

# **United Kingdom and Ireland Section**

# Mona Ghassemian

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 United Kingdom and Ireland section has an Industry Engagement Officer, also a Professional Registration Officer, these two key officers ensure we have continuing collaboration with the industry. Scope: UK and Ireland Section is currently working on three main scopes:

- Our Industry Forum, through which we have researched and responded to the UK industry needs which fell in three areas: re-skilling long-standing employees with digital skills; Input to IEEE Standards for new technologies; and ongoing professional development and the demonstration of competence.
- Industry-led activities: technical and non-technical activities planned or organised by our section's officers including our flagship conference called IEEE British and Irish Conference in Optics and Photonics (BICOP); BlockChain our SIG launch event and webinar series; our support for RTSI 2022 (now 2023): International Forum on Research and Technologies for Society and Industry (IEEE RTSI); our support for Internships towards industrial placement facilitating student placements in UK & Ireland industries.
- Thematic area professional development: helping individuals develop skills that help them to perform as a rounded professional. Key development areas include personal, management, and business skills.

Work in progress: Whilst some of these activities have had to be delayed or put on hold due to the Covid-19 pandemic we continue to develop our offering. A key enabler to increasing industry engineer membership levels in the UK is believed to be the ability to offer Professional Registration as a Chartered Engineer or equivalent through the IEEE. A steering group has been established chaired by Brian Harrington (former Region 8 treasurer), and we have agreed to a path to Associate Membership of the Engineering Council, a key first step in establishing this capability in the next 6 months. Find below the plan of activities:

- Understand relationship between Engineers Ireland and the Engineering Council in respect to IEEE.
- Achieve full understanding of Engineering Council's "Registration Code of Practice".
- Complete exploration with chosen Licensed Institutes.
- Work towards an MOU with each of the Licensed Institutes where agreements have been reached.

Achievements:

- Earlier in 2020, the IEEE Industry Engagement Committee organised a global competition for IEEE Sections to showcase their existing industry engagement activities/initiatives. Our section won the IEEE Industry engagement competition along with the Poland and Toronto Sections: (https://www.ieee-ukandireland.org/uk-and-ireland-joins-poland-and-toronto-sections-as-winners-of-ieee-industrial-engagement-competition/)
- Industrial placements sponsorships were offered by the IEEE EDS chapter to the Section students and their applications were received in August 2020. It has been allocated 6 placement sponsorships so far to Region 8 and there are still 4 to be allocated: (https://www.ieee-ukandireland.org/sponsorships-towards-industrial-placement-offered-by-ieee-eds-society/).

Request from Region 8: Region 8 may be able to assist by providing legal support on the MoU we are preparing to be signed with IET, IEI, etc.

# 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?

Young Professionals:

With a team of 15 volunteers from industry and academia, the group is focused on hosting exciting events that generate interest and motivate members to develop their technical, interpersonal, and leadership skills. Over the past 4 years, the Affinity Group has transformed itself from a fairly low base to a young vibrant group within the section, successfully hosting a number of events are a half-day networking seminar, entrepreneurial bootcamp, or a three-day cross-regional conference attracting some high-profile speakers nationwide along with local as well as overseas attendees.

The YP group has grown to consistently host at least 5-7 events every year in recent times, covering all major cities across the UK and Ireland, attracting anywhere between 30-100 attendees (subject to scale and size of the event) and even managing to self-sustain events by securing external sponsorships (and returning back financial support provided by the Section). The recently initiated 'YP Post Grad STEM Research Symposium' providing STEM researchers with an opportunity to present their research, receive feedback and explore the possibilities of turning research to the enterprise is a demonstration to the group's innovative efforts via a flexible new format event that is now approaching its third edition. Other examples of recent events include the Region 8 West-European Student and Young Professional Congress (WESYP) held in Glasgow across three days last year alongside HISTELCON - Region 8's flagship conference on History and Electrotechnology for cross-collaboration and mutual networking opportunities, the groups very own IEEE YP Young Entrepreneurs Open Day one-day series events held across England, Scotland and Ireland, Digital Healthcare events in Ireland, Pitch Bootcamp and Professional Development and Networking Workshops across the Section.

With a view of extending its visibility and outreach aspirations, the group has embraced the opportunity to collaborate with student and society groups across the Section, Region as well as a number of other external industry and similar professional organisations within the country. Having built an ambitious strategic plan of delivering high-quality value to members, the group is set to see exciting times ahead by further engaging with members and reaching out to all corners of the Section for their professional nourishment. Below are YP's activities for the next few months:



- YP Track at International Conference on Electronics Circuits and Systems, Glasgow, Nov 23-25th 2020 YP has collaborated with CAS to jointly organise a one-day YP track during the 27th edition of the 27th IEEE International Conference on Electronics Circuits and Systems (ICECS) which is the flagship conference for Region 8 IEEE Circuits and Systems. The event is targeted towards postgraduate and young professional researchers with a series of opening talks, followed by technical papers on topics broadly relating to this year's theme, poster competition and a demo session. Accepted papers will be published in IEEE Xplore. The event is now moved to a virtual model due to the current pandemic situation. Further details can be found here https://ieeeukiyp.org/upcoming-events/2020/08/28/International-Conference-on-Communications-Dublin.html
- YP AGM Nov 2020 Annual event for volunteers to meet, review progress, strategize and plan ahead for the following years' YP program. The event will now be held virtually next month.
- Digital Health Conference, Dublin 2020 (now planned for early 2021) AG's own brand building on the inaugural symposium on healthcare with sole YP ownership and responsibility to lead and host a full-day conference capturing with multiple 1-hour talks, and/or 1-hour seminar on reading world digital health initiatives by academic, industrial, and bureaucratic leaders. The event currently delayed due to the current pandemic but is intended to be held early next year. Further details can be found here https://ieeeukiyp.org/upcoming-events/2020/08/28/Digital-Health-Conference.html
- Arduino workshop, Dublin (now planned for early 2021) AG's own event with the sole ownership and responsibility to lead and host a 2-hour introductory session to familiarise participants with Arduino Programming. The event currently delayed due to the current pandemic restrictions but is intended to be held in the second quarter of next year. Further details can be found here: https://ieeeukiyp.org/upcoming-events/2020/08/28/Arduino-Workshop-Dublin.html
- 3rd YP Postgraduate STEM Research Symposium (planned for late 2021) AG's own brand and third edition event with sole YP ownership and responsibility to lead and host this one day PG Symposium for STEM researchers, especially PGRs (Ph.D. and MPhil), to present their research, receive feedback and explore the possibilities of turning research to enterprise. The event planned to be held virtually in late 2021. Further details to be announced in due course.
  Students:

In the area of student activities, the IEEE UK and Ireland section has seen rapid growth of enthusiastic student branches across over 30 universities, holding high quality and diverse events such as the Manchester Energy and Electrical Power System Symposium, Dublin City University Expert Talks, Scotland Renewable Energies Webinar and many more. Our successful revitalisation programme saw an increase of student branch reports from 8 in 2019 to 30 in 2020, with a further five appointments made to previously dormant branches throughout 2020. This resulted in a student branch rebate of £2919 being received to be invested in further student activities in 2021.

The UK and Ireland Section has seen a number of student branches participating in the IEEE Student Awards, including the Larry K. Wilson Award, Regional Exemplary Student Branch Award, Darrel Chong Student Activity Award and the Global IEEE Student Branch Website Contest. Many branches plan to participate virtually in the upcoming IEEEXtreme 24-hour programming competition, the IEEEmadC mobile application development contest and the IEEE Region 8 Student Paper Contest. In addition, the UK and Ireland Section student branches participated in the IEEE Day Virtual Celebrations.

The plan for 2021 is to further increase the appointment of enthusiastic officers to the remaining dormant student branches, with the objective to achieve a 100% reporting rate. Support will be provided to student branches to hold a diverse and an interesting range of virtual events, and collaboration between student branches will be encouraged. Finally, a focus on developing student chapters within the section, with the aim of supporting high-quality technical events and webinars from distinguished lecturers will be undertaken, with funding made available to support this initiative.

The following initiatives pertaining to Student and Young Professionals exist in our Section:

- Hosting, planning and organisation of the WEuSYP Congress 2021.
- Encourage timely reporting to ensure branch rebates and avoid branch closure significant increase in reporting observed.
- Support student branches with event hosting, for example:
  - IEEE ACDS Conference on Advances in Communications, Devices, and Systems held at Imperial College London, UK.
  - IEEE 'Literature Review Made Easy by Using Technical Publications' at Manchester.
  - Manchester Energy and Electrical Power System Symposium (MEEPS).
- Promotion of IEEE UK and Ireland activities at the IEEE CEuSYP Congress.
- Encouragement of the UK and Ireland to enter IEEE Student Branch awards (Exemplary Student Branch, Student Branch Website).
- Preparation of a UK and Ireland entry to the IEEE Larry K Wilson award.

#### Achievements:

The UK and Ireland Section were the 2020 winners of the IEEE Region 8 Outstanding Young Professionals Affinity Group presented at the recent IEEE Region 8 virtual Student and Young Professional Congress. Although this award is specifically for recent activities, the judges noted the Affinity Group's consistent work in providing member value for students and young professionals over a number of years and congratulated them for their efforts and achievements: https://www.ieee-ukandireland.org/award-for-uk-and-ireland-sections-young-professionals/).

Request from Region 8:

Region 8 may be able to assist by supporting programmes that can support employability of recent graduates during pandemic.

# 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 UK and Ireland Section is the largest Section in Region 8 with respect to the number of members (9,510). The Section covers 77 main cities (51 in England, 7 in Scotland, 6 in Wales, 5 in Northern Ireland, and 8 cities in the Republic of Ireland)



plus hundreds of smaller towns, for instance, only Scotland has members across 33 towns/cities. Despite the challenge that implies dealing with a vast cultural and geographical diversity, the Section has managed to keep a healthy proportion of members' respect to its population. Currently, we have a total of 9,510 members divided as follows: England 7,332, Scotland 881, Wales 159, Northern Ireland 105 and Republic of Ireland 1,033.

Section strategy:

The UK and Ireland section has set three priorities in line with membership development in 2020-2021: 1) Getting closer to industry, 2) Initiating niche technical activities based on IEEE Future direction, and 3) Humanitarian activities. More details of the section strategies re included in the section vitality section. The above strategies are set to organise events in response to the membership needs and interests and for better engaging members in the section activities:

### Work in progress:

Taking that there are a lot of members that do not know enough other members to then apply for senior membership and that getting people to senior membership helps with retention, one of the main focuses has been on supporting members to elevate to senior membership, which is done through a due diligence process. This has been successful for several hundred of our members but demands intensive resources. It is supported by a pool of volunteers that either help with the due diligence process and/or the writing of references.

Membership development has mainly been focussing on ensuring members are happy with their membership and so at various points, questionnaires have been sent to our members, to better understand them and give them an opportunity to inform our section ExCom on what they would like to see more of through their membership. Due to the large geographical spread, over the recent years, our section has been starting to do more web-casting of talks that make them accessible to the section as such, rather than those that live "close enough", something we want to do more of, but which has technical requirements. We also ensure that we take up any opportunity to recruit new members, through e.g. IEEE booths at conferences, universities (mainly for student members), and then also talking to employers who e.g. are looking to promote professional membership to their employees in different parts of the section.

Request from Region 8:

As a section, we would like to get support from region 8 to automate the parts of this due diligence process that are currently being executed manually by our volunteers and take up hours of our time. Everyone has been diligent in performing these actions but automating this would free up volunteering time to support more members in this process as well as time to deal with other elements of membership development.

# 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?

#### Section strategy:

The UK and Ireland section has set three priorities in line with membership development in 2020-2021: 1) Getting closer to industry, 2) Initiating niche technical activities based on IEEE Future direction, and 3) Humanitarian activities.

- To address industry members' requirements, the section's industry engagement activities are led by the Industry forum and professional registration chairs. In July 2020, our section received the IEEE industry engagement award as reported in the industry section of this report: https://www.ieee-ukandireland.org/uk-and-ireland-joins-poland-and-toronto-sections-as-winners-of-ieee-industrial-engagement-competition/.
- To address IEEE member's technical interest in emerging technologies, a number of "IEEE Future Direction" technical Special Interest Groups (SIG) groups are targeted to be established in 2020-2021. Blockchain SIG was launched in Feb 2020 after nearly 18 months of organisation. Future network initiative had its launch event planned in Dublin in May 2020 which was postponed in response to the lock-down situation. And more recently the Cybersecurity SIG has been explored to be launched in 2021.
- To work in line with IEEE moto as technology to advance humanity, the section works towards more humanitarian activities. After SIGHT committee approval in August 2019, the first SIGHT project was funded a week after the petition approval on supporting the sensory activity of autistic children. During the COVID-19 lockdown, the SIGHT committee has arranged a series of webinars to engage members in humanitarian centric discussions and being aligned with the IEEE motto of "Technology to advance humanity". Our SIGHT committee also will host the IHTC 2021 at Sussex University during 24-26 September (to be confirmed).

#### Section ExCom:

The section affairs are managed by section OpCom (section chair, secretary, treasurer, past chair and vice-chair), section officers, affinity group chair and chapter chairs: https://www.ieee-ukandireland.org/officers-and-support-functions/\_Officers. Section officers are elected/appointed/reappointed every two years and section website and the vTools gets updates accordingly.

Section ExCom has approved section chairs motion to introduce a new officer role to support section sponsorships during last AGM in April. A new officer is also appointed and approved by section ExCom for the nomination and appointment chair role that was vacant.

#### Work in progress:

Chapters and AGs always are looking for having representation of volunteers and committee members from different regions. For instance, the Education Society chapter is co-chaired by two officers from Wales and England with a recent representative in Scotland. Future Network Initiatives (SIG) is another example being co-chaired by two officers, one in England and the other one in Ireland. Before COVID-19, face-to-face events were held in different geographic locations to cover the entire Section (records of Section ExCom meetings can be found on this link: https://www.ieee-ukandireland.org/section-meetings), which represents a significant challenge. Several Section events that were planned for 2020 were cancelled due to the pandemic



situation, (e.g. AGM Section at BT London, IEEE ICC conference in Dublin, IEEE Future Network Initiative kick-off meeting in Dublin, Cybersecurity conference in Dublin). Instead, a virtual format has been adopted. An advantage is that online events ensure that all members have access to our activities.

Response to the pandemic:

A) Virtual tools:

Since lockdown started, the Section decided to upgrade its Zoom account in order to offer our ExCom an alternative to IEEE WebEx to organise and host meetings and webinars for their chapters' events. The Secretary put in place a procedure for Chapter Chairs to request webinars/meetings to have the events set up and receive the necessary guidance to host them. At the same time, the webinars are advertised through our Sections channels (eNotice, website & Twitter) and the recording is later uploaded on our website to give our members the opportunity to watch the events on demand.

The UK and Ireland section has recognised that delivering a professional-looking webinar or a smoothly conducted meeting goes beyond simply making the technology available. To enable this, it has produced guidance for users, such as:

- Best practice in setting up the webinar
- Pre-webinar checks to ensure that the audio and video are working
- A practice run-through so that the presenter is familiar with the platform
- How to record the event and the permissions required to do so.

The advantage of recorded online events is that an enduring record remains and, in the case of webinars, can be made available on-demand. To take advantage of this new opportunity, the Section has set-up and made available a Vimeo account where the recordings can be uploaded and then linked to the website and social media. To avoid webinar organisers having a significant amount of extra work to do, they simply record the event and make it available on a Google Drive or Dropbox, and then the Webmaster uploads, processes, and makes it available. As experience with webinars increases, the section is further enhancing the production of these webinars by making available front and back slides which are IEEE Section branded so that when a webinar is downloaded from the website, the link with IEEE and the Section remains. By making use of analytics, we can determine which thematic areas produce the most views and downloads which we can use to inform the future direction. In addition, as videos are good website traffic drivers from Google, this is likely to result in more visitor engagement with the Section website.

B) Section meetings:

One-to-one meetings: In June 2020, our Section Chair and Chapter Coordinator Officer carried out a series of one-to-one meetings with Chapter Chairs and AG Chairs (21 meetings in total). Apart from discussing general Chapters / AG matters (especially about how the Chapters are doing during these difficult times), the more recurrent topics were L31 reports and switching to online events. These meetings were initiated to overcome the limited interaction time the online AGM in spring could allow each officer and chapter chair to offer sufficient time share their reports and requirements with the section chair (Mona Ghassemian) and the chapter chair coordinator (Lee Cardington).

The section Chair asked Chapter Chairs how they can support section members and our community. Both technically and from the membership development point of view. All Chapter Chairs received a comprehensive summary after the meeting with all aspects discussed.

On 7th August, the Chapter Chairs Forum (online format) was held to discuss the findings from the one-to-one meetings and also Covid-19 related project opportunities among others subject. This meeting happened after our AGM and Chapter Chairs meeting on 24th April and it is set the Section Autumn meeting for next 13th November.

A summary of the key findings is listed below:

- Technical:
  - Contributing to bids/projects
  - Deliver related technical webinars
  - Publications
- Membership Development:
  - Setting up awards
  - Support student chapter formation (subsidising student society members)
  - Employability (start-ups/accelerators)
- Others:
  - Ethics standards/policies. Covid-19 certificates/ roadmap
  - Pre-webinar checks to ensure that the audio and video are working
- A practice run-through so that the presenter is familiar with the platform
- How to record the event and the permissions required to do so.
- C) Chapters and technical activities:

Our Section currently has 35 of the possible 39 technical societies represented in the UK and Ireland. As mentioned before, the Section has also supported forming technical Special Interest Groups (SIGs). Blockchain SIG was launched in February 2020. Chapter Chairs for Future Networks Initiatives SIG and Cybersecurity SIG have been appointed and their formal launch are being organised for 2021.

Those societies which we do not yet have the UK and Ireland chapter are and look to form are:

- IEEE Nuclear and Plasma Sciences Society (NPS05)
- IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society (UFFC20)
- IEEE Intelligent Transportation Systems Society (ITSS38)
- IEEE Product Safety Engineering Society (PSE43)

Regarding Student Branches, UK and Ireland section currently has 42 registered SB in the UK and Ireland Section. 30 of these are active and have submitted reports in the previous year, with the others in ongoing discussions.

D) Members engagement:

Our Section has one of the most active student activities programmes in the region, with regular technical events, seminars, meet-ups, social activities, and webinar activities held weekly. Recent examples include the IEEE Chartership and Career Path Webinar (Manchester), IEEE Renewable Energies IEEE Webinar (Edinburgh / Strathclyde / Aberdeen), Role of the Smart Grid in Facilitating the Integration of Renewables (Brunel), CISMA Webinar in Optical Sensing Technologies (Strathclyde), and entries to IEEEXtreme, IEEEmadC, the Quarantine Hackathon, and the IEEE Student Awards. Future plans to participate interactively in the IEEE Virtual Student & Young Professional Congress and local area meetings are in planning.

Chapters work closely with student members and have designed programmes that fit the students' requirements and to stay a member when elevated to YP. Examples are:

- Student Awards: ComSoc and Information Theory chapters give the annual student awards. ComSoc prize is £100 each with a certificate to honour student achievement in the subject related to Communications Engineering. The Scheme is very successful and lasted over 10 years and is ongoing and followed up by their appointed University liaison officers. The Information Theory Chapter of the UK and Ireland Section is offering three category student awards ranging from undergraduate to postgraduate. The awards are based upon the evaluation of a draft thesis in an information theory or related discipline.
- Summer schools: IEEE Communication Society Virtual Summer School 2020 (https://www.comsoc.org/education-training/ieeecomsoc-school-series/uk-ireland). This was originally arranged since last year to be organised in Glasgow in August 2020 but in response to the Covid-19 situation all events were switched to virtual mode. IEEE UK School organised in August this year was the first Virtual event IEEE ComSoc has carried out. 180 student/young professionals registered from 43 countries.

### E) Response to the pandemic:

Due to the global pandemic situation we are facing, the section is preparing a survey to gain insights about the impact that COVID-19 is having on our members. We would like to dedicate part of our unused budget to support membership renewals, and our highest priority is to support volunteer members to ensure continuity of Section operations for the benefit of our members generally. Regarding this subject, we would like support from R8 to determine a mechanism that allows us to use a discount code to support renewals and charge them to our section budget directly.

Miscellaneous:

- Chapters, Affinity Groups, Special Interest Groups, Future Directions, Student Branches, and Section's officers benefit from a variety of Section's channels to help communicate and disseminate all their activities and events. These advertisements are complementary to the Chapters' channels such as LinkedIn groups, Twitter, Facebook, newsletters, etc. The UK & Ireland Section manages mainly three channels: eNotice, Website, and Twitter.
- Our Section website is a strong channel to communicate section activities to members. It has vital information for members and continues to be a source for dissemination of member-related and IEEE activities. Our Section News column offers a current list of activities (https://www.ieee-ukandireland.org/section-news/).
- Apart from the Young Professional Award and Industry Engagement award already achieved this year, our section PES Chapter has ranked first in Region 8 as IEEE PES High Performing Chapter Program for the activities carried out in 2019 (https://www.ieee-ukandireland.org/power-and-energy-society-wins-high-performing-award/). US\$880.00 fund has been awarded to the Chapter as an encouragement towards their future work, as well as important recognition for their continued effort in providing better services to the members and public, particularly, young people in universities and workplaces.
- IEEE UK and Ireland Section PES Chapter Forms Women in Power Committee (https://www.ieee-ukandireland.org/ieeeuk-and-ireland-section-pes-chapter-forms-women-in-power-committee/). The main mission of Women in Power (WiP) is to advance the world through the creativity and innovation of diverse leadership, and to foster the careers, connections and talent of women in the power industry to achieve their full potential and become leaders of the future.
- The Section has arranged for the availability of the IEEE Glasgow Tartan, woven in Scotland by Ingles Buchan in 100% pure wool, as a fabric, tie and scarf on favourable financial terms. Discount code is available from https://www.ieee-ukandireland.org/ieee-tartan/. The IEEE Glasgow Tartans were created by the Glasgow Convention Bureau to celebrate Glasgow's long association with IEEE conferences and launched in 2019 during the IEEE Glasgow Milestone/Histelcon event. The IEEE Glasgow tartan, patterned cloth of criss-crossed, horizontal, and vertical bands in multiple colours, has a long history of representing regions, districts and clans with a modern-day representation of belonging for IEEE members. The tartan, woven in Scotland using traditional methods, consists of crisscross bands, using blue to represent knowledge, integrity, expertise, and stability and white to represent light, safety, and purity. The IEEE Glasgow Tartans are gifted by the section to certain members in recognition of their volunteer efforts to benefit our members generally, and particularly those who have supported member development and elevations in recent years this year.

#### Request from Region 8:

Region 8 can assist our section in understanding and meeting any compliance and policy requirements to either providing a discount code or other forms available to support membership renewals for next year.

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

Closer to Industry: Region 8 may be able to assist by providing legal support on the MoU we are preparing to be signed with IET, IEI, etc.

Attract and Support Students and Young Professionals: Region 8 may be able to assist by supporting programmes that can support employability of recent graduates during pandemic.

Membership: As a section, we would like to get support from region 8 to automate the parts of this due diligence process that are currently being executed manually by our volunteers and take up hours of our time. Everyone has been diligent in performing these actions but automating this would free up volunteering time to support more members in this process as well as time to deal with other elements of membership development.

Section Vitality: Region 8 can assist our section in understanding and meeting any compliance and policy requirements to either providing a discount code or other forms available to support membership renewals for next year.



Blockchain Group Launch 24<sup>th</sup> February – Welcome message Section Chair Dr. Mona Ghassemian



Blockchain Group Launch 24th February- London Met University - Group photo





21 one-to-one meetings with Chapter Chairs - June 2020



Chapter Chairs Forum – 7<sup>th</sup> August 2020





Webinars with IEEE Region 8 Director-Elect Candidates, 25 September