

## **Poland Section**

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## Section Vitality

Date of the last Section elections:

- 20.09.2023–10.10.2023 Poland Section (PS) Chair Election
- 01.12.2023–20.12.2023 Vice-Chair, Treasurer, and Secretary Election

#### Date of the next elections:

In the 2025 second half. Based on the IEEE MGA Operations Manual Geographic Unit Elections process - elections shall be underway no later than 1 August and be completed no later than 15 December.

The past Chair of the IEEE PS, Prof. Adam Dabrowski, is responsible for the election process.

#### The practice of Vice-Chair becoming the next Section Chair:

The current Section Chair is the Past Vice-Chair by-election.

Section ExCom meetings (list and summaries):

- 16.02.2024 election of the Coordinators; presentations related to the activities in 2023;
- 25.09.2024 presentations summarizing the activities in 2024;
- 28.02.2025 discussion on the cooperation with the industry; plans for the 2025.

Activities carried out to retain and recruit members and the results obtained:

Membership drive initiatives were conducted during multiple Student/YP/WIE/SIGHT events, resulting in a peak of over 200 Student/Graduate Student Members in 2024 and the beginning of 2025.

PS is starting to boost and refresh cooperation with local scientific and technical organizations. The support for local universities has also increased. Some examples:

- Polskie Towarzystwo Informatyczne (PTI <u>https://pti.org.pl/eng/</u>) PS will have common activities the LoI is preparing.
- Association of Polish Electrical Engineers (SEP <u>https://sep.com.pl/en/</u>) strongly cooperate and support each other. A considerable effort is being made to promote electrical engineering, electronics, and applied IT heritage by the SEP Central Historical Commission and the Polish National Committee for the Promotion of the Person and Work of Michał Doliwo-Dobrowolski (Chaired by dr Piotr Szymczak).
- Polskie Towarzystwo Elektrotechniki Teoretycznej i Stosowanej (PTETiS <u>https://ptetis.pl/</u>) common conferences.
- The Polish Committee for Standardization (PKN, <u>https://www.pkn.pl/en</u> ) starting cooperation.
- Warsaw University of Technology (<u>https://eng.pw.edu.pl/</u>) stronger cooperation for student support (joint conferences and workshops, etc).
- University of Zielona Góra (<u>https://uz.zgora.pl/en/</u>) IEEE Milestone preparation.
- West Pomeranian University of Technology (<u>https://www.zut.edu.pl/EN/university.html</u>) IEEE Milestone preparation.

PS also cooperates with the IEEE German and Switzerland sections in IEEE Milestone preparation process.

All the above actions promote and increase the visibility of the IEEE in Europe.

#### Students

The Section has witnessed an increase of student engagement, marked by a significant growth in Student and Graduate Student memberships in 2024, surpassing 200 students at its peak. Although this number has since decreased to around 160 due to membership deactivation in February, our student network remains strong.

Currently, there are 10 Student Branches in Poland, most of which are highly active (Table 1), contributing to a vibrant academic and professional environment. Notably, collaboration between Student Branches and Young Professionals has been exceptionally close, leading to multiple Student-to-YP transition events throughout the year. Additionally, technical activities among students continue to thrive, with eight technical events organised since October, including a visit from an IEEE EMBS Distinguished Lecturer.



Student meetings since October 2024:

- Southern Poland Student IEEE Day 2024 social event
- IEEE Krakow Students-YP elevation 2024 meeting
- Intro to IEEE Membership & Volunteering meeting
- 8 technical events and seminars, including an EMBS Distinguished Lecturer visit

No.	OU Code	Student Branch Name	Status
1	STB10631	AGH University of Science and Technology	active
2	STB11380	Cracow University of Technology	active
3	STB10018	Lublin University of Technology	probation
4	STB31701	Opole University of Technology	active
5	STB80051	Poznan University of Technology	active
6	STB11384	Silesian University of Technology	active
7	STB10116	University of Applied Sciences in Elblag	inactive, for dissolution
8	STB11530	University of Warsaw	active
9	STB50501	Warsaw University of Technology	probation
10	STB17141	West Pomeranian University of Technology Szczecin	active

#### Table 1. Student Branches

#### **Affinity Groups**

The IEEE Poland Section has three Affinity Groups (Young Professionals, Women in Engineering, and Life Members), one Student Branch Affinity Group, and a newly established Sectional SIGHT, all remaining active (Table 2).

The IEEE Special Interest Group on Humanitarian Technology (SIGHT) is an Institute of Electrical and Electronics Engineers (IEEE) program instituted by the IEEE Humanitarian Activities Committee (HAC) (<u>https://sight.ieee.org/about-ieee-sight/</u>).

Young Professionals collaborate closely with Student Branches and technical Chapters, supporting student-to-YP transition and early career development. Women in Engineering are focused on organising the IEEE International Leadership Summit Gliwice 2025, while S&YP with Life Members are contributing to preparing the IEEE EUROCON 2025 in Gdynia.

The Poland Section SIGHT, founded in December 2024, is dedicated to raising awareness about electrifying two-wheeled vehicles. Their project, *Energy Saving Electric Motor Drive*, is supported by the IEEE Tech4Good/IEEE Region 8 grant of 5000 USD, reinforcing the commitment to sustainable technology solutions (<u>https://ieeeht.org/</u>).



List of activities since October 2024:

- IEEE Day 2024 by WIE Poland social event (WIE)
- IEEE Krakow Students-YP elevation 2024 meeting (YP)
- Poland Section Activities: IEEE EUROCON 2025 in Gdynia and new IEEE milestone ceremonies info-meeting (LM)
- Do we live in a world of illusions? seminar (LM)
- The role of young people in the current changing social, economic and political environment global mentoring event (LM)
- Understand people with disabilities seminar (WIE)

No.	OU Code	Affinity Group Name	
1	WE80033	Poland Section Affinity Group, WIE	
2	YP80033	Poland Section Affinity Group, YP	
3	LM80033	Poland Section Affinity Group, LM	
4	SIGHT208	Poland Section SIGHT	
5	SBA11384 Silesian University of Technology SB AG, WIE		

Table 2. Affinity Groups and Student Bran	nch Affinity Groups
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## Chapters

The IEEE Poland Section has 20 Chapters, 4 Joint Chapters, and 4 Student Branch Chapters (Table 3), all actively supporting its members' technical and professional development. Of the 24 professional chapters, 19 submitted their reports on time and will receive rebates.

They have organised numerous events throughout the year, including seminars, Distinguished Lecturer visits, and technical workshops. They also play a key role in organising and co-sponsoring local and international conferences. Many Chapters are also strengthening their collaborations with industry partners and student communities, cultivating knowledge exchange and innovation across various engineering disciplines.

Examples of technical activities since October 2024:

- Over 10 international conferences were organised by the Chapters in 2024.
- Work in progress on cooperation agreements between the IEEE Poland Section (C16) and the Polish Information Processing Society.
- Novel Machine Learning Approach Based on Real Time Multi-Modal Data to Improve Cognitive Workload Classification in Human-Computer Interaction (Poland Section Chapter, SMC28)
- EMC MARATHON: Workshops on the use of Vector Network Analysers and Digital Oscilloscopes in EMC applications (Poland Section Chapter, EMC27)
- Additive Manufacturing: Emerging Opportunities for Microwave Components DML Talk by Prof. Cristiano Tomassoni (Poland Section Joint Chapter, AP03/AES10/MTT17)
- Analysis of the impact of preprocessing in the classification of retina lesions on B-scans of different OCT devices (Poland Section Chapter, CAS04)
- Learning with high-probability guarantees for multi-agent systems/Kernel-based identification of nonlinear systems with cyclostationary input signals (Poland Section Chapter, C16 Gdansk)
- Nobel prizes for AI work Seminar (Poland Section Chapter, C16 Gdansk)



- Comprehensive solution for sensors, micro, and nanosystems Seminar (Poland Section Chapter, IM09)
- Photonic Seminar organized at the Warsaw University in January 2025 (Poland Section Chapter, PHO36).
- Computational Science Meets Medicine; Success Stories from Neuro and Vascular Surgery Lecture organized in March 2025 (Poland Section Chapter, EMB18).

No.	OU Code	Chapter Name	
1	CH08800	Poland Section Chapter, DEI32	
2	CH08836	Poland Section Chapter, EMB18	
3	CH08339	Poland Section Chapter, PHO36	
4	CH08816	Poland Section Chapter, SMC28	
5	CH08756	Poland Section Chapter, SSC37	
6	CH08788	Poland Section Chapter, TEM14	
7	CH08109	Poland Section Chapter, C16	
8	CH08440	Poland Section Chapter, C16 Gdansk	
9	CH08078	Poland Section Chapter, CAS04	
10	CH08420	Poland Section Chapter, CIS11	
11	CH08353	Poland Section Chapter, COM19	
12	CH08297	Poland Section Chapter, CS23	
13	CH08184	Poland Section Chapter, ED15	
14	CH08443	Poland Section Chapter, EMC27	
15	CH08927	Poland Section Chapter, GRS29	
16	CH08383	Poland Section Chapter, IM09	
17	CH08338	Poland Section Chapter, MAG33	
18	CH08320	Poland Section Chapter, RA24	
19	CH08384	Poland Section Chapter, SP01	
20	CH08880	Poland Section Chapter, VT06	
21	CH10146	Poland Section Joint Chapter, IE13/PEL35	
22	CH08514	Poland Section Joint Chapter, ED15/EP21	
23	CH08092	Poland Section Joint Chapter, PE31/IA34	
24	CH08070	Poland Section Joint Chapter, AP03/AES10/MTT17	

## Table 3. Chapters and Student Branch Chapters



25	SBC11384	Silesian University of Technology SB, EMB18
26	SBC11530	University of Warsaw SB, PHO36
27	SBC50501	Warsaw University of Technology SB, IE13
28	SBC17141A	West Pomeranian University of Technology Szczecin SB, PE31

## Industry

Strengthening collaboration with industry remains one of the key objectives of the IEEE Poland Section's current activities.

Between 03.02.2025 and 08.02.2025, the Industry Relations Coordinator surveyed potential cooperation between the Polish Industry and the IEEE Poland Section. Several sets of questions were sent out to the Chairs of the Chapters and the Affinity Groups of the IEEE Poland Section, and the results that were obtained were analysed and discussed during the ExCom meeting on 28.02.2025. Due to the recognised potential of strengthening the cooperation, a decision has been made to schedule a meeting between the representatives of the Polish Industry and the IEEE PS. The tentative date for the meeting was set to 16.05.2025.

One of the ongoing efforts in this area is the organisation of IEEE Region 8's flagship conference, EUROCON 2025, which will take place in Gdynia, Poland. This event presents a valuable opportunity to establish new industry connections and reinforce IEEE's role in bridging academia and industry.

## **Diversity, Equity and Inclusion**

In line with the ongoing efforts to enhance diversity and inclusion within the PS, the following initiatives and developments have been implemented:

- Elections to the Executive Committee for the 2025-2026 term were conducted, forming a fully established board of officers.
- WIE Poland Section AG applied for the 2024 IEEE Computer Society Diversity & Inclusion Grant of 15000 USD; the application has been highly rated but not funded.
- A new IEEE Women in Engineering Student Branch Affinity Group was created in June 2024, and the first events took place, including a webinar on accessibility.
- IEEE WIE International Leadership Summit 2025 will be held in Gliwice on 1st-3rd June.
- IEEE Women in Engineering AG established a collaboration with Perspektywy Educational Foundation (<u>https://perspektywy.org/fundacja/</u>). They will participate as a Community Partner in the Women in Tech Summit (4th-5th June, Warsaw <u>https://womenintechsummit.pl/</u>), the most significant European event in this category (10000 participants).

Both female and student representation rates are on the rise, reflecting the continued efforts of the Student Branches and Affinity Groups to support inclusivity across different career stages and demographics. The Section also exhibits technical diversity through its numerous Chapters representing various disciplines. Table 4 provides an overview of the diversity metrics within the PS.



Table 4. Diversity metrics

7 1		
Female	84	8.95%
Male	765	81.47%
nknown	90	9.58%
A + GSM	155	16.51%
er Grades	784	83.49%
	24	-
	nknown I + GSM	nknown 90   I + GSM 155   er Grades 784

### Activities since the last report

The most essential activities for the PS are:

- 1. The IEEE Milestone "Long Distance Electric Power Transmission Using Three-Phase Alternating Current, 1891" preparation process.
- 2. IEEE EUROCON 2025 in Gdynia preparation process.
- 3. Strengthening of cooperation with industry and economic surroundings.

All of the above points are important and time-consuming. Based on the observation, the IEEE should start to promote its brand to European leaders as a source of advisory board members for the government (by analogy, as it is in the USA).

PS during the ExCom meeting on 28 February 2025 announced the IEEE PS Awards:

- 1. IEEE PS Service Award for prof . Ryszard Romaniuk
- 2. IEEE PS Early-Stage Career Service Award for Paweł Marek Grochocki

#### **Planned activities**

June 2025 will be a landmark month for the IEEE Poland Section, as it will host three significant events in succession: the IEEE Women in Engineering International Leadership Summit Gliwice 2025 (WIE ILS Gliwice), the IEEE EUROCON 2025 conference, and the IEEE Milestone celebration.

## 1-3 June, 2025 – Gliwice – **IEEE WIE International Leadership Summit Gliwice 2025** (www.facebook.com/ils.gliwice.2025, www.wie-ils-gliwice.pl)

IEEE Women in Engineering International Leadership Summits (ILS) are part of IEEE WIE's portfolio of global initiatives that focus on empowerment, entrepreneurship, leadership, and emerging/disruptive technologies.

# Confirmed guests of the ILS in Gliwice: IEEE President-Elect Mary Ellen Randall, IEEE R8 Director Mike Hinchey, IEEE R8 OpCom Members, IEEE MGA WIE Chair, IEEE R8 WIE Chair, IEEE R8 WIE Past-Chair.

The IEEE Region 8 OpCom Meeting will be held simultaneously with the IEEE WIE ILS in Gliwice.4-6 June, 2025 – Gdynia – **IEEE EUROCON 2025** (<u>https://2025.ieee-eurocon.org/</u>)

EUROCON is one of the flagship conferences of the IEEE Region 8 – the largest region of IEEE, including Europe, Africa, and the Middle East. IEEE EUROCON 2025 is the 21st edition of the EUROCON Conferences. A second Poland Section ExCom meeting is scheduled for the conference.

# 8-10 June 2025 – Szczecin – IEEE Milestone celebrations with the IEEE representatives (IEEE President Kathleen Kramer and IEEE R8 Director Mike Hinchey)



## 10-11 June 2025 – Zielona Góra – IEEE Milestone celebrations with the IEEE representatives (IEEE President Kathleen Kramer, IEEE R8 Director Mike Hinchey)

The IEEE Milestone celebrations are co-organized by IEEE Germany and Poland Sections in 3 cities to commemorate the achievements of Okas von Miller and Michael Dolivo-Dobrowolsky:

### "Long Distance Electric Power Transmission Using Three-Phase Alternating Current, 1891

The world's first long-distance (175km), high voltage (15kV), highly efficient (75%) electric power transmission of 300 horsepower using three-phase alternating current (AC) was demonstrated at the 1891 International Electrotechnical Exhibition by Oskar von Miller, German-Bavarian consultant; Michael Dolivo-Dobrowolsky, Allgemeine Elektricitäts-Gesellschaft (AEG), Germany; and Charles Eugene Lancelot Brown, Maschinenfabrik Oerlikon (MFO), Switzerland. This Lauffen-to-Frankfurt demonstration directly influenced the eventual worldwide dominance of electric power transmission using three-phase AC systems.

(https://ieeemilestones.ethw.org/Milestone-Proposal:Long\_distance\_transmission\_of\_electrical\_power\_using\_threephase\_alternating\_current, 1891-1912)

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

Challenges the Section is facing:

Expected Membership drop because of raised membership cost from 102USD to 188USD due to ineligibility for emembership (2026 membership year - starting in August 2025).

A new geopolitical situation – difficulties with contact between scientists from selected countries.

What support is required from Region 8:

Funding opportunities for Students/YP/WIE/SIGHT.

Professional training initiatives like R8 Counselors/Advisors Training, R8 SSR/SSAC Training, and high-quality training for Membership Development Coordinators/Chapters Coordinators

#### Any other issues of interest

More cooperation between IEEE Geographic Units and IEEE Technical Units, e.g. systematic meetings in Regions similar to IEEE Series Meetings or TAB Meetings in North America?