

## IEEE R10 News and Highlights

### Call for project proposal: 2014 IEEE R10 Humanitarian Technology Activities

IEEE Region10 Humanitarian Technology (HT) Activities invited project proposals from its sections for 2014 R10 HT activities. 22 proposals were received from various sections. Evaluation Committee has selected 4 best projects suitable for funding from Region 10.

The evaluation committee, consisting of following members, have evaluated the project proposals.

1. Deepak Mathur, R10 HT Activities Coordinator (Chair of the Evaluation Committee)
2. Kukjin Chun, R10 Award and Recognition Committee Chair
3. Rajendra Asthana, Past R10 Industry Relations Coordinator
4. Greg Adamson, Vice President IEEE SSIT, Past Chair Victoria Section
5. Arjun Pillai, GOLD representative from Kerala Section

Following projects (not in the order of ranking) have been selected:

1. Learning Aids for Visually Challenged:  
By **Sanikommu Sindhuja, Hyderabad Section**  
Project Cost: USD 1154
2. Smart Non-Invasive Health Monitoring Device for Elderly:  
By **Uttama Lahiri, Gujarat Section**  
Project Cost: USD967
3. CPR-assist:  
By **Edmond Zahedi, Malaysia Section**  
Project Cost: USD 1500
4. Canvas-Live:  
By **Celia Shahnaz, Bangladesh Section**  
Project Cost: USD 1200

### In this issue...

#### IEEE R10 News & Highlights

- Call for project proposal: 2014 IEEE R10 Humanitarian Technology Activities
- IEEE WIE Awards
- Awards Presented at the 2014 Region 10 Annual Meeting

#### IEEE R10 Councils/Sections - News & Highlights

- IEEE Australia Council
- IEEE Kerala Section
- IEEE Malaysia Section
- IEEE Uttar Pradesh Section

#### IEEE R10 Chapters - News & Highlights

- IEEE Madras Chapter
- IEEE PES NEDUET Chapter
- IEEE Queensland MTT/AP Joint Chapter

#### IEEE R10 Student Branches – News & Highlights

- IEEE SB, Mepco Schlenk Eng. college
- IEEE SB, Dr. NGP Institute of Technology
- IEEE SB, University of Melbourne
- IEEE SB University of Moratuwa

#### IEEE R10 WIE – News & Highlights

- IEEE WIE Affinity-Group, Malaysia
- IEEE WIE Affinity-Group, University of Moratuwa
- IEEE WIE Affinity-Group, MJCET

Region 10 thanks sections for participation and cooperation and congratulates all winners. Region 10 will support 50% cost of the project or USD 500 whichever is less. All projects are likely to be completed by 15<sup>th</sup> December 2014.

*Deepak Mathur*  
2013-14 IEEE Region10 Humanitarian Technology  
Activities Coordinator

## IEEE WIE Awards

Congratulations! Winners for the IEEE WIE awards. On behalf of the IEEE Women in Engineering Committee (WIEC), I am pleased to inform you that the WIEC (during our annual in-person meeting) selected the following award winners:

- ✧ Section WIE Affinity Group of the Year Award
  - Honorable Mention: WIE Calcutta
- ✧ Student Branch WIE Affinity Group of the Year Award
  - Winner: WIE University of Melbourne
  - Honorable Mentions:
    - WIE College of Engineering Chengannur

- WIE Delhi Technological University
- ✧ Inspiring Member of the Year Award
  - Honorable Mentions: Prof. Susmita Sur Kolay
- ✧ Inspiring Student Member of the Year Award
  - Winner: Ms. Mehvish Zahoor
  - Honorable Mentions: Fatemeh Jalali

I'm extremely proud of all winners for the awards. I look forward to working with WIE members to inspire, engage and advance women in technology more!

*Takako Hashimoto*  
*R10 WIE Coordinator*

### Awards Presented at the 2014 Region 10 Annual Meeting



*IEEE President and Region 10 Director with Awards recipients at award presentation ceremony during 2014 R10 Annual Meeting at Kuching*



*2012 R10 Distinguished Large Section Award presented to the representative of Hong Kong Section by R10 Director, Toshio Fukuda(Left in the picture)*



*2012 R10 Distinguished Small Section Award presented to the representative of Kharagpur Section by R10 Director*



*Peter Howard Over (New Zealand North Section) received 2013 R10 Outstanding Volunteer Award*



*2013 R10 Outstanding Volunteer Award for Sasi P M was presented to the representative of Kerala Section*



*2013 R10 Outstanding Volunteer Award for Ohno Eiichi was presented to the representative of Tokyo Section*



*2013 R10 Outstanding Volunteer Award for Sanjib Kumar Panda was presented to the representative of Singapore Section*



*2013 R10 Outstanding Volunteer Award for Arup Dasgupta was presented to the representative of Gujarat Section*



*2012 R10 WIE Section Affinity Group of the Year Award presented to the representative of Madras Section*



*2013 R10 WIE Professional Volunteer Award was presented to Dr. Celia Shahnaz (Bangladesh Section)*



*2013 R10 WIE Student Volunteer Award was presented to Ms. Rabail Raza (Lahore Section)*





*2012 R10 WIE Student Branch Affinity Group of the Year Award for CIIT was presented to Ms. Sania Arshad (Lahore Section)*



*2013 R10 Educational Activities Award (Continuing Education) was presented to Sri Niwas Singh (Uttar Pradesh Section)*



*2013 R10 Educational Activities Award (Informal Education) was presented to Lee Yoot Khan (Malaysia Section)*



*The Certificate of Appreciation from Region 10 was presented to Norliza Binti Mohd Noor (Malaysia Section) for organizing the R10 Meet in Kuching*



*2013 MGA GOLD Achievement Award for Muhammad Maroof Raza was presented to representative of Lahore Section*



*2013 MGA Leadership Award was presented to Darrel Chong (Singapore Section)*



*2013 Presentation Award of the first R10 WIE Poster Session at the R10 Student/GOLD/WIE Congress held in Hyderabad*

*Awards & Recognition Committee Chair:  
Kukjin Chun*

## IEEE R10 Councils/Sections News and Highlights

### IEEE Australia Council: Active IEEE Students Networking In Australia

The IEEE Australia Council received record levels of student participation for their recent 2013 Student Paper Contest as well as the Student Branch Competition. The council promotes IEEE through national activities and supports Australian hosting of major IEEE conferences and acts or responds on behalf of Australian Sections as required from time to time. There are currently 26 student branches across Australia. In 2013, over 100 students' submitted peer reviewed papers to participate in the highly prized student paper contests.

These two student activities aim to provide opportunities to improve students' career prospects. Graduates in engineering are now engaged increasing in a wider range of professional areas not just in engineering and they are called upon to communicate ideas to others effectively. Participation in the activities of the student branches provides opportunities for student members to interact and improve their communication skills.

Researching, writing, and presenting a paper provides a student with invaluable early experience in expressing ideas related to their professional field. Since the paper contest's primary function is to improve the engineering student's communicative skills, all IEEE student member in Australia are encouraged to participate in the paper contest.

### Results of the 2013 IEEE Australia Council Outstanding Student Branch Competition and the Student Paper Contest

IEEE Australia Council acknowledges the contributions of all involved in organising the highly successful student activities and student events held across Australia.

The Student Branch Awards from the IEEE Australia Council (AC) recognise outstanding Student Branch achievements by student members engaged in activities conforming to IEEE objectives and purposes. These activities has been the tireless efforts of individuals, student committees and their student leaders. Participation allows excellent development of leadership and organisations skills and gives opportunities to connect with other professionals and people with similar interests.

For 2013, we have joint winners of Best Student Branch Award - La Trobe University and Macquarie University (\$500 each + certificate), The Runner-up is University of Melbourne. (\$300 + certificate). There are also certificates of participation for all participating student branches. Money received can be used by the student branches to develop student projects and to recruit more student members.

As the result of an overwhelming response to the 2013 Student Paper Contest, and the outstanding quality of the overall number of papers submitted by the contestants, the IEEE Australian Council is pleased to announce the following results received from our panel judges. We thank the judges for their responses, time and effort in this competition. The Australia Council executive committee has also made a decision to allocate awards and prize money to the number of joint winners selected by the judges as follows.

- ✧ Postgraduate Category - Joint First Prize Winners
  - Carlos Teixeira - RMIT University (\$350 + certificate)
  - Reza Davoodnezhad - RMIT University (\$350 + certificate)
- ✧ Postgraduate Joint Second Prize winners
  - Faezeh Marzbanrad - University of Melbourne (\$150 + certificate)
  - Prasanga Samarasinghe - Australian National University (\$150 + certificate)
- ✧ Undergraduate Category
  - Nghia Ngyen-Troung - University of Adelaide (\$300 + certificate)
  - Edward Burstinghaus - University of Queensland (\$100 + certificate)

- ✧ Women in Engineering Prize
  - Mitra Mirhosseini - University of New South Wales (\$300 + certificate)



*Nghia Nguyen-Troung of Adelaide University, first prize winner in the IEEE AC Undergraduate student paper contest 2013-2014 receiving his prize from Dr. Brian Ng, Associate Dean (International) Faculty of Engineering, Computer and Mathematical Sciences, University of Adelaide*



*IEEE AC Postgraduate Student Paper Joint Second Prize winner Prasanga from ANU receiving her prize from Associate Professor Lan Fu at a recent Women In Engineering (WIE) event*

*Dr. Sharon Lim  
IEEE Australia Council Student Activities Coordinator*

Views expressed in articles published in this newsletter are those of author(s) and do not necessarily represent the views or official position of IEEE R10.

## IEEE Kerala Section:

### IEEE SIGHT Camp – inspiring work on local needs to change the world

Deep in the Western Ghats tropical rain forest, is situated a poorly inhabited tribal village **Kuchipara**, headed by a traditional chief **Moopan**. Locally administered by the Forest Department for development and rehabilitation, the tribals' have very poor access to main land, food or proper living conditions. Inhabitants here get meagre primary education, health care facilities, communications and transportation. A group of young determined engineers from Kerala, led by Amarnath Raja, former IEEE HTC coordinator, travelled to this part of the village and collected first-hand information on ground to earth reality of living conditions at these locations.

Travel to Kuchipara was tedious for the young team of YP and WiE engineers, as it involved driving and hiking through tropical forests known to have many species of animals including tigers, wild boars and elephants. Kuchipara has 72 families living in two groups, headed by the Moopan who briefed us with the history and culture of this community. These tribals' were nomads till as recently as the mid-nineteen eighties, clearing forests for agriculture and hunting wild animals for food. They were very shy of the non-tribal people and would run-away into the forest on sighting anyone. With the enactment and enforcement of laws to prevent hunting and nomadic agriculture, they were forced to settle down with the help of forest department officials. It was interesting to note that they had got to know of the monetary system just recently; they had to buy food and could not grow/hunt for themselves.

The root causes of such poor situations at the village were listed out as (a) Poor Education (b) No means of Transportation (c) Poor Communication (d) Un-aware of the outer world. The Visit and LFA workshops have brought a clear picture of the requirements of the population in the tribal village. The next step is to see how



best the engineering community can help them and to identify what contributions can be made so as to solve the identified root causes. After project proposals are submitted, a feasibility study in accordance to the climate, financials and social sustainability shall be performed.



*Travel to the location*

NGO partnerships and corporate sponsorships are being considered for successful rehabilitation of this tribal community. Detailed report of the SIGHT Camp may be found at

[http://origin.library.constantcontact.com/download/get/file/111576371955858/KerSIGHT\\_Camp.pdf](http://origin.library.constantcontact.com/download/get/file/111576371955858/KerSIGHT_Camp.pdf)



*IEEE SIGHT members with the tribal community of Kuchipara tribal village*

*Compiled and edited by Sabarinath G. Pillai  
Secretary, IEEE Kerala Section*

## NCHC



[www.nchc.org.tw/en/](http://www.nchc.org.tw/en/)

The National Center for High-performance Computing (NCHC), founded in 1991, is Taiwan's only national-level supercomputing center. Since its inception, the NCHC has been dedicated to strengthening Taiwan's HPC and networking infrastructure. It has planned and implemented pilot research programs in HPC, cloud computing, and big data.

In order to effectively support Taiwan's research, the NCHC constructed R&D platforms to support domestic and foreign R&D teams in developing HPC and big data applications, which cover engineering, natural science, environmental science, disaster prevention, biomedicine, and digital cultural content creation. The NCHC hopes to become an HPC center of international caliber and a base for HPC applications and R&D collaborations within the Pacific Rim region.

### Technologies

- High performance computing
- Big data computing
- Networking and information security
- Cloud integration technology

### Facilities

- HPC supercomputers
- The TaiWan Advanced Research and Education Network (TWAREN)
- Off-site storage, replication, and archiving facilities at its Hsinchu, Taichung, and Tainan branches

### Achievements

- Provided 200 TFlops of computing capacity for over 710 domestic projects in the fields of HPC, engineering, and scientific research
- Planned and constructed a next-generation 100 Gbps backbone network with 40 Gbps links to 13 regional network centers; maintained the TWAREN network and provided a robust high-speed networking service for academic research and application development
- Provided over 5 PB cloud storage for over 30 different databases (e.g. brain science, gene identification, disaster prevention, earth science, climate change, and the humanities)
- Developed Taiwan's first malware knowledge database to defend TWAREN against malware threats
- Constructed the Formosa series cluster supercomputers and service system
- Provided cloud services to the 3D Drosophila Brain Neural Image Database, the Environmental and Earth Science Observation Database, the Disaster Information Management Database, and the Render Farm
- Facilitated the development of cloud technologies including cloud middleware



**NAR Labs**  
National Applied Research Laboratories  
National Center for  
High-performance Computing

## IEEE Malaysia Section: 2014 IEEE Region 10 Symposium

IEEE Malaysia Section has successfully organized the 2014 IEEE Region 10 Symposium (2014 TENSYP) on 14-16 April 2014 at Berjaya Times Square Hotel, KL. The technical co-sponsors of this symposium are the following chapters: Antennas and Propagation, Microwave Theory and Techniques, Electromagnetic Compatibility Joint Chapter (AP/MTT/EMC); Communications, Vehicular Technology Joint Chapter (COM/VT); Engineering in Medicine and Biology Society Chapter (EMBS); Photonics Society Malaysia Chapter (PH); and Signal Processing Chapter (SP).

This symposium had authors from 29 countries submitting 258 papers. Out of these papers only 135 (52%) are presented in 25 technical sessions comprising papers with topic similarity. 91.3% of the authors are from the Asia/Pacific region, 7.8% from the regions of Europe, Middle East and Africa, and with the rest coming from United States and Canada.

Besides the paper presentations, there were four special sessions: EEG based Analysis, Analysis for Low Concentration Disease Related Biomarker, Special Session on Industrial Applications in Signal Processing and Communication Systems, Special Session on Signal and Image Processing in Agriculture, and Practices in Signal Processing Education.

The four keynote speakers were Prof. Toshio Fukuda, Dr. Oh Ser Wah, Prof. Nigel Lovell, and Prof. Alex Cot. The three invited talk speakers

were: Prof. Lawrence Wong, Assoc. Prof. Zulfadzli Yusoff, and Prof. Kukjin Chun.



*End of Day 1 Photo Session*

Amidst the Day 1 Symposium schedule was the R10 Leadership Forum. 17 postgraduates representing eight universities out of 35 participants attended the forum. The participants were given tips on how to become leaders in IEEE by Lawrence Wong, past R10 Director, while Tashio Fukuda, R10 Director, gave an overview of IEEE Organisational Governance with an emphasis on Technical Activities. Malaysia Section Chair, Norliza, enlightened the participants with Student Congress and the various activities at student branches. Takatoshi Minami, R10 Vice-Chair of Technical Activities, and R10 Conference & Technical Seminar Coordinator, spoke on IEEE Conference: website, organizing committee, POCO, and On Job Training. Elmer P. Dadios, R10 Section, Subsection and Chapter Coordinator shared the IEEE Section Philippine Experience.

*Dianne Cheong Lee Mei  
Communication/Newsletter Chair  
Malaysia Section*



*Q&A session after Prof. Fukuda's presentation at R10 Leadership Forum*



## **IEEE Uttar Pradesh Section: 2014 International Conference on Information Systems and Computer Networks (ISCON 2014)**

An International Conference on “Information Systems and Computer Networks: ISCON-2014” was organized in GLA University, Mathura, on 1-2 March 2014 in technical collaboration with IEEE Uttar Pradesh Section and CSI Mathura Chapter, Division: I & IV & Region-1. The theme of the Conference was aptly chosen keeping in conformance with the industry demands and proliferation in the fields of Information System and Computer Networks.

The Conference was inaugurated on 1 March by Chief Guest of the conference Mr. Sanjeev Nikore, President - Consumer, Manufacturing and Public Services, HCL Technologies Ltd, and Guest of Honour Prof. Rajeev Tripathi, MNNIT Allahabad. The day took off with a scintillating Inauguration ceremony thronged by the glitterati of the academia who were extended a warm welcome message by the Convener of the Conference, Prof. Charul Bhatnagar.

The Pro-Vice Chancellor, Prof. A. M. Agrawal, welcomed the gathering and addressed them with a motivational words that such types of International Conferences would benefit not only the members present here, but to the industry, academics and researchers as a whole. He also congratulated the organizers and thanked them on behalf of the Vice-Chancellor, Prof. D. S. Chauhan, and the Management of GLA University.

The General Chair, Prof. Krishna Kant introduced the theme of the Conference. He emphasized the importance of Information Systems, which consists of components of collecting, storing and processing data and for delivering information, knowledge and digital products. Apart from various organizations, Individuals, too rely on Information Systems for conducting much of their personal lives, like online shopping, banking, entertainment, etc. Also, Computer Networks are

used to transmit information in which connections between different computing devices is established using wired or wireless media. He also added that some of the recent advancements in this field are Computer Clusters, Peer to Peer Systems, Grid Computing, Cloud Computing, etc. He concluded that the conference would provide a platform to the researchers to delve on different domains on Information Systems and Computer Networks.



*Inaugural Function (Left to Right): Convener- Prof. Charul Bhatnagar, Pro-Vice Chancellor- Prof. A. M. Agrawal, Chief Guest- Mr. Sanjeev Nikore, Guest of Honour - Prof. Rajeev Tripathi, General Chair- Prof. Krishna Kant, Head of Deptt.-Prof. A. S. Jalal*

Mr. Sanjeev Nikore addressed the employee relationship management; the target is to avoid the risk that employees refuse any IT solution in which combining information from multiple spread sheets and databases is tedious and manual. He also focused on the key idea – that a good management of the relationship with employees has a great value for the company and is a driver of performance improvement both in individual and in teams. The programme was wound up with a Vote of Thanks delivered by the Head, Department of Computer Engineering and Applications, Prof. Anand Singh Jalal.

The Conference witnessed technical session for paper presentation on various sub-themes during these two days. Prof. Rajeev Tripathi, focused on Adaptive modulation and coding schemes mentioning these as promising technique to support the demands for high data rates and wideband proposed for 4G mobile communication system standards.

Prof. Nishchal Verma, IIT Kanpur, delivered a key note on Intelligent Informatics. This deals with interdisciplinary research on artificial intelligence, cognitive science, knowledge engineering, information technology and engineering management.

Prof. Ekram Khan, AMU Aligarh, delivered a key note on designing wireless video communication system describing it to be a challenging task due to high error rates of wireless channels, limited and dynamically varying bandwidth availability, and low energy and complexity requirements of portable multimedia devices. The discussion mainly focused on wavelet coded video, but it is applicable to other embedded bit streams as well. The session was co-chaired by Dr. Dilip Kumar Sharma from the Department of CEA, GLA University, Mathura.

ISCON 2014, papers were classified in two tracks: Track 1: Information System & Track 2: Computer Networks. The organizers received 196 research papers in all from various academicians and industry people from India and abroad. Out of which there were 185 valid submissions. 75 research papers were of track 1 and 110 papers were of track 2. First, the papers were matched

with the relevance of the conference, and then checked for plagiarism. 106 papers were shortlisted and each paper was sent to two esteemed external reviewers from institutions of repute. After second level of review, 71 papers were selected out of which 29 papers were of track 1 and 42 papers were of track 2. There were 29 registrations against these 71 accepted papers and out of which 28 papers were presented in six sessions. In each session, the best paper was awarded as sponsored by McGraw Hill Education.

The conference valedictory session was organized at 2.30 p.m. on 2<sup>nd</sup> March. Prof. Ekram Khan, AMU graced the occasion as the Chief Guest. Dr. Manas Kumar Mishra gave the crisp summary of the conference followed by the Vote of Thanks by Prof. Ashish Sharma. With efforts from GLA University Management, faculty members and delegates, the conference was a great success in meeting its objectives.

*Dr. Dilip Kumar Sharma,  
Joint Secretary  
IEEE Uttar Pradesh Section,  
Steering Committee Chair- ISCON 2014*



*Group Photo in the Valedictory Session of the Conference*

## IEEE R10 Chapters News and Highlights

### **IEEE Madras Chapter: IEEE CIS Madras Chapter and Valliammai Engineering College organized NCEEE'14**

The department of Electrical and Electronics Engineering of Valliammai Engineering College has organized the 4<sup>th</sup> National Conference on “Emerging Technologies in Electrical and Electronics Engineering” with the technical sponsorship from IEEE CIS Madras Chapter on 19th April 2014.

The conference was conducted with the primary objective of bringing together academicians and practitioners in Electrical and other associated fields on a common platform to share their knowledge and expertise so as to contribute towards research and development in the field. About 50 papers on diverse topics encompassing Power systems, Power electronics, Energy Management, Control systems, etc. were received for the conference from reputed institutes across the country. The expert panel selected around 40 papers for presentation in the Conference after careful scrutiny.

The inaugural session of the conference began with the invocation followed by the Welcome Address delivered by Prof. K. Elango, Head of the Department, Electrical and Electronics Engineering. The session had Dr. N. Kumarappan Chair, IEEE Computational Intelligence Society, Madras Section as the chief guest. Dr. M. Murugan, Vice Principal Valliammai Engineering college felicitated the gathering and congratulated the office bearers of the conference for making fruitful attempts to organize the conference for the fourth consecutive year.

Following this the chief guest of the function Dr. N. Kumarappan presented the inaugural address. In his address he highlighted the importance of organizing such conferences for the benefit of student community as well as faculty. He pointed

out that such conference would ignite a spark in the minds of budding engineers and they would be triggered to explore more in the areas of their interest and also highlighted the importance of new trends of power engineering. Following the inaugural address the conference proceeding was released by the chief guest. The session ended with the vote of thanks delivered by Mr. G. Madhusudhanan convener of NCEEE'14.

The presentation had two tracks for which Dr. K. Vijaya Kumar, Professor and Head, Department of EEE, SRM University and Mr. Rathnam, Assistant Professor, Department of EEE, SRM University consented to be judges and gave their valuable suggestions to the participants for their corrective actions and molding to be a good presenters.

Dr. K. Vijaya Kumar, Professor and Head, Department of EEE, SRM University was the chief guest for the valedictory function. Following the valedictory address by the chief guest, certificates were issued to the participants. And also the Best papers presented were awarded with special certificates. The participants were requested to give their valuable feedback and the feedbacks obtained were found to be very useful. Dr. G. Udhaya Kumar, Co-Convener, NCEEE'14 presented the vote of thanks.



*Releasing the Proceedings of NCEEE'14*

*Dr. N. Kumarappan  
Chair, IEEE CIS Madras Chapter*



## **IEEE Madras Chapter: Faculty Development Programme on “Soft Computing and Simulation for Power Engineering”**

The IEEE Computational Intelligence Society – Madras Chapter in association with IEEE Madras section, IEEE Student Branch, S. A. Engineering College, Chennai organized a Faculty Development Programme (FDP) on the topic “Soft Computing and Simulation for Power Engineering” on 8<sup>th</sup> and 9<sup>th</sup> May 2014. This was the 27<sup>th</sup> FDP in a series of programs aimed at improving the quality of teaching in Engineering Colleges in Tamilnadu. The programme was attended by 31 faculty members of colleges and universities from all over Tamilnadu. The coordinators of the program were Dr. N. Kumarappan, Professor of Electrical Engineering, Annamalai University and IEEE Madras Section Educational Activity Chair, Chair-IEEE CIS Madras Chapter; Dr. G. Umarani Srikanth, Professor and Head, Department of PG Studies, S. A. Engineering College, Chennai.

The Programme was started with an inaugural function. Dr. T. Sasi Latha, Vice-Principal, S. A. Engineering College, Chennai has presided over the function. Dr. N. Kumarappan, Chair, Educational Activity and CIS Madras Chapter, IEEE Madras Section, Chennai delivered the inaugural address. Dr. G. Umarani Srikanth, Professor and Head, Department of PG Studies, S.

A. Engineering College, Chennai has delivered the welcome address.

The Resource Persons for the program were Dr. N. Kumarappan, Professor of Electrical Engineering, Annamalai University; Mr. M. Venkateshkumar, Assistant Professor, Dept. of Electrical and Electronics Engineering, Saveetha University, Chennai; Dr. A. Manju, Professor and Head, Department of Embedded System Technologies, S.K.P Engineering College, Tiruvannamalai; Mr. R. Arulraj, Research Scholar, Department of Electrical Engineering, Annamalai University, Annamalai Nagar. The topics covered included Fuzzy Logic based Load Frequency Control, ANN based Power Dispatch, GA based Unit Commitment, Performance Analysis of Buck and Boost Converter using PSCAD, Load Flow Analysis using ETAP. In addition to this, Hands-On training was given on all the above mentioned topics.

The program ended with valedictory function and certificate distribution. The program received an excellent feedback from all the participants. The FDP provided an excellent opportunity to listen to the experts.

*Dr. N. Kumarappan  
Chair, IEEE CIS Madras Chapter*



*Group photo*

## IEEE PES NEDUET Chapter: Earth Day Seminar

This event *Earth Day* seminar, focusing on ‘The climatic change and the integral role of students and professionals’, was conducted under IEEE PES, NEDUET Chapter and Electrical Engineering Department in collaboration with K-Electric on April 17<sup>th</sup>, 2014 in NED University.

The chief speakers of the event were Mr. Asif Hussain Siddiqui from Director of Energy Conservation Department – K Electric, Dr. Talat Altaf, Dean of ECE – NEDUET, Dr. Saad Ahmed Qazi, Chairman- Electrical Department NEDUET, Mr. Mehbub Alam Khan, Deputy General Manager- K-Electric, and Mr. Fawad, Deputy General Manager- K-Electric.

The event began in the name of Allah through Quranic recitation, followed by speeches in the course of event. Mr. Mehbub Alam Khan began his speech by igniting our sense of prime duty towards the only liveable planet-Earth. He stressed on the collective action to be taken to promote greenery to fight the uprising adverse climatic conditions.

Dr. Talat Altaf focused on how the industrial

advancement, harmful emissions and cutting down of trees are causing environmental deterioration. He also stressed on promoting and conserving EEE- Energy, Economy and Ecology for our betterment.



*Team IEEE PES NEDUET SB*

Mr. Asif Hussain Siddiqui stressed on the dire need of protection of Earth and promoted the policy formulated under K-Electric for earth protection. The policy includes the following two agendas: Mitigation of carbon footprints in our environment and Reduction in emission of hazardous gases through renewable energy resources, and plantation. He further urged on cutting down unnecessary usage of electricity.

Mr. Fawad presented a documentary on global warming and its harsh effects on our surroundings. He defined global warming as heating of atmosphere due to continuous rise in temperature.



*Faculty members, K-electric speakers and PES NEDUET SB EXCOM*

The temperature has already increased by 2°C majorly due to anthropologic activities (burning of fuels, deforestation) and it needs to be brought into control. Hand in hand, due to heavy emissions of carbon dioxide, ocean acidification has come into play causing deaths of marine animals, thus, causing disturbance to natural ecosystems.

Dr. Saad Ahmed Qazi suggested moving towards renewable and alternative resources and improving our existing social behavior regarding energy consumption. This seminar, thus, provided mass awareness about the protection of Earth through energy revolution, proper management of forests and cities and reduction in greenhouse gas emission.

*Junaid Qureshi*

*Faculty Advisor, IEEE PES NEDUET Chapter,  
Lecturer, Department of Electrical Engineering  
NED University of Engg & Tech Karachi, Pakistan*

## **IEEE PES NEDUET Chapter: Professional Referencing Using Endnote**

IEEE PES NEDUET Chapter conducted an event "Professional Referencing Using Endnote" in collaboration with Electrical Engineering Department and Mr. Junaid Ahmed Qureshi at NED University on 20th May 2014.

Prof. Dr. Saad Ahmed Qazi, Chairman Electrical Engineering Department, encouraged the faculty members and supported IEEE PES NEDUET chapter to organize a comprehensive session to promote technical writing and citation management. Undergraduate & Postgraduate students and faculty members attended this fruitful seminar.

Referencing, as globally known, is defined as source identification or citation. It is an integral



*Junaid Ahmed Quraishi addressing the audience*



part of documents be it research papers, magazines or thesis reports. In this seminar, EndNote software was shown to be a highly efficient tool to cite references. EndNote features more than 3000 pre-defined journal styles; spell-check and can serve as a travelling library within a document. You can register your copy of endnote and to configure it with MS Word.

References can be imported by accessing Google scholar and other citation index. This citation can then be inserted into a document using 'insert selected citation' option in EndNote tab on Word. Manual entry of data can also be done by selecting new reference option in reference drop down menu of EndNote. This method however is most prone to errors. It is possible to create a new EndNote library from a Word document if the references in the document were originally inserted from EndNote.



*Junaid Ahmed Quraishi going through technical details*

*Barkha Parkash*

*IEEE PES NEDUET Chapter,*

*IEEE PES student branch Chair at NED University of Engineering & Technology, Karachi, Pakistan*

### ***IEEE Member-Get-a-Member (MGM) Program***

Recruit Members from 16 August 2013 through 15 August 2014, and earn \$\$\$ towards your membership dues, society fees, products & services, and at the same time help your Section earn membership development awards to fund local activities and programs.

Details of MGM programs and rules available at:

[http://www.ieee.org/membership\\_services/membership/join/mgm.html](http://www.ieee.org/membership_services/membership/join/mgm.html)

Fanny Su & Ewell Tan

IEEE Asia-Pacific Limited

## IEEE Queensland MTT/AP Joint Chapter: Distinguished Lecturers from MTT and APS Society

In March 2014, the IEEE MTT/AP Queensland joint chapter invited IEEE Distinguished Lecturers from the two parent societies – Microwave theory and techniques (MTT) and Antennas and propagation (AP). The first of the two lecturers was Microwave Theory and Techniques Society Distinguished Lecturer Dr. Goutam Chattopadhyay, who is a Principal Engineer/Scientist from NASA-Jet Propulsion Laboratory, California Institute of Technology. Goutam is a Fellow of IEEE since 2011. The second DL speaker was Antennas and Propagation Society Distinguished Lecturer Prof. Per-Simon Kildal from Chalmers University in Chalmers, Sweden. Per-Simon is a Fellow of IEEE since 1995.

Dr. Goutam Chattopadhyay's lecture was on *Terahertz Technology and its Applications*. Depending on people's background Terahertz signals can be thought of as very high frequency signals (for those coming from a Microwave and RF background), or low frequency for those from an optical background.

The presentation provided an excellent introduction to the concept of Terahertz signals as well as aimed to inspire the audience to either begin or continue working in the area of Terahertz. Terahertz radiation is the most abundant form of radiation being emitted in the universe (peaking at 3 THz excluding cosmic microwave background). Due to this, terahertz spectroscopy can be used to get signatures of different forms of matter in the universe. One such application of terahertz (and is very relevant to the main output of NASA-JPL) is in the area of space exploration and discovery. In Goutam's presentation several examples of planets or moons found in the universe which have molecular oxygen and/or water were shown. These

two items being quite important as they are required for life as we know it.

The presentation next explored several ways in which terahertz signals can be generated and detected. Also as most terahertz signals are quite weak, the importance of sensitive detectors was emphasised. Also, devices such as mixers and amplifiers using a modern process on high electron mobility transistors (HEMT) were described.

Some of the technology developed at NASA-JPL has also been converted into commercial/civilian applications such as atmosphere analysis (including the tracking of climate changes) on our own planet, secure short range high bandwidth communication, concealed weapon detection, and even wireless power transfer.



*Dr. Goutam Chattopadhyay*

Later in March our second speaker presented two presentations at two of the local universities. The first presentation being *Rethinking the Wireless channel* and the second was *Some Reflector and Feed Antenna Inventions that Made a Difference*.

The first of the presentations included discussions about a reverberation chamber, which has been used to emulate a rich isotropic multipath environment, and is an excellent way to test modern communication systems which use MIMO OFDM communication methods. The use of real systems in a reverberation chamber gives measured throughputs that are in great agreement

with theoretical limits. However, as real-life systems operate in between the two extremes of rich isotropic and line-of-sight channels, it has been difficult to estimate real world performance of systems. Prof. Kildal showed a way that measurements in these two channels representing the limits can be combined with statistics of the user to produce real-world throughput, detection probability and a way to start optimizing wireless networks.

In his second presentation, Prof. Per-Simon reviewed some interesting inventions within reflector antennas and feeds used in radio telescopes. The inventions were quiet novel when introduced, but through the presentation it can be seen that they are associated with simple fundamental EM principles. The first of these innovations was a line feed using beam-forming rods, which improved the efficiency of the 224 MHz antenna by 0.4 dB (8%) used for ionosphere research. The second system was to add beam-forming rods reducing cross-polar side lobes and improving the illumination efficiency by 0.5 dB. The end result was that the earth station for a ship for communication with INMARSAT was reduced by at least 30%. The third innovation presented was a corrugated horn based feed for the Arecibo radio telescope. The inspiration for this was the corrugated horn and the theories of soft and hard surfaces. The next innovation was the hat feed which can be used for applications above

10 GHz. Lastly an eleven feed for radio telescopes was presented. Such a feed is being considered for the square kilometer array radio telescope. The requirement here is a very large bandwidth covering at least 2 to 13 GHz. This wide bandwidth means that one possible solution is a log-periodic dipole antenna



*Prof. Per-Simon Kildal*

IEEE Queensland MTT/AP Chapter website is available at the following URL:

<http://ewh.ieee.org/r10/queensland/v2/doku.php/chapters:mttap:start>

*Dr. Konstanty Bialkowski*

*IEEE QLD MTT/AP Joint Chapter Chair 2013/2014,  
School of Information Technology and Electrical  
Engineering, the University of Queensland*

### ***Special benefit to IEEE members only!***

Do you know IEEE-USA is providing IEEE members with one complimentary E-Book each month?

IEEE-USA E-Books offers a convenient way to brush up on your professional career. These E-Books cover a broad range of topics including: careers, financial planning, innovation and more, that will help you to maximize your career potential.

Some titles are available as free member downloads, and most are available at heavily discounted IEEE member rates.

Check out the IEEE-USA E-Books today at: < <http://www.ieeeusa.org/communications/ebooks/default.asp> !



Fanny Su and Ewell Tan,  
IEEE Asia-Pacific Limited



## IEEE R10 Student Branches News & Highlights

### IEEE SB Mepco Schlenk Eng. College: Altair'14 - National level Techno Management Symposium

Altair'14 is a National Level techno management symposium jointly conducted by IEEE, CSI student branches and Microsoft Campus Club of Mepco Schlenk Engineering college. The Symposium begun with proper approval from the conference coordinators of IEEE and it was held on March 2014.



*Inauguration ceremony*

The spirit for searching information will definitely improve the reading habits of the students and provide them in depth knowledge about current business environment.

#### **Paper Presentation**

The students had come up with great innovations. After each presentation judges posted various questions to test the presenter's knowledge on that particular concept.

#### **Idea Presentation**

The objective of this event is to testify the students' innovative ideas in the field of engineering, green technology, advanced controls etc. which are to be implemented on or about the year 2035.



*Idea Presentation Session*

#### **Circuit Debugging**

The main concept of this round is to test the competitor's innovative circuitry skills both on electrical and electronics domains. The event composes of finding, detecting the circuits and the errors within them and the final round is to design the most effective circuit for the concept given. This event was hosted by student panel headed by Mr. M. Kiruba Sankar.

#### **Code WARS**

This is a C- language proficiency test. The main event is a program developing in which the teams were given with a simple C- program and were asked to debug their coded created by them to debug the above in GCC Compiler.

#### **Workshop Windows 8 APP. development**

The main objective of this workshop was to train the participants to develop the windows 8 applications and to get comprehensive knowledge about the Application development. Mr. J. Venkatesan Prabu, CEO of KAASHIV INFOTECH, and Chennai conducted the workshop.

#### **Workshop EMBEDDED SYSTEMS**

The main motto of the workshop is to deliver a comprehensive and intellectual training on latest advancements in Embedded Systems and its applications. The workshop was started initially by Mr. M. Kiruba Sankar, Vice chairperson of our student branch welcoming the participants and introducing the Trainer Mr. Arun Assistant Professor, Dept. of ECE, and explaining the

concepts of embedded soft wares (KEIL UVISION -3 and PROTEUS).the event proceeded till 5 P.M.

*M. Kiruba Sankar*  
*Chair, Mepco Schlenk Engineering College SB*  
*sites.ieee.org/sb-mepcoeng*  
*Madras Section, India*

## **IEEE SB, Dr. NGP Institute of Technology: IEEE International Conference on Green Computing, Communication and Electrical Engineering**

The Department of Electrical and Electronics Engineering, Dr. N. G. P. Institute of Technology, Coimbatore-48 in association with Wayne State University USA, IEEE USA, IEEE Madras Section and Kovai Medical Center Research and Educational Trust organized the IEEE International Conference on Green Computing, Communication and Electrical Engineering –

ICGCCEE'14 at the Institute premises during 6th – 8th March 2014.

Dr. K. Porkumaran, Conference Chair, Principal, Dr. N.G.P. Institute of Technology welcomed the gathering and motivated the students to pursue Research oriented activities in their respective domains and focus on inventions & developments. Dr. V. Kumar Chinnaiyan, Organizing Chair, Professor and Head, Dr. N.G.P. Institute of Technology presented the report about the conference ICGCCEE'14.

Dr. Nalla. G. Palanisami, Chairman, Kovai Medical Center and Hospital delivered the Presidential address.

The International Conference was inaugurated by Shri S. Senthil Kumar, Environmental Manager, Asia Pacific, FORD Motor Company, India and released the conference proceedings in addition to the inaugural address highlighting the technological development that is happening in India.



*ICGCCEE 14 Proceedings Release*

The Guest of Honour Dr. Y. Gene Liao, Director, Electric Transportation Technology program, Wayne State University, USA delivered a special address on “Green Car and Energy Storage Technology”.

Dr. Thavamani D Palanisami, Secretary, Dr. N.G.P. Institute of Technology, and Dr. O. T. Buvaneswaran, CEO, felicitated the gathering.

Invited talks by eminent academicians and industry professionals from Wayne State University USA, National Instruments Bangalore, Teclever Pvt. Ltd, Bangalore, KMCH Coimbatore, HCL Technologies Chennai, Indian Institute of Space science and Technology Trivandrum and Karpagam University Coimbatore were delivered.

The session’s presentations had diversified fields of interest which includes Renewable Energy, Storage Devices and Systems, Smart Grids, Distributed Generation, Wind Energy Conversion Systems, Power Quality and Power System Reliability, Image and Signal Processing, VLSI Design, Cloud Computing, Data Mining, Network Security, Soft Computing, Wireless Communication, Embedded Systems Video Conferencing, Computer and Wireless Sensor Network, Neural Network and Fuzzy Logic. The selected papers will be published in the IEEE Xplore Digital Library.

The conference concluded with a Valedictory session in which Dr. S. N. Sivanandham, Emeritus Professor, Karpagam University delivered the valedictory address explaining how the computing and communication grew over the years have now merged and become pervasive in real time world. The Guest of Honour Dr. G. Sai Narayanan, Senior Consultant, HCL Technologies, Chennai, discussed about the Research Direction Issues in Digital Image Processing. Finally Dr. M. Gopinath, Co-chair, Dr. N.G.P. Institute of Technology, concluded the conference by delivering the vote of thanks.

*Dr. K. Porkumaran Sr. MIEEE,  
IEEE Student Branch Counsellor,  
Dr. NGP Institute of Technology, Coimbatore*

## **IEEE SB, University of Melbourne: Snapshots from a Melbourne Student Branch: Reflections, Plans and Ideas**

Since the beginning of the academic year in Australia last March 2014, our student branch has witnessed significant activity. With the student in focus, we have organized many activities that students have indicated interest in. Our most successful event was the trip to Toyota’s manufacturing facility in Melbourne. Visiting one of the most advanced factories in the world, the attendees gained valuable information about the robotics, automation and manufacturing methods in a gigantic factory! To add even more value to the site visit, senior and professional IEEE members attended, thus providing great networking opportunities for students. This trip was repeated due to popular demand.

Apart from that, the student branch’s partnership with the Melbourne University Electrical Engineering Club (MUEEC) has had enormous benefits to both student societies. One co-organized event is “Industry Exposed”. On that evening, engineers from industry spoke about their everyday lives as engineers, their career stories, and provided valuable advice to the audience. Apart from that, they also presented about the different career paths and opportunities that their companies offer. Another co-organized event was an introductory presentation for Australia’s largest national Cyber-Security Challenge, which brought many of the organizing companies and key employers to campus to present about the challenge.

So far, engineers and computer scientists from Siemens, Ericsson, BAE, Telstra, Department of



Defence, PwC, and many other companies have been invited to our campus to provide value to our IEEE student members, and we are aiming to create partnerships for future collaborations with some of those companies, so stay tuned! From the IEEE, we invited Greg Adamson, Vice Chair of the Society on Social Implications of Technology, to present about the Norbert Wiener conference that he is chairing and organizing. The presentation included information about volunteering opportunities provided by the IEEE, as well as the great benefits of being with the largest professional technical organization in the world. This includes networking with some of the most important figures of industry, research and academia.

Our plans for the next few months include revamping our marketing techniques: we have already introduced a weekly eNotice that provides IEEE student members with information about all

exciting IEEE student branch events in Melbourne. This eNotice also includes reminders about certain scholarship applications, and highlights of student membership benefits, such as the Microsoft Software Development Network, and the most beneficial IEEE Resume Lab. Yet, there is more to achieve. Updating our website and creating a new logo to represent our student branch are crucial steps! Other plans include organizing more site visits and workshops to equip students with the skills they need to enjoy their engineering careers. Having provided a summary of some of our key events, I am hoping that this provides some form of direction to new student branches that are looking for new ideas for events in the different regions of IEEE.

*Loai Khalayli*

*Chair, IEEE University of Melbourne Student Branch*



*IEEE University of Melbourne Student Branch Site Visit to Toyota*

## **IEEE SB University of Moratuwa ENEUMRO 2014 - Workshop on Advancing Technologies**

IEEE or the Institute of Electrical and Electronic Engineers is known to be the paramount organization for engineers all over the world. The IEEE Student Branch of University of Moratuwa, the official representative of IEEE for University of Moratuwa, is known to be one of the most active student branches in Sri Lanka.

IEEE UoM includes undergraduates from the departments of Electrical, Electronic, Computer Science, Mechanical Engineering as well as Faculty of Information Technology. Student branch has earned a unique recognition among the university community for being a renowned students' society which makes a huge impact on society through various community projects.

From all the student branch of Sri Lankan universities, IEEE UoM Student Branch has the pride of organizing the very first IEEE Students/ GOLD / WIE Congress in Sri Lanka. And also IEEE SGW Congress2013 which was held in University of Colombo is co-chaired by IEEE the student branch of UoM.

Enumero 2014, the first ever open workshop on advancing technology, organized by the IEEE UoM SB, was held on 05th of April 2014 in the Civil Engineering complex of University of Moratuwa. It was a platform which built up the interaction with the IEEE Power and Energy society (PES), IEEE Robotics and Automation society (RAS) and IEEE Computer society (CS). 'Enumero' was a technical workshop organized with the utmost intention of accreting the technological knowledge of undergraduates. On the other hand it was a platform to build up the collaboration among the members of the IEEE UoM student Branch. Therefore it was an enormous opportunity for the students who are

with the thirst of hunting modern technical advances.

In this workshop there were two parallel sessions on Robotics and Automation and Computer.

"ROBOZONE", the session organized by the Robotics and Automation Society, included sub sessions on 'Quadcopters' by Mr. Eranga Fernando and 'Unmanned Aerial Vehicles' by Mr. Chamika Gamage from Department of Electronic & Telecommunication Engineering, 'Generations in prosthetic arm designing' by Mr. Sanjaya Bandara and an 'Introduction to MEMS and NEMS' by Dr. Ranjith Amarasinghe from Department of Mechanical Engineering.

Meanwhile, the event organized by the Computer Society, HACKERSPACE, included sessions on 'Telecommunication frauds and prevention' by Mr. Venura Athukorala from Wavenet, 'Social Engineering' by Mr. Kasun Chathuranga from TechCERT and finally an interesting session under the theme 'Think Like a Hacker', which discussed about require VMware, virtual installation of Kali and Linux by Mr. Dilan Warnakulasooriya from 99x.

All the speakers who conducted the sessions were renowned experts in the relevant areas from the University of Moratuwa and well-known Technology providers in the country.

This was followed by an open event conducted by the IEEE Student Branch which let the participants to have hands on experience on what they learnt in the morning sessions. Not only that, but the participants enjoyed the event to the maximum since it had been organized so that collaborative efforts lead towards the success.

It is worth mentioning that this massive event honored by the participation of the Chairperson of IEEE Sri Lanka Section, Dr. Jayathu Samarawickrama and the IEEE UoM Student Branch Counselor, Professor Sisil Kumarawadu, was enriched with the friendly accompaniment of

the members from the IEEE Student Branches of University of Colombo, School of Computing and SLIIT.



*Sachinthana Pathirana*

*Editor – IEEE University of Moratuwa Student Branch, With Madeesha Fernando*

## WIE Affinity-Group News & Highlights

### IEEE Malaysia WIE-Affinity-Group: Special Session at TenSymp 2014

IEEE Malaysia WIE Affinity Group Special Session was held on the 15<sup>th</sup> of April 2014 in conjunction with the IEEE R10 Technical Symposium 2014 at Berjaya Times Square Hotel, Kuala Lumpur, Malaysia. This event was held to provide a platform for women engineers in IEEE to understand more about WIE, to network and to share their success stories. This event, chaired by Dr. Lee Yoot Khuan, was joined by about 25 participants, which comprises of both men and women engineers and academicians in engineering.

The session started with a video presentation by Prof. Dr. Takako Hashimoto, IEEE WIE Region-10 Coordinator. In her speech, Prof. Hashimoto spoke about the mission of WIE, which among others are to recognize outstanding women engineers, advocate women in leadership roles, and to facilitate the development of programs and activities that promote entry into and retention of women in engineering. She also urged all the

participants to engage in activities that can promote a 'zero gender gap society'. Finally, she congratulated WIE Malaysia in successfully organizing this event.

WIE Malaysia is honored to have Ir. Hjh. Khalidah Binti Haron (former Managing Director of the New ILSAS, TNB) to give an inspiring and lively talk on 'Charting Your Own Journey, Defining Your Own Success'. Ir. Khalidah challenged the participants to question the meaning of success, the importance of being successful, and the types of ideal outcomes desired by each individual. She shared her success stories and encouraged us to be self-actualizing leaders.



*Ir. Hjh. Khalidah presenting her talk on 'Charting Your Own Journey, Defining Your Own Success'*

Best paper awards sponsored by Region-10 WIE were also presented to three young women engineers. The winners were selected based on the technical content and presentation of their papers.



*Attendees of the IEEE Malaysia WIE-Affinity-Group Special Session*



*Nadia Tan Mei Lin*  
*Senior Lecturer/Honorary Secretary*  
*University Tenaga Nasional/IEEE Malaysia*  
*WIE Affinity Group*

## **IEEE University of Moratuwa WIE-Affinity-Group: Limelight 2014 - A panel discussion featuring today's elite lady personalities to empower tomorrow's leaders**

Knowing the fact that lacking confidence and inability to identify the true potential and becoming second in the engineering field by thinking engineering is meant for males and always lagging behind them, the Women in Engineering Affinity Group of the IEEE Student Branch of University of Moratuwa, introduced the novel event, "Limelight 2014" to their calendar, starting from this year for the very first time in order to help the young undergraduates of University of Moratuwa to unveil their immense potential to be at the heights they deserve to be at in the future and to uplift their confidence, competencies and personality to operate in a corporate environment meeting high level industry standards.

Limelight 2014 was a panel discussion organized by WIE affinity group of University of Moratuwa,

to empower tomorrow's leaders with the hands on experiences of today's elite lady personalities. This is a novel program added to WIE calendar from this year onwards. And the inaugural chapter was successfully held on 20th May 2014 from 5.30pm to 7.30pm in Department of Electronic and Telecommunication, University of Moratuwa. Lady undergraduates of different fields joined hands with the WIE members to make the event a remarkable one.

The panel consisted of Prof. (Mrs.) Dileeka Dias (Professor at University of Moratuwa), Mrs. Samadani Kiriwandeniya (Chairperson, Sanasa Development Bank), Mrs. Indrani Fernando (Chairperson/Managing Director at New Philip Hospitals (Pvt) Ltd) and Mrs Indira Kulatilake (Managing Director, Universal Labels (Pvt) Ltd).

The four panelists appeared on the event were interested to share their experiences with the young undergraduates. Mrs. Indrani Fernando, a delightful personality shared her inspiring business experience with us. While Mrs. Dileeka Dias shared her educational experiences and family life experiences. Mrs. Samadanie Kiriwandeniya who was ranked one of the 50 most powerful women in Sri Lanka taught how to face to an interview successfully by sharing her life experiences. Mrs. Indira Kulatilake showed us the interpersonal ability of women which leads to the success of



whole family.

As expected this event was a massive successful one, where it opened up the platform for the young undergraduates to gain the experience of today's professional figures interactively. And also since all the panelists are today in a top position of their respective fields and it motivated to build up the confidence in female undergraduates to compete in the male dominated engineering field with confidence. The feedbacks given by the participants revealed their enthusiasm on programs like these, specially focused on the female engineers in molding their characters enabling them to get on with the rapidly moving industrial world. Thus, it is also evident that the event was a great success.

*Ashani Muthumala*

*Secretary, IEEE WIE Affinity Group of University of Moratuwa*

*With Madeesha Fernando*

## **IEEE WIE MJCET affinity group: Introduce a Girl Child to Engineering Program**

IEEE WIE affinity group, Muffakham Jah College of Engineering and Technology (MJCET), Hyderabad Section invited the students of Loyola school to MJCET during the IEEE Student Professional Awareness Conference which was held on March 6th and 7th, 2014 with the aim of "Introducing a girl child to Engineering".

Team WIE MJCET fetched the students from Loyola Girls High School where Mr. John Babu, Principal, was elated and received the team with great pleasure. After a brief interaction with the students, they reached MJCET where a world of new technology and sciences awaited.

This event had been unionized with the intension of making these young girls cognizant with the world of engineering, the sciences of technology that the world is going to deal with in near future. The excited students were given a chance to control various robots made by MJCET Robotic Team and were given brief explanation of various models that had futuristic and real time approach towards solving the existing problems in construction of various types of roads and bridges.



*Team IEEE WIE MJCET with the school students and esteemed dignitaries.*

The students were also presented with other breath taking models such as hearing Aid, Water Level Indicator, Blind stick for visually impaired people, mobile based control of home appliance and many such innovative models were showcased under Hardware Modelling which were not only aimed to improve the technology but also serving the people in their day to day activities. This small effort of IEEE WIE MJCET has inspired the girl students to pursue engineering as their career.

The Head Master of the school Mr. John Babu thanked the entire team and wished to continue rapport with Muffakham Jah College of Engineering & Technology. We extend a heartfelt

thanks to IEEE Women in Engineering for giving us this opportunity & privilege of promoting women engineers in whatever best way we can. Our sincere thanks to Dr. Kaleem Fatima, WIE MJCET Chapter Advisor, Branch counselor, IEEE MJCET and Mr. Mohd Arifuddin Sohel, Branch Mentor, IEEE MJCET for the constant guidance and support in making this effort successful.

*Zainab Fatima,*

*Vice Chair IEEE WIE MJCET*

*D. S. Pranavi,*

*General Secretary IEEE WIE MJCET*

### Looking for conference & events?

There are a lot of IEEE conferences to be organized in Region 10. Here is the step-by-step instruction to call up all the conferences and events:

1. Please visit the website: <http://www.ieee.org/index.html>
2. Click on the tabs "Conferences and Events" on the top
3. Under "Search Conferences", type in Region 10 Asia Pacific in Location field.
4. Narrow the search by selecting the date range.

Editor

[R10-ecm@ieee.org](mailto:R10-ecm@ieee.org)



## R10 Executive Committee 2013-2014

### Regional Director:

**Toshio Fukuda**

Email: [tofukuda@nifty.com](mailto:tofukuda@nifty.com)

### Past Director:

**Lawrence Wai Choong Wong**

Email: [elewwcl@nus.edu.sg](mailto:elewwcl@nus.edu.sg)

### Director Elect:

**Ramakrishna Kappagantu**

Email: [kramakrishna@ieee.org](mailto:kramakrishna@ieee.org)

### Secretary:

**Hidenori Nakazato**

Email: [nakazato@ieee.org](mailto:nakazato@ieee.org)

### Treasurer:

**Takao Onoye**

Email: [onoye@ist.osaka-u.ac.jp](mailto:onoye@ist.osaka-u.ac.jp)

### Vice-Chair of Technical Activities:

**Takatoshi Minami**

Email: [taka.minami@jp.fujitsu.com](mailto:taka.minami@jp.fujitsu.com)

### Vice-Chair of Membership Activities:

**Darrel Chong**

Email: [dchong@ieee.org](mailto:dchong@ieee.org)

### Advisory Committee:

**Janina Mazierska**

Email: [janina.mazierska@icu.edu.au](mailto:janina.mazierska@icu.edu.au)

### Advisory Committee:

**Yong Jin Park**

Email: [yjp@ieee.org](mailto:yjp@ieee.org)

### Awards & Recognition Committee Chair:

**Kukjin Chun**

Email: [kchun@snu.ac.kr](mailto:kchun@snu.ac.kr)

### Conference & Technical Seminar Coordinator:

**Takatoshi Minami**

Email: [taka.minami@jp.fujitsu.com](mailto:taka.minami@jp.fujitsu.com)

### Educational Activities Coordinator:

**Supavadee Aramvith**

Email: [supavadee.a@chula.ac.th](mailto:supavadee.a@chula.ac.th)

### Electronic Communications & Information Management

#### Coordinator:

**Gowtham Prasad K. N.**

Email: [gowthamk@ieee.org](mailto:gowthamk@ieee.org)

### GOLD Coordinator:

(Position vacant)

### History Coordinator

**Isao Shirakawa**

Email: [sirakawa@ai.u-hyogo.ac.jp](mailto:sirakawa@ai.u-hyogo.ac.jp)

### Humanitarian Activities Coordinator:

**Deepak Mathur**

Email: [deepakmathur@ieee.org](mailto:deepakmathur@ieee.org)

### Individual Benefits & Services Coordinator:

**Michael Ling Chuen Ong**

Email: [ongmichael@i2r.a-star.edu.sg](mailto:ongmichael@i2r.a-star.edu.sg)

### Industry Relations Coordinator:

**Ravikiran Annaswamy**

Email: [ravikiran.a@ieee.org](mailto:ravikiran.a@ieee.org)

### Life Members Coordinator:

**Kunio Tada**

Email: [kunio.tada@jcom.home.ne.jp](mailto:kunio.tada@jcom.home.ne.jp)

### Membership Development Coordinator:

**Darrel Chong**

Email: [dchong@ieee.org](mailto:dchong@ieee.org)

### Newsletter Editor:

**Ruey-Beei Wu**

Email: [rbwu@ew.ee.ntu.edu.tw](mailto:rbwu@ew.ee.ntu.edu.tw)

### Professional Activities Coordinator:

**Hui Zhang**

Email: [zhanghui@iscas.ac.cn](mailto:zhanghui@iscas.ac.cn)

### Section / Chapter Coordinator:

**Elmer Dadios**

Email: [elmer.dadios@dlsu.edu.ph](mailto:elmer.dadios@dlsu.edu.ph)

### Strategic Planning Coordinator & R10 Sections

#### Congress Coordinator:

**Zia Ahmed**

Email: [zia.ahmed@ieee.org](mailto:zia.ahmed@ieee.org)

### Student Activities Coordinator:

**Om Perakash**

Email: [opbatra2kn@gmail.com](mailto:opbatra2kn@gmail.com)

### Student Representative:

**Pasan Pethiyagode**

Email: [pasan.uom@gmail.com](mailto:pasan.uom@gmail.com)

### Women in Engineering Coordinator:

**Takako Hashimoto**

Email: [takako@cuc.ac.jp](mailto:takako@cuc.ac.jp)

### IEEE Asia-Pacific Limited:

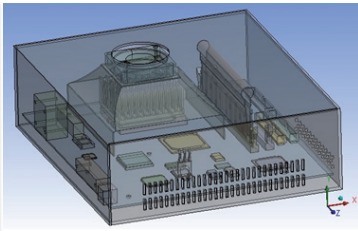
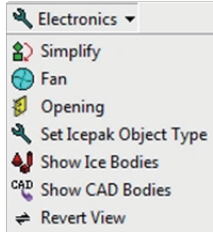
**Fanny Su & Ewell Tan**

Email: [ieeeapo@pacific.net.sg](mailto:ieeeapo@pacific.net.sg)

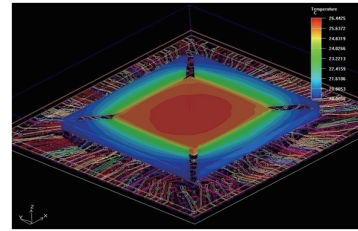
# ANSYS電子散熱解決方案



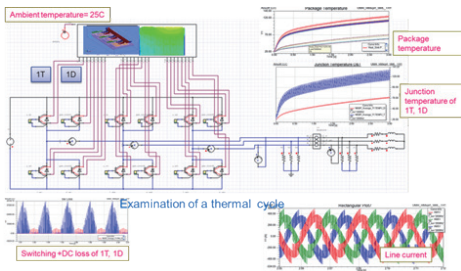
Icepak是專業的電子散熱分析工具。結合專業的MCAD與ECAD工具，Icepak可針對電子設備進行快速建模、仿真。基于ANSYS Workbench平臺，Icepak還可聯合電磁/結構仿真工具HFSS、Q3D、Maxwell、Siwave、Maxwell、Simplorer、Mechanical等進行複雜的多場耦合計算。基于平臺中的HFSS/Q3D/Maxwell/Siwave等電磁場工具，用戶可以準確評估電子設備中的電磁損耗分布，并在Icepak中完成精確的散熱分析，進一步可在Mechanical中獲取熱應力/變形信息。



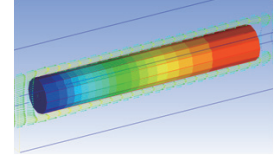
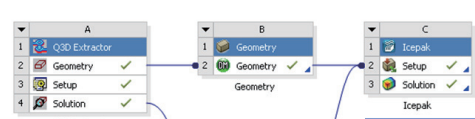
Workbench平臺中的DesignModeler可快速為Icepak導入、編輯複雜的電子CAD模型



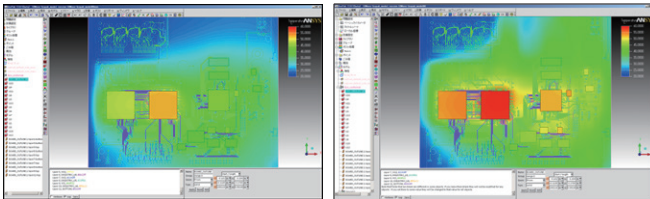
Icepak擁有豐富的ECAD數據接口，可快速建立封裝級、板級熱模型



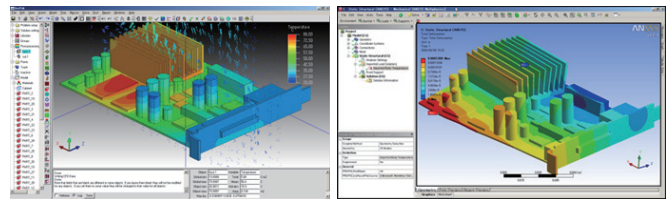
利用Icepak和Simplorer進行複雜的系統級電/熱雙向耦合仿真



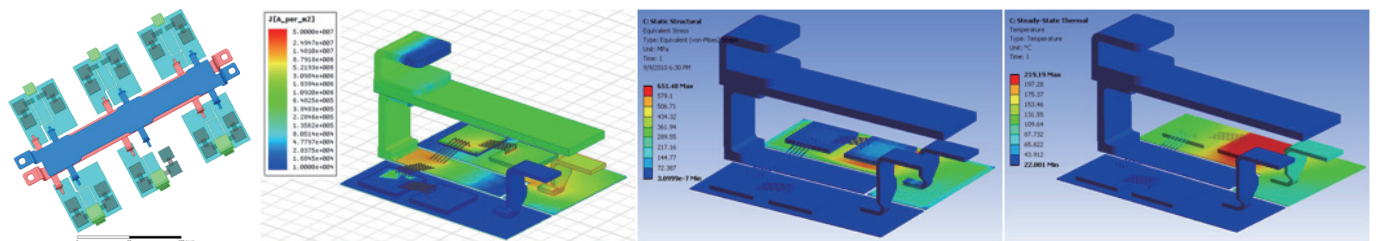
利用Q3D/Icepak進行協同仿真求解強制對流下同軸電纜的溫度分布



利用Siwave將PCB損耗納入Icepak板級熱分析中（右圖）獲得比單純考慮器件功耗（左圖）更準確的溫度結果



Icepak模擬獲得的溫度結果（左圖）可以直接應用于熱應力/變形的計算



IGBT電磁、熱、結構多場耦合仿真

**ANSYS 臺灣**

**Tel: +886-2-2725-5828 #301 Fax: +886-2-2725-5836**

11F, Room B, No. 200, Keelung Road, Sec.1, Taipei, Taiwan, 11071, R.O.C.  
台北市信義區基隆路一段200號11樓B室

如需了解更多，請登錄 [http://www.ansys.com/zh\\_tw](http://www.ansys.com/zh_tw)