IEEE R10 Student, Young Professionals and Women in Engineering Congress 2015 Report

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The IEEE R10 Student, Young Professionals and Women in Engineering (SYWC) congress was held in Sri Lanka, Colombo from 9th - 12th July. The congress was well attended by many R10 sections and provided an excellent platform for learning, networking and sharing ideas. The congress had a number of interesting and very informative tracks, some of which included:

- Rejuvenating Young Professionals (YP)
- YP Brainstorming Session
- Member Benefits
- IEEE SIGHT/Humanitarian Activities
- IEEE Collabratec
- IEEE Xtreme
- IEEE Academic
- IEEE Day

Rejuvenating YPs

The IEEE YP is an international community of young, enthusiastic and dynamic members and volunteers. R10 has 29 YP affinity groups (AG) and a total of 24870 YP members. IEEE has a number of programs to retain YP members and attract new members. These are:

1. New Initiative Program for Active AGs

   This program is to support active R10 YP AGs initiatives/flagship events. A grant of up to USD500 is available.
   How to apply:

   - Fill up the proposal (http://goo.gl/LXrsCe)
   - Last date of submission is July 20th
   - Results announced by July 30th
   - Program to be conducted by Oct 31st

2. YP Vibrancy Project for Dormant AGs

   This project is for promoting formation of new AG's and invoking plans to revive dormant YP AG's. Project also aims to regularise the communication channel and set up a platform for interaction and collaborative programs with YP reps from various IEEE Societies. Members looking to revive dormant AGs can approach the R10 YP coordinator for ideas and funding.

3. Special Program: Entrepreneurship Development Program

   This program aims to set up entrepreneurship working groups among AGs and host an entrepreneurship summit. AGs looking to set up entrepreneurship working groups are encouraged to contact the R10 YP coordinator. Bids for hosting the summit are invited.

4. New Awards Program

   This program recognises substantive projects/achievements of R10 YP AGs/members, their initiatives/ flagship events and institute awards for the best AG and YP volunteers. The awards are:

   - IEEE R10 Best Young Professional Volunteer Awards (awarded to academic, industry practitioner and entrepreneur).
   - IEEE R10 Best Young Professionals Affinity Group Awards

YP Brainstorming Session

The YP brainstorming session aimed to identify issues that hinder YP chairs from effectively performing their duties. Two major issues were identified.

The first issue is that the unavailability of funds and knowledge about fund raising leads to a decline in planned activities by AGs. To address this, a number of funding sources were identified by the panel. These are

- IEEE Student Transition & Elevation Partnership (STEP) funding.

  IEEE STEP was developed to provide a dynamic program for facilitating the transition from Student member to young professional by introducing the opportunities and benefits of IEEE membership during the onset of a STEM career. Funding is available for STEP activities, including the graduation reception for groups holding an event with a minimum of ten recent graduates. Basic funding will be provided at the amount of US$500, and additional funding may be available if additional recent graduates attend beyond 25.

- Funding from sections and regions (for specific activities depending on audience)

- Rebate from HQ (based on membership strength)

- Rebate from sections (based on membership strength)

- Member and Geographic Activities (MGA) YPs awards

- Collaboration with Educational Activities Board (EAB), Technical Activities board (TAB), Women in Engineering (WIE) and Special Interest Group on Humanitarian Technology (SIGHT).

- IEEE New Initiatives Committee

- Industry Collaborations (Google, Microsoft, IBM, Paypal etc)

- MOUs with NGOs and Government

The second issue faced by YP chairs is lack of information and awareness. This is largely due to the manner in which IEEE organises and manages information. For instance, SAMIEEE is outdated, there is no central place where a YP chair can find all YP related information and in many cases a YP chair does not get proper training before being elected to the position. The panel recommended the following steps for improvement:

1. Databases be updated regularly
2. Unification of information such as deadlines for awards, funding sources, nominations, etc.
3. YP liaison in each student branch. This will allow better collaboration between YPs and students and also provide training to a student who would be transitioning into the position of a YP chair.
4. Publication of a YP Chair Handbook which would contain all information needed by a new chair.

Member Benefits

An overview of IEEE member benefits was provided by the Director of IEEE, India Operations, H. Mysore. He stated that he frequently gets complains from R10 members about the lack of R10 member benefits. Insurance seemed to be a popular sought after benefit. As an example, Regions 1-7 offer the following insurance related benefits to its members:

- Life/Health insurance
- Business insurance
- Professional liability insurance
- Auto/home insurance

In 2012, R8-10 began offering international term life insurance in 64 countries. Other benefits currently being offered or planed for future are:

- Technology, student discounts offered by NI, Dell, Lenovo, etc
- Hotel discounts
- Car insurance
- Risk management
- Salary calculation tool
- Internship/job portal

- Keeping technically current
- Continuing education
- Resume builder
- Amazon smiley program
- Local currency payments for membership
- Amazon donates money to IEEE when members buy
- Retail discounts
- Selected product discounts.

Member benefits by country can be found here
http://www.ieee.org/membership_services/membership/benefits/index.html

IEEE is also planning to set up 7 IEEE Labs in India. The aim is provide development/prototyping facilities to members with bright ideas. Keysight, Rhode & Schwartz and NI are some of the key investors.

There is also a plan to start a mentoring program for YPs. IEEE would also validate bright ideas from YPs which could be funded by funding agencies.

IEEE Special Interest Group on Humanitarian Technology (SIGHT)/Humanitarian Activities

The use of technology for the betterment of humanity was a major focus at the congress. The main objective of SIGHT is to promote the mission of IEEE regarding humanitarian technology activities. The objectives of SIGHT can be found at http://www.ieee.org/special_interest_group_on_humanitarian_technology.html.

A number of presentations were made by R10 sections about their SIGHT activities which included solar power and water purification & pumping for rural communities, telemedicine, communication systems and rehabilitation of handicapped people.

IEEE is promoting collaboration between SIGHT teams.

This area is of great interest to me and I am planning on starting a SIGHT group to collaborate with teams in the developing nations.

Please see the attached flyer for a SIGHT student competition. I will be forwarding this to our section's student chair.

IEEE Collabratec

A presentation was given about IEEE Collabratec, IEEE's new networking and collaboration platform. It is for both members and non-members, however, members get some added privileges. Users can create research groups (private communities) or open communities. The main aim is to enable more collaboration between engineers.

You can access IEEE Collabratec at https://ieee-collabratec.ieee.org

IEEE Xtreme

IEEE Xtreme is a 24-hour online coding competition, within which a worldwide community of college and university students enjoy an engaging set of unique programming challenges. Teams of up to three students who are current IEEE student members are eligible to enter. A university may form multiple teams.

The grand prize is a trip to an IEEE conference of your choice, anywhere in the world.

YPs are encouraged to become mentors for these teams.

I will be promoting this event to our student members and will be inviting YPs to volunteer as mentors.

Competition will be held on 24 Oct. 2015 starting at 00:00:00 UTC.

IEEE Day - 6th October 2015

IEEE Day celebrates the first time in history when engineers worldwide gathered to share their technical ideas in 1884. IEEE Day's theme is "Leveraging Technology for a Better Tomorrow".

Members are encouraged to get involved and arrange an event. More information can be found here http://www.ieeeday.org

Last year a US$30 membership discount was offered for new members as part of the IEEE day promotions. There was talk of the same promotion being run this year. We could use this promotion for new membership drive.

Summary

I found the IEEE SYWC'15 to be a very informative congress. It allowed me to network with many very enthusiastic and knowledgeable volunteers and gain many essential skills and knowledge required to be an effective YP chair. I hope to put some of the skills I gained at this congress into action. I highly recommend this congress to future YP chairs.

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Advancing Technology for Humanity

This is to certify that

Sudhir Singh

of

IEEE New Zealand Central Section

took part as a delegate
in the

IEEE Region 10
Student.Young Professionals.Women In Engineering Congress 2015

Held from 9th to 12th July 2015
at Hotel Galadari, Colombo, Sri Lanka

Kavinga Ekanayake
Chair,
IEEE Region 10 Congress 2015

Ruwan Ranaweera
Chair,
IEEE Sri Lanka Section

IEEE SIGHT

Special Interest Group on Humanitarian Technology

IEEE SIGHT

The Special Interest Group on Humanitarian Technology program serves to promote the mission of IEEE regarding humanitarian technology activities.

Purpose:

Building on the IEEE theme of Advancing Technology for Humanity, the Special Interest Group on Humanitarian Technology will promote activities which use appropriate and sustainable technologies to benefit the vulnerable and underserved sections of humanity.

Application:

Interested in forming a SIGHT group?

Complete the petition and submit the application materials to the SIGHT Steering Committee for review via:

IEEE SIGHT Steering Committee
445 Hoes Lane
Piscataway, NJ 08854-4141
USA

E-mail: h.s.brown@ieee.org
Fax: +1 732 463 3657

For More Information:

Go to http://bit.ly/11kykcY

Objectives of SIGHT

- To bring together members / IEEE OUs working in or wishing to work in humanitarian fields and to encourage participation in activities that use humanitarian technologies.
- To increase awareness of IEEE members and engineers of the potential of their work to improve the standard of living of under-privileged populations.
- To engage with NGOs, Civil Society Organizations, UN Organizations, Corporates and other similar bodies in the global engineering community that have common goals to synergize efforts in delivering useful and sustainable technologies in their operations.

Six Easy Steps to Form a SIGHT

- Create a group of six IEEE members. At least three of these signatories must be representatives from two different chapters.
- Affiliate group to an IEEE section or student branch to form a SIGHT Affinity Group (AG).
- Download petition form: http://bit.ly/16RtF0w
- Complete the prescribed form and get approval from section chair.
- Send the Petition to SIGHT Steering Committee.
- Receive approval and startup amount from IEEE HQ.

Seed Grants

To help set IEEE SIGHT group activities in motion, the IEEE Humanitarian Ad Hoc Committee will award initial seed grants of US$250 to each of the first 50 SIGHT groups formed.

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Technology Innovation Competition for IEEE MTT-S

SIGHT (Special Interest Group of Humanitarian Technology) Design Competition

December 10, 2015, 1:00 PM-4:00 PM, Hyderabad, India

Proposals are invitec from students (High schools, colleges, part-time, full-time) and volunteers engaged in developmen: of technology. which utilizes m icrowaves and RF technolog es (MHz through THz) for humanitarian applications. As examples, such humanitarian applications may include but are not limited to affordable healthcare, telemedicine, cuality and safety monitoring of edible materials and technologies and systems used for disaster relief and recovery. Participation is encouraged from groups (maximum five persons on a team) involved in such system or product developments. The design may consist of a broad spectrum of science and technology; however, the focus should be on how to take advantage of microwave technologies from MHz through THz.

The design proposals will be evaluated using the following criteria.

- Impact – the proposa should demons:rate that, if implemented, the idea should be of sign ficant benefit to many people.
- Novelty – the idea should be relatively new with near term application potential.
- Depth – Details of design, quantitative data, ncluding available devices, cost and manufacturability, robustness, cost-effectiveness for potential users should be provided. A superficial overview will not be sufficient.

Those who wish to particioate should submit a design proposal with supporting documents and photographs, as applicable. The last date of submission is Sept 30, 2015. Participants will be notified of acceptance on or before Oct 30, 2015. Participants are encouraged to bring their projects and any live demons:rations to the venue. However, they must identify the power requirements and measurement ecuipmen: needed for the evaluation.

The selection of first, second and third prize will be awarded, based on evaluation criteria outlined above and demonstration/ presentation to a panel of judges on Dec 10, 2015 at IMaRC 2015 in Hyderabad. The first, second and third prize will consist of: One-year membership of IEEE-MTTS, as well as partial suppor: for attending IMS 2016, San Francisco or APMC 2016 & IMaRC 2016, New Delhi.

Dr. Ajay K. Poddar, Synergy Microwave, NJ, USA, Email: akpoddar@synergymwave.com, Cell Phone: +001-(201)-560-3806
Dr. Anarjan Basu, IIT-Delhi, CARE, Email: anarjan_b@yahoo.com, Cell Phone: +91-9958252438

IEEEXTREME PROGRAMMING COMPETITION 9.0

Follow IEEEXtreme

24 October 2015

Starting at 00:00:00 UTC

IEEEXtreme is a 24-hour online coding competition, within which a worldwide community of college and university students enjoy an engaging set of unique programming challenges.

WHO CAN COMPETE?

- Teams of up to three collegiate students who are current IEEE student members
- A local college or university may form multiple teams

WHERE IS THE COMPETITION HELD?

- IEEEXtreme is a virtual event, but teams often organize around their local IEEE Student Branch

WHAT COULD I WIN?

- Fame: Unlimited bragging rights and an item for your resume
- Fortune: The Grand Prize is a trip to the IEEE conference of your choice, anywhere in the world

Not an IEEE member?

If you are not a student member, you can join both IEEE and IEEE Computer Society for US$35 or US$40, depending on location. Current IEEE student members can add IEEE Computer Society Student Membership for just US$8.

www.computer.org/students

IEEE computer society

For more information, visit:
www.ieee.org/xtreme

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IEEE ACADEMIC

IEEE Academic is an international project, with students and professors creating free educational materials together.

- Dozens of teams from all over the world
- Students and professors working together
- Creating free educational multimedia materials
- In their own languages, meeting their own needs
- Inventing new tools for education

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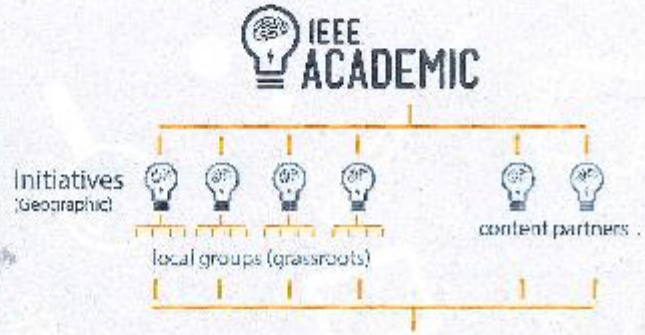

creating relevant educational contents

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