE Photonics Society</u>

IEEE RS joint Sweden and Norway chapter have received financial support to organize the 1<sup>st</sup> RAMS-Europe 2025 conference and the 2025 ICPHM conference in the summer 2025. More info are at <u>http://rams-europe.org</u> and <u>https://phmconf.org/</u>

During 2024, two new chapters have been formed under the Sweden Section: GRS (Geoscience and Remote Sensing Society) and IA/IE (Industrial Electronics Society).

# Industry

We have appointed a new Industry Officer during 2024. Two industry talks were given during 2024.

### **Diversity, Equity and Inclusion**

WiE is a very active affinity group in the Section. Several Chapters (SPS, PES/PELS, YP, WiE, Reliability) are led by female members.

Dr. Ming Xiao, Membership Officer keeps the statistics regarding gender balance, inclusion, etc.

### Activities since the last report



The Annual General Meeting is held as a hybrid event at Linköping University at the end of March 2025. The financial report from 2024 has been presented. The budget for 2025 has been approved. And a new board as a result of the 2024 election has been appointed.

The Annual Chapter Chairs Workshop has been held successfully as a hybrid event online and at Linköping University in October 2024. There were in total 17 presentations including three from the section board, and 14 from different chapter chairs. The workshop served as a communication platform between the section board and the chapters.

The Sweden Section Strategic Workshop has been held successfully as a physical meeting in Stockholm in October 2024. The Past Chair Samarth Deo organized this meeting. The executive committee and invited chapter chairs participated in this meeting. This was the first physical-only meeting after the pandemic.



Figure 1: A picture from the Section Strategic Workshop, Stockholm, October 2024.

The Sweden Section, in together with the affiliated Computer Society Chapter, co-sponsored the 2024 9th International Conference on Fog and Mobile Edge Computing (FMEC) which was held in Malmö in September 2024. <u>FMEC 2024</u>

The Sweden PS Chapter announced the IEEE Best PHD Thesis Award in Optics/Photonics to Max Karlsson for his thesis "Dynamics in Blue Emitting Metal Halide Perovskites for Light Emitting Diodes". At the Optics and Photonics in Sweden (OPS-2024) conference, held on November 6-7 in Gothenburg, the Sweden Chapter presented its Best Poster Award to Pantea Dara for her research on "Directional Marangoni flow induced by laser heating of amorphous silicon nanodisks".

The Sweden PS Chapter sponsored an OptoPub event in Kista/Stockholm in December 2024, in collaboration with PhotonicSweden. This successful gathering brought together over 30 professionals for a day of dynamic networking and insightful presentations. Key highlights included a talk by Prof. Scott A. Holmstrom from the University of Tulsa on Photonic Integrated Circuits for Sensing, Dr. Elena Vasileva from Ansys, who discussed Innovations in Optics and Photonics Solutions, and Dr. Lennart BM Svensson from PhotonicSweden, who provided an update on PhotonHub Europe and its New Funding Rates.

At the end of 2024, in support of IEEE Women in Photonics the Sweden PS Chapter celebrated the Nobel Prize in Physics, held at RISE in Kista.



## **Planned** activities

The Sweden Section is planning to activate a new student branch in Lund University.

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

Provide early registration and visa support 6 months before R8 events, travel insurance and travel compensation. Sponsor an additional delegate to R8 meeting for training.

Provide a tool to recruit more volunteers to the Section board. Facilitate buying IEEE merchandise.