

## Section Name

Italy Section

## Reporting Officer Names

Gianfranco Chicco (Chair), Daniela Proto (Secretary)

## Section Vitality

*Please provide information about the date of last Section elections, date of next elections, and do you have the practice of Vice-Chair becoming the next Section Chair. Section ExCom meetings (list them and provide brief summary if appropriate). List the activities carried out to retain and recruit members and the results obtained.*

The last elections of the Section officers, for the term 2023-2024, took place by December 20<sup>th</sup>, 2022. The previous Vice-Chair was nominated by ballot and was then elected as the new Section Chair. The new Vice-Chair and Secretary elected were already active in the ExCom. The former Treasurer was re-elected and is continuing her previous activity.

The Section ExCom meetings are usually held three times per year, plus additional meetings when needed. The first meeting is generally held at the beginning of each year, focused on the discussion of the activity for the current year. The second meeting is held in Spring, where the activities of the past year are reported, the activities of the current year are proposed and voted, and the final budget of the previous year is presented and discussed. Then, according to the Section bylaws, a full Section ballot is carried out to approve/reject the budget approved by the ExCom. In the ExCom held on January 26<sup>th</sup>, 2023, the new Section Officers and Committees were approved. In the ExCom held on May 3<sup>rd</sup>, 2023, the initial budget for the year 2023 was approved, and the provisional budget for the year 2022 was accepted. In the same ExCom meeting, the Memorandum of Understanding between the Section and the Italian Association of History of Engineering (Associazione Italiana di Storia dell'Ingegneria - AISI) was approved. The meeting of the Section Assembly on June 26<sup>th</sup>, 2023 approved the nomination of the new Auditor. The final budget for the year 2022 is expected to be approved in the next full Section ballot scheduled before the end of July 2023.

In order to recruit members and retain the current ones, the Section: (i) encourages the participation of young professionals and students, (ii) encourages and support of the WiE AG initiatives, particularly in the STEM studies area, (iii) encourages and supports the Senior Member and Fellow elevation, (iv) recognizes the commitment of volunteers by awarding them, (v) encourages the active participation of industry members and life members, (vi) organizes stands dedicated to IEEE membership during the sponsored conferences, and (vii) organizes tutorials, webinars and contests during conferences open also to students that are not IEEE members.

On 17 July 2023, the Section counts 5805 members, with a small fluctuation with respect to the 5825 members counted at the end of 2022. Small fluctuations appear in all the categories, with a slight increase in the total number of Student Members and Graduate Student Members (1576, from 1488 at the end of 2022). An IEEE Membership and Volunteering event organized by IEEE R8 MD was held during IEEE EUROCON 2023.

The main result recently obtained is the 2023 MGA Outstanding Large Section Award 2023 received by the Section. The Section is proud of this award, which will incentivize all Section members to provide continuing improvements in all activities.

## Students

*List of Student Branches (SB) in your Section, the newly formed or dissolved SBs, if any since the last meeting reporting. List the student meetings held and Section activities addressed to Students and Young Professionals.*

The number of SBs did not change recently. The Section has 30 SBs and SBAGs, most of them active. None has been dissolved yet.

While the number of branches stayed, the number of members rose. In particular, the Naples Student Branch nearly doubled its members in the last year.

The SB of Politecnico di Torino collaborated with the IEEE Italy Section and IEEE Region 8 in the organization of the IEEE EUROCON 2023 Conference (6-8 July 2023), in particular for what concerns the student competition, beside the logistic support.

The Section is considering 5 candidates for the Exemplary Student Branch Award 2023,

## Affinity Groups

*List of Affinity Groups (YP, LM, WiE, SIGHT, etc.), list of SB AGs, newly formed or dissolved AGs/SB AGs, if any since the last meeting reporting. List the activities intended to support affinity groups.*

The Section has a YP, a LM and a WiE AG and three SBAGs: SB WiE AG Politecnico di Milano, SB WiE AG University of Pavia, and SB WiE AG Politecnico di Torino.

The AGs are very active. The Section usually organizes events with the AGs, oriented to their members as well as to the whole Section.

The new Board of elected YP Officers started the activity in 2023. The YP Board has been involved in spreading YP activities in co-sponsored conferences and by organizing scientific sessions and competitions for young researchers. The YP Chair and Vice-Chair have participated to the selections for best YP contributions for a competition at IEEE EUROCON 2023. Following the impressive improvement of 56% in the number of members reached in 2022, thanks to the new initiatives, the YP Board plan to further improve the total number of members at the end of 2023.

The WiE AG is still working to constantly update the WIE.steer2STEM.chart, a commitment chart: "Steering girls to STEM": an open document, annually updated, which describes the shared objectives and the targeted actions to carry out to make the careers in STEM (Science, Technology, Engineering and Mathematics) subjects more attractive for young women, reaching the version 3.0 this year. Each year, the WiE AG organizes in March the event IRIS (gender equality in research and innovation at school), to promote the study of the STEM subjects starting from child age. Several activities in IEEE workshop have been organized going from specific panel to thematic technical session or contribution in female award assignment in this first semester. In particular, in the EUROCON 2023 IEEE Region 8 flagship conference, the WIE AG has been in charge of the organization of 4 different activities:

- 1) Competition "Best Female-leading Student Projects" for secondary school students.
- 2) Poster session GENEVA2023: 5th edition of GENEVA (Gender equality in research and innovation), poster session aimed at illustrating the best practices in managing "gender equality" within funded research and innovation projects.
- 3) IEEE WIE AG Italy Section annual meeting 2023 and release of the version 3.0 WIE.steer2STEM.chart "Steering girls to STEM" commitment chart.
- 4) The Panel: A new era for funding: the role of gender equality and diversity, with the analysis of the effect in introducing GEP in the research, university and industrial context.

Regarding SIGHT, on April 29, 2023, at the SIGHT Day Celebration by IEEE R8 HuAC, the Humanitarians Activity Committee Coordinator of the Section announced plans to establish a section-level SIGTH group, receiving warm appreciation from Mr. Abdullateef Aliyu and Theodoros Panagiotis Chatzinikolaou, R8 HAC Chairs. Also, Student Branches of two Italian Universities were contacted to organize the North-South SB network for the 2030 agenda projects.

An awareness campaign has been also started to promote the registration of IEEE Italy Section members to SIGHT, indicating how to proceed also in the last two ExCom meetings. To 17 July 2023, there are 71 subscriptions to SIGHT indicated in OU Analytics.

## Chapters

*List of Chapters and SB Chapters in your Section, the newly formed or dissolved Chapters, if any since the last meeting reporting. Indicate how many have reported on time and received rebate. Highlight some of the activities.*

The total number of Chapters and Joint Chapters is stable at 41. By June 2022 there has been no newly formed Chapter or dissolved Chapter. The Section is continuing the actions to promote similar periods for the elections of the Chapters with officers in charge from more than 2 years.

The Chapters of the Section continue to be very active in organizing meetings and conferences, often collaborating with their mother Societies, and in supporting the Section initiatives. The conference IEEE EUROCON 2023 (Torino, Italy, 6-8 July 2023) was supported by over 30 Chapters of the Section with their technical co-sponsorship.

The Section has still six SBCs: SB Chapter – SMC (University of Cagliari), SB Chapter – Computer Society (Politecnico di Milano), SB Chapter – EMB (Politecnico di Milano), SB Chapter – MTT (University of Pavia), SB Chapter – AP (University of Pavia), and SB Chapter – IA (University of Rome La Sapienza).

## Industry and Entrepreneurship

*List the activities carried out to foster relations with Industry and the results obtained.*

The industry is significantly involved in the Section activities in different directions. They contribute to the activities of the Section by funding research grants, supporting conferences, and co-writing milestone proposals. The multinational corporation ABB is continuing to provide funding to a best MS thesis and a best PhD award on yearly basis, while the Section is funding an equal additional number of awards. The number of grants provided each year has been recently doubled upon request by ABB.

The flagship conference RTSI (the Forum on Research and Technologies for Society and Industry) was founded by the Section with the aim of bridging the gap between academy and industry and strengthening the relations between the Italy Section and the industry. Since 2022, the RTSI Forum became a Region 8 Portfolio conference. By following the agreement

taken in the previous years the RTSI 2022 has been organized in France, for the first time out of Italian borders, with the support of the Italy Section and Region 8, technical co-sponsors. The 2024 edition of RTSI will be held in Milan (Italy).

Wide space is provided to industrial partners in the conferences and events organized by the Section. In the conference IEEE EUROCON 2022 there have been many events with the involvement of the industry, starting from the presence of 2 Plenary Speakers during the Opening Ceremony (Orio Bellezza, CEO of ST Microelectronics, “Trends in Power Electronics with focus on wide-bandgap materials technology and applications”, and Franco Pierro, Head of Project Management and Construction Italy at e-distribuzione, “Enabling the energy transition”).

Various other initiatives related to entrepreneurship and start-ups with participation of industrial representatives were scheduled for IEEE EUROCON 2023, including the Workshop “Modernization of the Electricity Industry” organized by IEEE R8 Action for Industry, Workshop “Let ideas to grow: tech transfer from research labs to successful realities” organized with IEEE R8, the “Best Entrepreneurship Idea demo&poster Competition” organized with IEEE R8, and the Workshop “The Electric Renaissance: the Italian Path” organized with Ordine degli Ingegneri Torino (official professional entity in Italy) and AEIT.

### Diversity, Equity and Inclusion

*Highlight any diversity metrics (gender, age, religion, geographical, employment, etc.), new initiatives, best practices and progress around diversity and inclusion happening in your Section. Link to IEEE DEI statement [<link>](#).*

The Section officers elected at the end of 2022 (Chair, Vice-Chair, Secretary and Treasurer) are gender-balanced.

In 2022, the Section has appointed a Diversity, Equity and Inclusion representative. This role was started in January 2023, with the start of the mandate of the coordinator Dajana Cassioli. As past chair of WiE AG Italy, Dajana continued to follow the activities of WiE, with the task of organizing WiE activities in the conferences IEEE EUROCON 2023 and IEEE HISTELCON 2023 together with other WiE members. Dajana will participate in the "Girls in STEM" event on 10 November 2023 at the University of Parma for the opening speech to present her experience as DEI coordinator of IEEE Section Italy and past chair of WiE Italy.

The planned activities are the definition of a commission to support DEI activities and the development of a dedicated web page similarly to the other activities of the section.

### Activities since the last report

*Highlight some of the activities in your Section, with special attention to the things that work well, and things that don't, so that your acquired know-how can be used by other Sections.*

The IEEE Italy Section has financially sponsored/co-sponsored conferences and workshops held in the first months of 2023:

- IEEE EUROCON 2023 (Torino, Italy, 6-8 July 2023, <https://2023.ieee-eurocon.org>), a flagship conference of the R8, which included technical sessions, keynote and invited speeches, tutorials, workshops, entrepreneurship events, and competitions -- also based on demos -- for students and YPs.
- IEEE AIM 2023 - Advances in Magnetics - Moena (Italy) - January 15-18, 2023 - <https://www.aim2023.com/>
- IEEE MeAVeAS 2023 - 2023 IEEE International Workshop on Measurements and Applications in Veterinary and Animal Sciences - Napoli (Italy) - April 28-28, 2023 - <https://meaveas.org/>
- IEEE MetroLivEnv 2023 - 2023 IEEE International Workshop on Metrology for Living Environment - Milano (Italy) - May 29-31, 2023 - <https://metrolivenv.org/>
- IEEE MetroInd4.0&IoT 2023 - 2023 IEEE International Workshop on Metrology for Industry 4.0 & IoT - Brescia (Italy) - June 6-8, 2023 - <https://www.metroind40iot.org/>
- IEEE MetroAutomotive 2023 - 2023 IEEE International Workshop on Metrology for Automotive - Modena (Italy) - June 28-30, 2023 - <https://metroautomotive.org/>

and has technically co-sponsored other conferences, such as:

- IEEE MetroAeroSpace 2023 - 2023 IEEE International Workshop on Metrology for AeroSpace, held on June 19-21, 2023 in Milano (Italy).
- 7th AEIT International Conference of Electrical and Electronic Technologies for Automotive (AEIT AUTOMOTIVE 2023), held on June 17-19, 2023 in Modena, Italy.

Also, the Section has co-organized the Summer School of Information Engineering (SSIE) (Ph.D. School) held in Bressanone/Brixen, Italy, on 10-14 July 2023. The Ph.D. School on Information and Communication Technologies has been delivered yearly since 1991, reaching its 32nd edition in 2023.

### Planned activities

*Highlight some of the future activities and initiatives in your Section.*

In 2023, the Section is organizing IEEE HISTELCON 2023, a flagship Conference of the R8, which will be held in Florence, Italy, 7-9 September 2023 (<https://2023.ieee-histelcon.org>).

Other planned activities are related to the organization of:

- IEEE RTSI 2024 (Research and Technologies for Society and Industry), to be held on September 18-20, 2024, in Milano, Italy.
- IEEE International Humanitarian Technologies Conference (IHTC 2024), Bari, Italy.

Also, the Section is technical co-sponsor of several conferences, among which:

- 2023 International Workshop on Biomedical Applications, Technologies and Sensors (BATS) to be held on September 28-29, 2023, in Catanzaro, Italy.
- 2023 IEEE International Workshop on Metrology for the Sea to be held on October 04-06, 2023, in the Valletta Campus, Malta (the Section is also a financial co-sponsor).
- 2023 IEEE International Workshop on Technologies for Defense and Security (TechDefense) to be held on November 23-24, 2023, in Rome, Italy.

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

*List any challenges your Section is facing and what support is required from the Region 8. Please, also, give us your suggestions for agenda items that you want to be discussed during the R8 Committee meeting.*

A discussion was launched in the recent ExCom meetings of the Section about the possibility of having more than 2 years between successive elections of the Chapter Officers. This discussion is proposed at the R8 level, with the aim to allow the Sections that may be interested to change the mandate of the Chapter Officers from 2 to 4 years. On the other hand, no change is proposed to the duration of the mandate of the Section Officers.

### **Any other issues of interest**

None.

## IEEE Eurocon 2023

The 20th Edition of EUROCON was held at Politecnico di Torino, Italy, from Thursday, July 6<sup>th</sup>, to Saturday, July 8<sup>th</sup>, 2023. After the COVID pandemics, this year conference was held in presence, aiming to make people meet again after years of remote meetings.

EUROCON is a major international forum for the exchange of ideas, theory basics, design methodologies, techniques and experimental results between academia, research institutions and practitioners from industry. It covers all fields of electrical and electronic engineering, ICT and computer science covered by IEEE Societies and it is one of the flagship conferences of the IEEE Region 8, the largest region of IEEE including Europe, Africa and Middle East.

The main technical sessions of EUROCON 2023 were organized with the IEEE Region 8 (R8) and the support of over 30 Chapters and Affinity Groups of the IEEE Italy Section. The set of topics covered was broad and included topics ranging from transportation electrification to healthcare, power components and applications, computer science and magnetism, and many others. Contributions from Authors coming from 46 countries of 5 continents (about 18% authors outside R8) have been accepted and presented. The papers presented will be proposed for publication on IEEE Xplore.

Besides 27 regular technical sessions and 2 special sessions, the EUROCON program was highly varied, including an opening plenary session with 3 keynote speakers, 6 invited speakers, 2 invited sessions, 8 workshops, and 3 tutorials. In particular, the workshops covered many aspects of key interest for R8, including industry, women in engineering, humanitarian, membership, entrepreneurship, standards and soft skills, enhancing the networking opportunities and involvement of different realities, from startups to large industries, as needed in a R8 flagship conference.

The program this year was further enriched by various special events with competitions aimed at covering the whole range from young students to senior professionals (WiE competition for secondary schools, B.S. and M.S. Student Competition, R8 Student Paper Contest, Best student video & poster competition, Best PhD and Young Professional demo competition, Best entrepreneurship demo & poster competition), and several panels.

Over 300 delegates attended the event during the days, having fruitful time with prospective colleagues by presenting their latest on-going research achievements, sharing ideas, thoughts, and visions with the goal of shaping a better future for the benefit of humanity. The local organization at Politecnico di Torino was carried out by some staff members together with 10 volunteers of the local Student Branch and HKN Branch.

During the Opening Ceremony, three plenary speakers provided an updated view on the ongoing evolution in the respective fields: Orio Bellezza (CEO of ST Microelectronics, "Trends in Power Electronics with focus on wide-bandgap materials technology and applications"), Marcelo Masera (former Head of Unit at the Directorate Energy, Transportation and Climate of the Joint Research Centre of the European Commission, "Energy transition: electrification, digitalization, market, resilience"), and Franco Pierro (Head of Project Management and Construction Italy at e-distribuzione, "Enabling the energy transition").

Some truly emotional moments were the delivery of the 2022 Honorary Award of the IEEE Italy Section during the Opening Ceremony to Pasquale Pistorio, "The rebuilder of European Semiconductor industry, able to combine profit and environmental/social sustainability", and the speech of Hugo Wyss of the Switzerland Section, who remembered the activity of Roger P. Wellinger and the launch of the first edition of IEEE Eurocon in Lausanne in 1971.

In addition to the stimulating program of the conference, Torino, a multifaceted city rich in historic splendor, former Italian Capital, was a great venue to see, touch, feel and taste the Italian culture. The Conference dinner, held in the beautiful location of the Museo dell'Automobile in Torino after a short visit to the museum, was an excellent example of mixing history, technology and food.

The IEEE EUROCON 2023 General Co-Chairs

Gianfranco Chicco

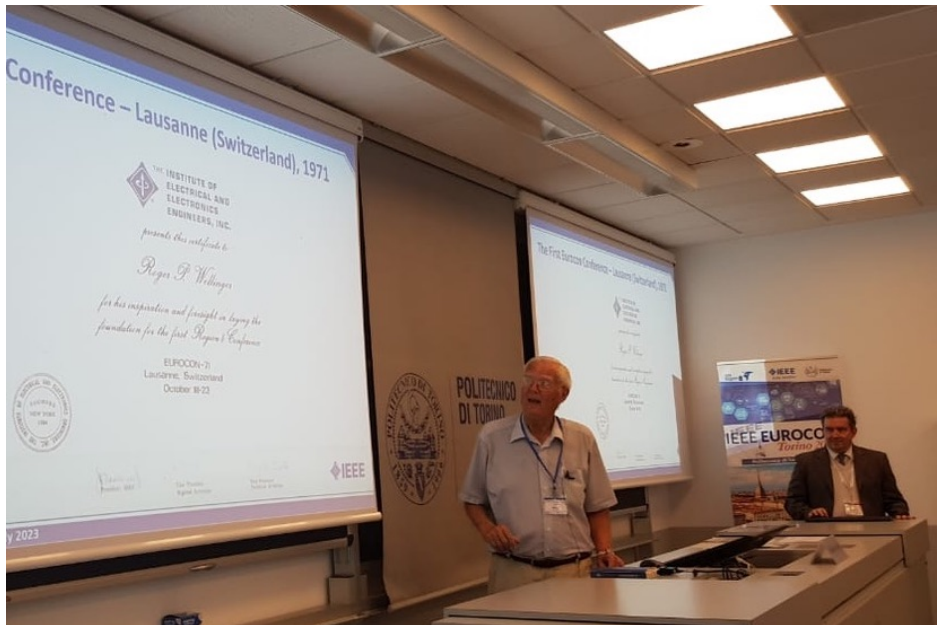
Sergio Rapuano



*Plenary speakers: Orio Bellezza, Marcelo Masera, Franco Pierro*



IEEE Italy Section 2022 Honorary Award – Pasquale Pistorio



Hugo Wyss remembering the first Eurocon Conference (1971)



Conference opening: Gianfranco Chicco (General Co-Chair), Vincenzo Piuri (IEEE R8 Director and Honorary Chair), Tiziana Tambosso (IEEE R8 Conference Coordination Committee Chair) and Sergio Rapuano (General Co-Chair)



*B.S. and M.S. Student competition award – Best idea*



*B.S. and M.S. Student competition award – Best presentation*



*The General Co-Chair and a group of volunteers*



*Participants in the WiE event on 8 July 2023*



*Registration on 6 July 2023*



*Conference closure*



*Conference dinner*

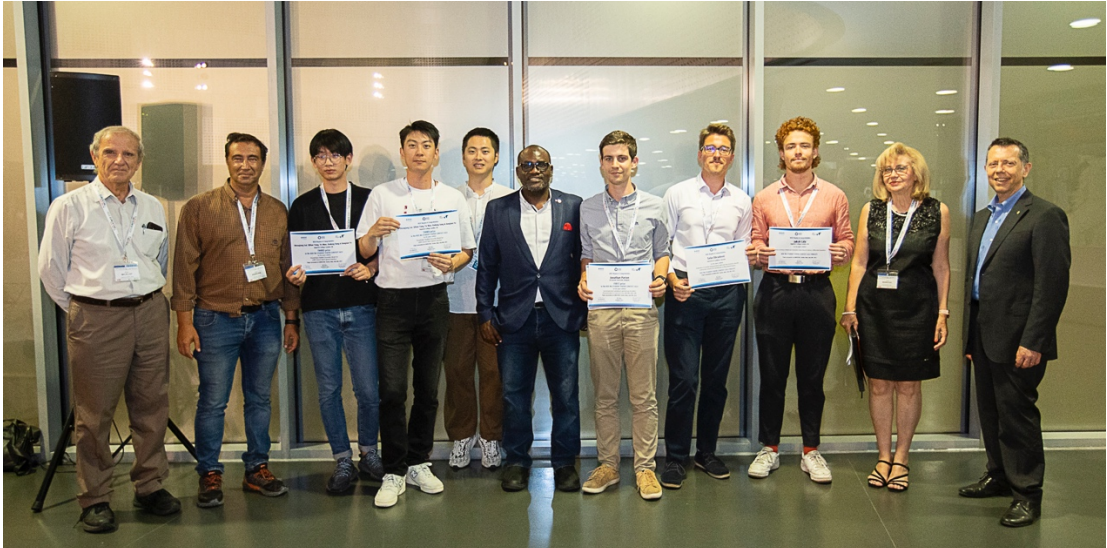




*Conference dinner*



*Conference dinner*



*R8 Student Paper Contest: the R8 Director, the jury and the finalists*



*R8 Student Paper Contest Award: the R8 Director, the jury and the winner*