

Italy Section

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List the activities carried out to foster relations with Industry and the results obtained. List the initiatives planned during the next 6 months and their expected outcomes. How can the Region help your Section in your industry-related activities?

The activities that work well in Italy Section to foster Industry Relations are:

- The Industry Relation Committee works to establish direct dialogue with industry firms, to facilitate engagement of industry firms in IEEE initiatives, to increase the number of industrial companies participating in the R8 Programs (Mentor and Internship) and Italy Sections Programs (forum, panels, workshops, job fairs, awards, Student Branch initiatives, special meetings).
- In 2019, the Italy Section assigned the "Honorary Award" to Dr. Roberto Padovani, CTO Qualcomm Technologies, Inc., (retired), and Affiliate Professor Department of Electrical Engineering UCSD (University of California San Diego), "for pioneering innovations in mobile packet-switched Internet access, central to third- and fourth-generation cellular networks" (<https://italy.ieeer8.org/ieeee-italy-section-awards-2019-winners/>). The next 6 February 2020, Dr. Padovani will give a lecture by the University of Pisa. His experience and career in the industry combined with his worldwide recognized contribution to the advance of technology represents an important event aligned with the purposes indicated in the previous paragraph. Further, many students will attend the event, and there will be also the contribution by Dr. Riccardo De Gaudenzi, Head of Radio Frequency Systems and Payload Office by the European Space Agency (ESA).
- In 2019, the Italy Section assigned two "Industrial Distinguished Lecturer Award" to Dr. Bruno Cova of CESI "Key role of power systems in decarbonizing human activities: how to ensure security and reliability" (three lecturers are already scheduled in 2020) and Dr. Antonio Manzalini of TIM "Future Internet: a bridge from Artificial Intelligence to Quantum Intelligence" (five lecturers are already scheduled in 2020) (<https://italy.ieeer8.org/ieeee-italy-section-awards-2019-winners/>). Invitations are advanced by several SBs and Chapters. All this clearly shows the interest and the importance of this activity to enforce the dialogue with industry, especially for our students and YP.
- The Entrepreneurship Committee has the aim of analyzing the Italian Entrepreneurship scenario, promoting events in collaboration with the world of entrepreneurship and developing agreements with startup incubators, accelerators, venture capital, collaborating with R8 and IEEE Entrepreneurship. During RTSI 2019 there was a successful special meeting on Innovative Startups and Entrepreneurs, during which several representatives of the entrepreneurship world could bring their experience and stimulate discussion. This year the Entrepreneurship Committee is involved in the organization of a dedicated event during the IEEE TEMS International Conference on Technology and Entrepreneurship, which is scheduled in Bologna, 19-22 April 2020.
- On June 16-18, 2020, the R8 flagship conference IEEE MELECON will be held in Palermo (<http://melecon2020.org/>). The program foresees several technical and scientific sessions and a series of side events aimed at enforcing and increasing the dialogue among the industry, the academia, and the students.

We will have, in Naples, the sixth edition of the international forum IEEE RTSI (Research and Technology for Society and Industry) (7-10 September 2020) <https://rtsi2020.ieeesezioneitalia.it/>. RTSI is the annual flag event of the Italy Section. As for the past editions, the forum foresees important initiatives devoted to industries such as the 5th Industry Forum, the Forum on Innovative start-up and entrepreneurs, panels with industries. The program is still in progress. As discussed during the last meeting of R8 in Valencia, this year starts a three-year tour of the forum, which will move to France in 2021 and then to UK&Ireland in 2022, to move back to Italy in 2023. R8 could help the Section and the other involved Sections in these activities.

Finally, in 2019 several awards have been assigned to students in conjunction with the industry. In particular, awards for Master and PhD students were promoted by the Section with the contribute of ABB, and with the contribute of TERNA Company and the PES Society (<https://italy.ieeer8.org/ieeee-italy-section-abb-award-2019-new-challenges-for-energy-and-industry/>). The established link and collaboration with ABB and TERNA are very important since, being big companies, they strongly contribute to attract the industry to the IEEE initiatives. ABB already sponsored a series of awards for this 2020. The award ceremony is scheduled during the RTSI 2020.

List the activities addressed to Students and/or Young Professionals and the results obtained. List the initiatives planned during the next 6 months and their expected outcomes. How can the Region help in your students and YP-related activities?

The 5th IEEE Italy Section meeting of Student Branches is scheduled during IEEE RTSI 2020 in Naples (<http://rtsi2020.ieeesezioneitalia.it/>). As per the past editions, the Section supports the students in the organization and involves representatives from the industry. The SB chairs received financial support from the Section to participate in the meeting. Tutorials and plenary events are free, this is done with the aims of attracting student participation.

Through the Student Activities and Educational Committee, coordinated by Prof. Paolo Maresca, the Section is carrying on an important effort aimed at supporting, and therefore increasing, the SBs activities. In particular, we are trying to help them to establish and enforce their network with other SBs as well as with YP AG and Chapters. In particular, we are trying to involve past-chairs of SBs in a working group of the Italy Section YP AG, with the aims of increasing the cross-activities between SBs and the YP AG, giving major continuity to the contribution of our young members, and increasing also the activities of the YP AG.

In collaboration with Industry, the Section grants various awards for MSc degree and for PhD degree students. ABB, Schneider Electric, Terna as well as IEEE PES financially sponsored various awards for 2019. ABB already granted the awards also for 2020, and we hope to receive other contributions from Industry in favor of our IEEE Student Members.

The 1st October 2019, we celebrated the IEEE Day by the "Villa del Grumello" by the Como lake. The event was organized and promoted in conjunction with the IEEE Switzerland Section. SBs representatives participated at the event together with YP representatives from both the Section to establish cross-activities between the SBs of the two Sections. The event was very successful and we have in program to replicate it also for 2020.

To increase the number of students that maintain the IEEE membership after last graduation (usually Master or PhD) a special discount for YP membership should be discussed. Helping Students and YP to increase their networking is one of the main aims of the IEEE Italy Sections. Help Students and YP to enter in contact with industrial companies is important. Support in such directions by R8 would be welcome.

The Section organizes summer schools for PhD students. A summer school of "Information Engineering" is in the program on July 13-17, 2020. The past edition was very successful and this year we hope to involve other Sections. R8 could support the Section in these activities. The Section also technically supports together with its Chapters several summer schools, among which, for 2020, there are the European PhD School Power Electronics, Electrical Machines, Energy Control and Power Systems, which will be held in Gaeta 25-29 May, 2020, and the International School on Internet of Things: Computing, Communications and Systems, which is promoted in collaboration with the University of Calabria, June 29 - July 4.

The Section also supports the organization of Student Hackathon involving several IEEE Italy Section Chapters and SBs to further encourage idea exchange, collaboration and birth of new solutions among the participant students. Already in program it is the Student Hackathon on June 4-5, 2020: <http://www.metroind40iot.org/ieee-student-hackathon>

List the activities carried out to retain and recruit members and the results obtained. List the initiatives planned during the next 6 months and their expected outcomes. How can the Region help in your membership-related activities?

The number of activities by the Student Branches registered an increasing trend. They play a very important role to attract new Student Members. The Section promotes and supports their initiatives as well as their interaction with the Young Professionals.

The active Student Branches have increased their membership, reaching more than 1000 student/graduate student members. This contributed to the formation of novel SB Chapter and AG.

The Section will open the call for four (4) 2020 Exemplary Student Branch Awards.

The annual meeting of students and young professionals will be held during the IEEE RTSI 2020 (7-10 September). During this event, students and YP will be put together to work towards new initiatives, interacting with representatives of the industrial world in an international contest. Several awards for Master and PhD Students are foreseen with the support of Industry and IEEE Societies.

The Section is fully supporting the Membership Development Committee to form a working group in order to better diffuse the knowledge of the possibility offered by joining IEEE. This in order to enforce the number of volunteers dedicated to this key activity.

IEEE is also advertised during the many conferences (at the reception desk and in a special corner dedicated to IEEE, gadgets and other support material of IEEE was distributed). In particular, this is done to all the events organized by the Section.

R8 could help the Section in providing information material or gadgets.

List the activities intended to support chapters, affinity groups, and student branches and the results obtained. List the related initiatives planned during the next 6 months and their expected outcomes. How can the Region help in your support to chapters, affinity groups, and student branches?

Chapter activities are well organized. The Chapters receive financial support from the Section for their technical activities. Currently, we have 40 Chapters.

IEEE Italy Section WIE Affinity Group is still fast increasing its activity. This thanks also thanks to the financial support by the Section and to the cooperation with other Italian Association and Industrial firms having the same purposes. The next WIE meeting will take place in Palermo during the MELECON Conference, June 16-18 2020, and another meeting is scheduled in the next September, during RTSI, September, 7-10, in collaboration with other associations.

YP Affinity Group promotes each year a YP Demo Competition during the RTSI forum and a special event together with the Student Branch. This year, these events will take place during RTSI 2020, September, 7-10. These events are important because they put together Students and YP from different regions of Italy and establish an important network among them. The Section aims at improving such networking among Student Branches and YP, with the support of the Chapters. This is a central activity by the Section and it is increasing during the years. This should help also to increase the number of Student and YP memberships.

LM AG is active and each year has an annual meeting. This year there was a meeting during the IEEE Day, for the first time in conjunction with the LM AG of the Switzerland Section. The meeting between the LM and the Students is considered very important and supported in the initiatives by the Section.

The History activity committee is working very well. This 2020, we will celebrate three Milestones: for the research contribution of Galileo Ferraris together with the Politecnico of Torino; for the research contribution of Giovanni Giorgi together with the University of Roma La Sapienza; for the research contribution relevant to the Gravity Wave Antenna with VIRGO in conjunction with the LIGO projects of the USA.

The Section has a very rich Section Award Program (<https://italy.ieeer8.org/awards/>): The Honorary Award plaque will be given to Roberto Padovani, Qualcomm of the award on February 6, 2020, in Pisa, during a special event organized at the University of Pisa.

The awards granted by the Section for 2019 are confirmed also for 2020. The award ceremony will take place in Naples during RTSI 2020. One honorary award, up to two distinguished service awards, four awards for the best four chapters and two awards for the two Best Student Branches are in the program. Industrial Distinguished Lecture Awards are also in the program for 2020.

Italy Section continues to strengthen its relationship with Italian Technical Associations AEIT, and AICA, with which a MOU was signed. This year we have in program four events in collaboration with AEIT and two events with AICA. Italy Section continues collaboration with other Sections. Among the various activities we cite here: the technical co-sponsorship for the RTSI 2020, and possible support for the Summer School of Bressanone.

Italy Section is currently improving the website in order to further and better inform the section members about the recent news of the Section, the Chapters, Section Committees, Student Branches, Young Professional, other activities, announcements. See Section website for all the information (<https://italy.ieeer8.org/>).

The YP representative member by the ExCo was renewed this year.

Challenges (with a focus on what support is required from Region 8)

Increasing Industry vs. Students and YP networks, monitoring and supporting a bottom-up process: as an example our ex SB Chairs or ex YP AG Coordinators are important resources to enforce the network and also to increase the membership.