

Section Name Italy Section (R80011)

# **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 in the first part of each year, focused on the discussion of the activity for the current year. The second meeting is held to report the activities of the past year, to propose (and vote if needed) the activities of the current year and discuss the final budget of the previous year. Then, according to the Section bylaws, a full Section ballot is carried out to approve/reject the budget approved by the ExCom.

The meeting of the Section Assembly held on June 26<sup>th</sup>, 2023, approved the nomination of the new Auditor. The final budget for the year 2022 was approved in the full Section ballot held on July 28<sup>th</sup>, 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 31 December 2023, the Section counts 6324 members, with **7% increase** with respect to the 5825 members counted at the end of 2022. Small fluctuations appear in all the categories, with a remarkable 13.8% increase in the total number of Student Members and Graduate Student Members (1718, from 1488 at the end of 2022).

The main result recently obtained is the **2023 MGA Outstanding Large Section Award** received by the Section. The Section is proud of this award, which incentivizes 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.

In 2023 the **new** Student Branch Chapter ComSoc linked to the SB STB00151 of the University of Bologna has been approved. The Section passed from 30 to 31 SBs and SBAGs, most of them active.

In addition, the **new** Local Group "IEEE Torino Icarus-RA Group" was approved on 14 January 2024 with the ID LGR80011IR, with the mission "To contribute in the advancement of an increasingly sustainable aviation sector by forming a community of Students, Professionals and Industries." Associated Entities SBA06971 - Politecnico di Torino and WIE STB06971.

No SB has been dissolved.

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. For this collaboration, the SB of Politecnico di Torino coordinated the activity also with the Eta Kappa Nu Mu Nu Chapter of Politecnico di Torino.

The SB of the University of Florence collaborated with the IEEE Italy Section and IEEE Region 8 in the organization of the IEEE HISTELCON 2023 Conference (7-9 September 2023).

The SB of the University of Brescia hosted the European Cansat Competition (12-13 October 2023), with participants from different countries. The winner was a Portuguese team, followed by a Romanian team and by a team from Tunisia.

The Section has given the Exemplary Student Branch Award 2023, by evaluating the application of 5 candidate SBs. The Award was announced during the online meeting for the celebration of the IEEE Day 2023 (the winner has been the SB of Politecnico di Torino).

# **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. In addition, the Section is promoting activities referring to SIGHT.

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

#### Young Professionals (YP) AG:

The new Board of elected YP Officers started the activity in 2023. Following the previous increase in the number of members in 2022, the YP Board has further increased the number of members at the end of 2023, with 13% increase (passing from 2478 at the end of 2022 to 2807 at the end of 2023). In November 2023, the board of YP Italy Section organized a scientific session at the 2023 IEEE International Workshop on Technologies for Defense and Security, specifically devoted to young researchers and entitled "Young Researchers Activities in Technologies for Defense and Security". Moreover, in the framework of the same workshop, the board awarded a prize for young researchers entitled "Best Paper presented by a Young Researcher". The session hosted 10 high-quality scientific works. The YP board has also been involved in the sponsorship of a prize for young researchers in the framework of the 2023 IEEE International Workshop on Metrology for the Sea. To further improve the number of YP members and to advertise events, a LinkedIn page has been created and maintained by the board of the officers, in which technical details and photos related to social and scientific activities of the affinity group have been constantly published and shared.

#### Women in Engineering (WiE) AG:

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 year.

In particular, in April 2023 the WIE AG organized a panel entitled "Research experiences on the path towards gender equality in Animal and Veterinary Science" at MeAVeAS 2023 (IEEE International Workshop on Measurements and Applications in Veterinary and Animal Sciences), where two speakers were invited as female role models. They discussed about the impact of their research activities and the presence of female professors/researchers/students in their sectors and universities.

In June 2023 the panel entitled "Sharing Idea with Experienced and Early-stage Researchers" was organized during the workshop "2023 IEEE International Workshop on Metrology for AeroSpace" to share ideas and suggestions in the world of Aeronautics and Space with young people. Here two experienced speakers were invited as female role models to discuss about their professional experiences with three young researchers.

In July 2023, in the EUROCON 2023 IEEE Region 8 flagship conference, the WIE AG has been in charge of the organization of 4 different activities, as detailed in the previous report. In the same month, WIE AG taken part of the jury for the "PinKamP! Le ragazze contano!", a national project devoted to Italian secondary school female students, and a talk about career perspective of women in STEM was given during the final event.

In October 2023 a talk in the "Girls in STEM "Così fan tutte? Riflessioni e dialoghi sul divario di genere" was given supporting the interest of young women to STEM careers.

Moreover, in November 2023 the advantage of the presence of women in the industry sector was explored during the meeting "Immaginando le aziende del futuro: dai buoni propositi alle azioni concrete" organized by a group of Italian industries.

Finally, it has to be noted that the IEEE Workshops MetroInd4.0IoT 2023 (June), MetroSea 2023 (October), MetroAutomotive 2023 (June), and MetroXraine 2023 (October) saw the active participation of the WIE AG, that sponsored the "Best paper presented by a woman" award in the first one and organized specific panel in the last two. *SIGHT*:

Regarding SIGHT, the Humanitarians Activity Committee Coordinator of the Section announced plans to establish a sectionlevel SIGHT group. For this purpose, he participated in the IEEE Region 8 Humanitarian Activities Congress on 25 November 2023 and followed six courses (Introduction to Sustainable Development, Multidisciplinary Perspectives in Humanitarian and Sustainable Development, Activities Community Engagement in Sustainable Development Projects, Humanitarian Technology for Sustainable Development, Sustainable Project Design, and Project Assessment, Monitoring, and Evaluation) obtaining the corresponding certifications. The process of preparation of the petition to form the SIGHT Group is in progress and is targeted at sending the petition during 2024, possibly presenting the creation of the SIGHT Group during RTSI 2024 in Milan and IHTC 2024 in Bari.

An awareness campaign was started in 2023 and is in progress to promote the registration of IEEE Italy Section members to SIGHT. To 17 January 2024, there are 128 subscriptions to SIGHT indicated in OU Analytics, with 45% increase in 6 months with respect to the 71 subscriptions found on 17 July 2023 and indicated in the previous report.



# 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 Chapter has been recently **increased to 42**. This happened because the previous VT/COM joint Chapter has been split into the separate chapters Vehicular Technology Chapter (VT07, geo-code CH08523) and Communications Chapter (COM19, geo-code CH08274), based on the relatively high number of members of the Chapters and of the emergent timely topics referring to these Chapters. The split has been obtained after a petition started in fall 2023. The official communication of the acceptance of the split has been received on January 12<sup>th</sup>, 2024, by the Petition Processing Team, IEEE Member Operations, MGA, IEEE Geographic Unit Formation Policies and Petitions.

Another key aspect is the strong action done by the Section to revitalize the activity of some Chapters that have been less productive in the last years. The action has led to new elections also in Chapters in which the Chair was in place for a long time (over two years) and/or very few or no activity was reported in the last years. As a result of the new elections, the number of officers in place from more than 2 years passed from 17 to 7. In particular, newly elected officers are now active at the Chapters AES10 (Aerospace and Electronic Systems), BIO46 (Biometrics Council), CIS11 (Computational Intelligence), CT08 (Consumer Electronics), DEI32 (Dielectric and Electrical Insulation), E25 (Education), EMB18 (Engineering in Medicine and Biology), EMC27 (Electromagnetic Compatibility), NANO42 (Nanotechnology Council), and TEM14 (Technology Management). The Section is continuing the actions to promote elections of the Chapters with officers in charge from more than 2 years.

In 2023, the Section passed from six to seven 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), and the new Student Branch Chapter ComSoc (University of Bologna).

#### **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 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. The 2024 edition of RTSI will be held in Milan (Italy), financially co-sponsored by the Italy Section and Region 8.

Wide space is provided to industrial partners in the conferences and events organized by the Section, as well as various other initiatives related to entrepreneurship and start-ups with participation of industrial representatives. Examples are three work-shops and a competition organized at IEEE EUROCON 2023 with R8, the professional organization Ordine degli Ingegneri Torino 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 <i>statement statement state* 

The Section officers elected at the end of 2022 (Chair, Vice-Chair, Secretary and Treasurer) for the years 2023-2024 are gender-balanced.

The IEEE Italy section appointed in 2023 the DEI coordinator, who served for the past six years as the chair of the IEEE WiE AG Italy Section. Through the WiE Italy, the Italy Section continued its mission of promoting women in STEM careers by means of consolidated practices to raise awareness about the gender gap, to empower girls since very young age and to highlight the role of women into research projects. To this aim, the DEI coordinator and WiE Italy organised four events in EUROCON 2023 to promote the girls in STEM (https://2023.ieee-eurocon.org/call-for-best-female-leading-student-projects/), to raise awareness about the mandatory gender equality plan in Europe (WiE Panel: A new era for funding: the role of gender equality and diversity https://2023.ieee-eurocon.org/workshops/), to create a community of WiE (IEEE WiE AG Italy Section annual meeting 2023) and to show the women participation in EU or Italy funded research projects (https://2023.ieee-eurocon.org/poster-sessions/). These events gathered a significant participation of international attendants, more than 50 people per each event.



Also the DEI coordinator gave an invited speech at the event GIRLS IN STEM (https://www.unipr.it/node/103469) at the University of Parma, Italy, directed to more than two hundreds high-school students to raise awareness about women empowerment and participation in STEM careers.

# 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 second semester of 2023:

- IEEE EUROCON 2023 20th International Conference on Smart Technologies (6-8 July 2023, Torino, Italy) a flagship conference of the R8, which included technical sessions, keynote and invited speeches, tutorials, work-shops, entrepreneurship events, and competitions -- also based on demos -- for students and YPs.
- 2023 8th IEEE History of Electrotechnology Conference (HISTELCON) (7-9-September 2023, Florence, Italy) a flagship conference series of the R8 held every two years and dedicated to the history of electrical engineering, electronics, computing and their impact on social and economic development.
- 2023 IEEE International Workshop on Sport, Technology and Research (STAR) (14-16-September 2023, Cavalese Trento, Italy)
- 2023 IEEE International Workshop on Metrology for the Sea; Learning to Measure Sea Health Parameters (MetroSea) (4- 6 October 2023, The Valletta Campus, La Valletta, Malta)
- 2023 IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRAINE) (25- 27 October 2023, Milano, Italy)
- 2023 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor) (6-8 Novmber 2023, Pisa, Italy)
- 2023 IEEE International Workshop on Technologies for Defense and Security (TechDefense) (20- 22 November 2023, Rome, Italy)

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

- 2023 International Workshop on Biomedical Applications, Technologies and Sensors (BATS) (28-29 September 2023, Catanzaro, Italy)
- 2023 4th International Symposium on the Internet of Sounds (26-27 October 2023, Pisa, Italy).
- 2023 International Conference on Embedded Wireless Systems and Networks (EWSN) (25-27 September 2023, Rende, 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 32<sup>nd</sup> edition in 2023.

# Planned activities

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

In 2024, the Section is organizing two conferences with R8:

- IEEE RTSI 2024 (the 8th Forum on Research and Technologies for Society and Industry Innovation), a flagship Conference of the R8, which will be held in Milan, Italy, 18-20 September 2024 (https://2023.ieee-histelcon.org).
- IHTC 2024 (the IEEE International Humanitarian Technologies Conference), Bari, Italy.

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

- 2024 IEEE International Workshop on Metrology for Living Environment (MetroLivEnv), 12-14 June 2024
- 2024 IEEE Workshop on Complexity in Engineering (COMPENG), 22-24 July 2024
- 2024 11th International Workshop on Metrology for AeroSpace (MetroAeroSpace), 3-5 June 2024
- 2024 IEEE International Workshop on Metrology for Industry 4.0 & IoT (MetroInd4.0 & IoT), 29-31 May 2024
- 2024 IEEE International Workshop on Metrology for Automotive (MetroAutomotive) 26-28 June 2024
- 2024 IEEE International Workshop on Sport, Technology and Research (STAR), 8-10 July 2024

and technical co-sponsor of the 2024 14<sup>th</sup> International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP) 17-19 July 2024, and of the 7<sup>th</sup> International Conference on Smart Energy Systems and Technologies

(SEST 2024) 10-12 September 2024.

Further initiatives in progress in 2024 are:



- The change of the registered office of the Section, moving the office to a location where the contacts with other Associations become easier.
- The proposal of a new Milestone.
- The collaboration with the Italian Association of History of Engineering (Associazione Italiana di Storia dell'Ingegneria AISI, https://www.aising.eu/), following the Memorandum of Understanding approved with the Section in the ExCom on May 3rd, 2023, with the participation of a representative of the History Committee of the Section to the AISI meeting.

### 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 ExCom meetings of the Section in 2023 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.