



The IEEE Region 10 Student/GOLD/WIE Congress 2011 (R10SC)

The Organisers	4
Messages from IEEE Leadership	5
Prof. Lawrence Wong.....	5
Dr. Peter Staecker.....	5
Dr. Roger Pollard	6
Dr. Lewis Terman.....	7
Dr. Ramalatha Marimuthu	7
Dr. Darrel Chong.....	7
Timothy Wong.....	8
Prof. Takako Hashimoto.....	8
Message from the Dean of Engineering, The University of Auckland	9
Our Sponsors.....	10
The Hosts	11
IEEE New Zealand North Section	11
The University of Auckland	12
The University of Auckland IEEE Student Branch.....	13
The University of Auckland IEEE WIE Affinity Group	14
IEEE New Zealand North GOLD Affinity Group	14
A Summary of R10SC Proceedings	15
Day One.....	15
Day Two.....	15
Day Three	16
Day Four	17
Delegate Articles	18

The IEEE Region 10 Newsletter Special Supplement was proudly put together by:

Dr. Zia Ahmed, Josheel Pranalal, Om Perakash Batra,
Michael Omondi, Hengjie Wang and Chuan-Zheng Lee.

The IEEE Region 10 Student/GOLD/WIE Congress 2011 (R10SC) was a joint event involving Region 10 Student Branches, GOLD Affinity Groups and WIE Affinity Groups. Additionally, this was also the first time that the R10SC has been hosted within Australasia, since its inception in Singapore in 2002. Held from the 7-10 July at The University of Auckland, the R10SC was jointly organised by The University of Auckland IEEE Student Branch, WIE Affinity Group and the IEEE New Zealand North GOLD Affinity Group.

In attendance were 150 delegates from 36 Sections and 15 countries around the Asia-Pacific (Region 10), of which approximately 30 per cent were females. They were joined by 20 industry professionals and 16 IEEE dignitaries from local, regional and global levels of IEEE leadership.



R10SC 2011 attendees with IEEE leadership on day four

The theme of the R10SC was “Emerging Technologies: Realizing innovative ideas that will define a better tomorrow for humanity”, which aligned well with the important new direction for the IEEE, highlighted by its tagline “Advancing Technology for Humanity”. Attendees took part in a diverse programme which consisted of over 80 speaker sessions, these included: professional skills workshops, forums for IEEE volunteers, sessions on career development and panel discussions. Also included were a series of seminars related to the R10SC Theme, “Emerging Technologies”. Such a multifaceted programme encouraged participants to envision the future, and was a delicate mix that stimulated the collaboration of world-changing technologies, and helped set the stage for future leaders to take form.

On a final note, the Organising Committee would like to thank IEEE Region 10 for their tremendous support and guidance, as well as our sponsors ABB NZ, Mighty River Power, Google Japan, INRO Technologies, Microsoft and Schneider Electric NZ - this event would not have been possible without their help.



IEEE R10SC Organising Committee:

Chairman	Hengjie Wang
Vice Chairman	Josheel Pranalal
Treasurer	Amit Pandey
Secretary	Ya-Ting Wang
Sponsorships Director	Lincoln Vaz
Programme Director	Chuan-Zheng Lee
GOLD Director	Noel Gomes
WIE Director	Alisha D'Souza
Creative Director	Alliv Samson
NZN SAC Chair	Dr. Nirmal Nair
Logistics Director	Brenny Wang
Vice-Logistics Director	Niko Uusitalo
I.T. Director	Shaun Blyde

Committee Members

Abdullah Siddiqui
 Abhilash Kamineni
 Grace Cheuk-Wai Huen
 Hanieh Sanei
 Happy Xia
 Ly Nguyen
 Mira Kim
 Nilookie Homer
 Rieke Aucamp
 Sun Kee Hong
 Thuvaraka Thiruchelvam
 Tom Hughes

IEEE Region 10 Advisory Committee:

Professor Lawrence Wong (R10 Director)
 Dr. Darrel Chong (MGA SAC Chair)
 Professor Ramalatha Marimuthu (MGA WIE Chair)
 Professor Kukjin Chun (R10 MA Chair)
 Professor Mini Thomas (MGA MELCC Chair)

Om Perakash (R10 Student Representative)
 Timothy Wong (R10 GOLD Chair)
 Professor Takao Onoye (R10 SAC Chair)
 Professor Takako Hashimoto (R10 WIE Chair)

The R10SC Organising Committee would also like to thank the following for their invaluable contributions:

Dr. Adrian Pais
 Loreen Ozolins
 Peter Kim
 Gladwin Mendez
 Ruchi Vyas
 Chris Park
 Dr. David Budgett
 Shreejan Pandey

Prof. Michael Davies
 Nick Brewer
 Cherie Stevenson
 Ivor Woodfield
 Prof. Allan Williamson
 Imee Tribo
 A/Prof. Enrico Hammerle
 A/Prof. Grant Covic

Laurence Moss
 Karen Reid
 Gareth Williams
 Rebecca Stevens
 Peter Harrison
 Wes Jones
 Tracey Ayre
 Lara Phillips

Dr. Ir Ron McDowall
 Ir G. Richard Gibbons
 Colin Kennedy
 Jeremy Stott
 Dr. Mattias Reumann
 Dr. David Alan Grier
 Dr. Andrew Myles



Professor Lawrence Wong (IEEE Region 10 Director)



The 2011 Region 10 Student/Graduates Of the Last Decade (GOLD)/Women-In-Engineering (WIE) Congress (R10SC) was a joint event involving Region 10 student branches, GOLD affinity groups and WIE affinity groups. It has brought together students, young professionals and seasoned IEEE volunteer leaders in an event that provided excellent opportunities for networking, sharing and learning. Participants were exposed to volunteer leadership enhancement skills as well as topical and emerging technological trends that would influence our global village in the near and medium term. It has been an enriching experience and many friendships have been forged. I congratulate the R10SC Organizing Committee for their dedication, time and efforts in making R10SC a success. In addition, the support and sponsorships from various organizations that has made this event possible are much appreciated.

Regards,
Lawrence Wong
2011-2012 IEEE Region 10 Director

Dr. Peter Staecker (IEEE President-Elect 2012)



The R10SC Student-GOLD-WIE in Auckland was my first opportunity to attend an IEEE Student Congress. Its organization had all the attributes of successful IEEE meetings: strong and dedicated industrial and academic sponsorship, and energetic volunteer presence. At the same time, the 4-day meeting featured a full and diverse topical program designed to forward the discussions of continuing matters of importance to the Congress delegates, as well as significant and relevant professional and technology tracks of interest to all attendees. The Congress more than fulfilled its role in continuing the conversations in areas of mutual interest, while expanding those areas to GOLD and WIE participation. My feeling at the end of the meeting was that I had missed important presentations due to a selection of parallel sessions (and perhaps jetlag?), and I hope that the organizing committee will be able

to provide selected videos and or presentations to make the delegates' and participants' experience more complete. (The organizers' task begins well before the meeting takes place, and continues well after the meeting is finished.©)

Of particular interest were the opening messages from the industrial and academic sponsors:

Grant Gillard, Managing Director of ABB NZ (Principal Sponsor), had suggested a joint advert: "If you want a very good experience and you want to work for a great association, work/volunteer for... ABB/IEEE."

Michael Davies, Dean of Engineering at The University of Auckland, stated that "The Faculty of Engineering is committed to creating an environment where people thrive and contribute to improving the quality of life in national and global communities, as well as enhancing the wealth creation of the nation, through excellence in teaching, research and service."

Then, in a spirit of collaboration, organization, and a bit of "cattle herding" techniques, the students, women, and GOLDies led us through the program: professional skills workshops, regional briefings, WIE and employer forums, emerging technologies, IEEE breakouts, topical panels, humanitarian technology, and more... Good food, great friends, and lots of pictures!



In the end, this Congress was about and for the student community and its close affinity to WIE and GOLD: We saw here the future technical leaders of the world – who through meetings like this are increasingly empowered to transform our lives and values to something greater than what we have. IEEE owes YOU, the members of its student community, access to the experiences and tools to prepare YOU for life's professional challenges. At the end of the Congress, the students gave feedback to Local, Region, and IEEE leadership on requests for change. Let us discuss, listen and work together to implement the most relevant of these suggestions for the next R10SC.

Best regards,
Peter Staecker
IEEE President-Elect 2012

Dr. Roger Pollard (IEEE President-Elect Candidate 2012)



The role of IEEE – making the world better.

The IEEE tagline “Advancing Technology for Humanity” should make you think about the role of IEEE and the way in which the various groupings contribute. We have to recognize the specific geography as well as the social and political environment into which new technologies are deployed. The benefits offered by IEEE and the value of IEEE membership are different depending on the member's career phase. Take a look at <http://www.ieee.org/benefits> to see which benefits might be most relevant to you depending on where you live and your current career point.

It is vital that IEEE services and products cover the full breadth of the lifecycle, supporting industry and our members at every stage. The role of IEEE is to facilitate - to help people accomplish their own goals. An important part is about helping our members to develop as professionals. We must continue to increase the involvement of our student members; they are the future of IEEE and provide the energy for the growth and renewal of our organization in the future. IEEE offers student members the best network of peers, academics and professionals of any technical professional society in the world. It is vital that student members are consulted and involved in all aspects of the development of IEEE, its products and services.

Important elements of IEEE life are the two major subdivisions – the *Regional*, with its focus on local activities, professional development, networking, etc. and the *Technical* with the principal emphasis on the discipline and technology. Always the emphasis is on community – technical and local. Nowadays, the average engineer will have seven employers during a career; s/he may not be in the same place or working in the same technology. IEEE is the global common thread providing the professional home in both the diverse technical space and geography. Together we all need to make this work for our mutual benefit and to make our diversity an asset. We need flexibility as we change technology or location to look at what we have to offer and make connections with others.

Our tagline also reminds us of our social responsibility as engineers and technologists. This can be negative, meaning there is a responsibility to refrain from acting in any way that may do harm or it can be positive, meaning there is a responsibility to act for the benefit of society. Within IEEE we can view it as being applied to the manner in which IEEE conducts its own operations or as an object of its mission. We can help our members be more socially responsible within their own communities, and the world. Examples are: developing databases of member activities to facilitate networking; sharing best practices of members through conferences and publications; aiding member selection and solution of some of the high-profile grand challenges important to society; helping members select the most worthy causes for their financial contributions; and the IEEE initiative to increase public visibility of member efforts. Ultimately, it's all about teamwork – we're all one IEEE!



Dr. Lewis Terman (IEEE President 2008)



Once again, the Region 10 meeting for students, GOLD and WIE members was quite successful. It provided a great opportunity for the attendees to meet and network with people from all around Region 10 and elsewhere, people they would likely not meet otherwise. It also provided an opportunity for them to learn about the IEEE, to get their questions answered, and to make their needs and concerns heard. I really enjoyed meeting the attendees and the organizers and was greatly impressed by their enthusiasm and effectiveness. Congratulations to all involved.

Lewis Terman
IEEE 2008 President
IBM Research Emeritus

Dr. Ramalatha Marimuthu (IEEE WIE Chair 2011)



The Region 10 IEEE has crossed another milestone – the organizing of the Region 10 Student/GOLD/Women in Engineering Congress at Auckland in July 2011. I am thankful to the organisers of the congress for inviting me and providing me an opportunity to network with the students as well as professional members of IEEE in our region. I had a great time talking with our volunteers and planning future activities and strategies for improving the member value. The enthusiasm of the volunteers was overwhelming and encouraging and it will go a long way in improving the relationship between the sections and the region. It was heartening to have follow-up from the volunteers and I am sure the tradition will be continued to encourage the volunteers.

And I am proud to say that Region 10 has proved unique in organizing frequent Women in Engineering Congresses and showing phenomenal growth in number of affinity groups, membership as well as in introducing novel programs and activities and more importantly in receiving Women in Engineering awards. Region 10 Sections and Student Branches have been receiving Affinity Group of the year award consecutively from 2008. I am grateful to the volunteers who made this possible and assure them that I will not hesitate to assist in any activities to the best of my capacity. I also request them to keep reporting their activities and applying for awards.

With my best wishes,
Ramalatha Marimuthu
Chair, IEEE Women in Engineering Committee
Chair, Madras IEEE Women in Engineering

Dr. Darrel Chong (IEEE MGA SAC Chair 2011)



Organizing an international congress is a rare opportunity. If done well, the process develops one's character and ability to manage larger things in life.

We are given many opportunities in life. Most of them come once a lifetime. We should always take hold of each and ask "what can I make of this", and "how can my involvement make someone else's life better"? I hope the 2011 organizing committee had benefitted much from the journey as much as the delegates have experienced a tremendous experience gaining a glimpse of the IEEE.

Seeing every successful completion of a R10 Student-related congress is a joy to me. It brings sweet memory to me on how my team in the National University of Singapore (NUS) had gone beyond uncertainties to put together a very successful inaugural R10 Student Congress in Singapore, 2002. Then, the congress was attended by 60 delegates and graced by the Past President of the IEEE (1996), Dr. Wallace Read. I thoroughly enjoyed his opening address and two days open



conversation he had with the student volunteers. I recalled that Cecelia Jankowski, Managing Director of MGA was also there (by chance). 10 years down the road, we catch up with each other at IEEE events like old friends. The entire congress experience - networking, training, industrial visit, brainstorming, going around Singapore - was so good that my IEEE committee in NUS wanted to extend their term of office at the Student Branch! I was amazed at the energy and enthusiasm that a global event and a job well done could bring. I hope this spirit of excellence, learning, and teamwork will continue as we see future student branches bid to organize the R10 Student/WIE/GOLD congress. Remember. Keep an open mind, and be willing to learn.

To all student volunteers who reads this, I want to encourage you to consider bidding for the 2013 R10 Student/WIE/GOLD congress. Even if you are a section leader, you can influence and encourage your Student Branches to consider this opportunity. Trust me. A job well done together with friends and fellow colleagues offer you sweet memories that stay with you forever.

My closing note to the student volunteers - keep your spirit of excellence. Continue to ***strive for the best, with a good balance***. This attitude will see you through your university days, family, and working life.

Darrel Chong, PhD
IEEE MGA SAC Chair, 2011-2012
IEEE R10 Secretary, 2011-2012
www.ieee.org/students

Timothy Wong (IEEE Region 10 GOLD Coordinator)



This year, the second joint Region 10 Student, Graduates Of the Last Decade (GOLD) and Women in Engineering (WIE) Congress marks another significant achievement for Region 10. Typically, IEEE Student, GOLD and WIE members do not have an opportunity to collaborate, learn and network off each other all in one place and at the same time. With the current dynamics of our IEEE membership base and the importance of continuity between Student and GOLD membership, this joint event has been really important for ensuring that our volunteers are equipped to serve our Student Members before and after they graduate.

I would like to congratulate the congress organisers, attendees, industry and IEEE Region 10 support for making this event a great success. I have no doubt that this event has energised our Young Professional members and volunteers and resulted in many friendships and collaborative partnerships being established.

Timothy Wong
Region 10 GOLD Coordinator

Professor Takako Hashimoto (IEEE Region 10 WIE Coordinator)



As R10 Coordinator, my heartiest thanks to all the organizers for holding the R10 Student/GOLD/WIE Congress. Moreover, I would like to express my sincere gratitude for the participation of a lot of WIE members from various R10 WIE groups.

As you may know, R10 is the most emerging and active region within IEEE. Especially the activities of R10 WIE have been highly evaluated within IEEE.

However, still a lot of problems remain for the women to take active role in the field of engineering. Particularly in the Asia Pacific region, women's outside activity is not encouraged by feudal mindedness and conservative regional limitations. Change of mind is quite crucial, but it has not been achieved yet. In this situation, it is very important for us, women engineers, to build network and cooperate with each other for opening up of our career and contribution to the society.



In the congress, there were excellent presentations, useful/lively discussions among WIE members. I've been fully convinced that through the R10 WIE Congress, WIE members could strengthen our bonds, share issues, improve our empathy and understand each other.

The outcome of the R10 WIE Congress has influenced R10 WIE and all participants can extend the activities globally as R10 WIE members.

Thank you again, and I hope I can see you again sometime soon.

Takako Hashimoto, Ph. D.
Coordinator, IEEE R10 Women In Engineering

Message from the Dean of Engineering, The University of Auckland

Professor Michael C. R. Davies (Dean of Engineering, The University of Auckland)



I was delighted by the Auckland IEEE Student Branch being presented with IEEE Student Branch awards for both 2010 and 2011. The award of the top Student Branch in 2011 is a reflection of the professional way in which The University of Auckland IEEE Student Branch contributed to the success of the Congress as well as their other activities.

Many thanks.

Professor Michael C.R. Davies FRSE

Dean of Engineering and Head of Tāmaki Innovation Campus
The University of Auckland



Principal Sponsor:

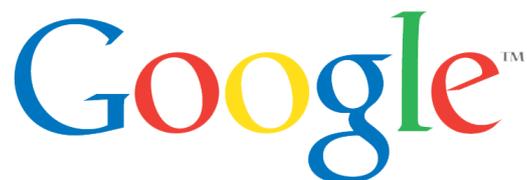


Power and productivity
for a better world™

Diamond Sponsor:



Platinum Sponsors:



Gold Sponsor:



The IEEE New Zealand North Section

The vision for IEEE New Zealand North (NZN) Section is to be a leading technical society for engineers & scientists involved in electro-technology and/or information technology in New Zealand. The Section provides members with access to high quality, current and topical technical information in the following forms:

- Lectures and Short courses
- Workshops and Symposiums
- Hosting Conferences and Congress

The Section also provides members with selected opportunities to enhance their professional development and careers through access to:

- Courses, workshops and seminars on professional, business and legislative topics
- Expanded electronic resources/database
- Professional networking

The IEEE NZN Section works together with other leading technological societies within New Zealand and Australasia to meet the above aims. On an on-going basis the Section aims to provide a high quality annual programme of technical events. The Section actively facilitates the following:

- Foster current student members and promote student events
- Aim to broaden the committee representation with members from related institutions and industries
- Encourage student members to become GOLD members, and promote GOLD activity
- Foster Student Branch formation in each related institution
- Foster activities of the WIE affinity group

Message from Section Leadership:

It has been a great privilege for the New Zealand North Section affinity group volunteers to get the opportunity to host the 2011 IEEE Region 10 Student/GOLD/WIE Congress here in Auckland. We would like to take this opportunity to thank every delegate who came to this beautiful country and got to enjoy some 'kiwi' hospitality, while experiencing an exciting and well-balanced program of activities. We believe that the theme of this joint Congress, *"Emerging Technologies: Realizing innovative ideas that will define a better tomorrow for humanity"* captures the essence of the vision and focus of IEEE for the future. It definitely embodies the spirit of the IEEE tagline "Advancing Technology for Humanity". IEEE in New Zealand has come a long way since its genesis in 1968. The formation of the IEEE New Zealand North Section in 1979 has been followed by a steady growth and consistency of membership activities. We continue to this day the established spirit of volunteerism and active engagement by our section and affinity group leadership towards all its membership. It is in this tenor that we wish that all of you enjoyed a great Congress and hope that your participation and interaction experiences here left you with wonderful memories for the future.



From right to left: Dr. Nirmal Nair, NZN SAC Chair and Student Branch Counsellor, Noel Gomes, NZN GOLD Chair and Tom Hughes, NZN GOLD Vice-Chair

The University of Auckland



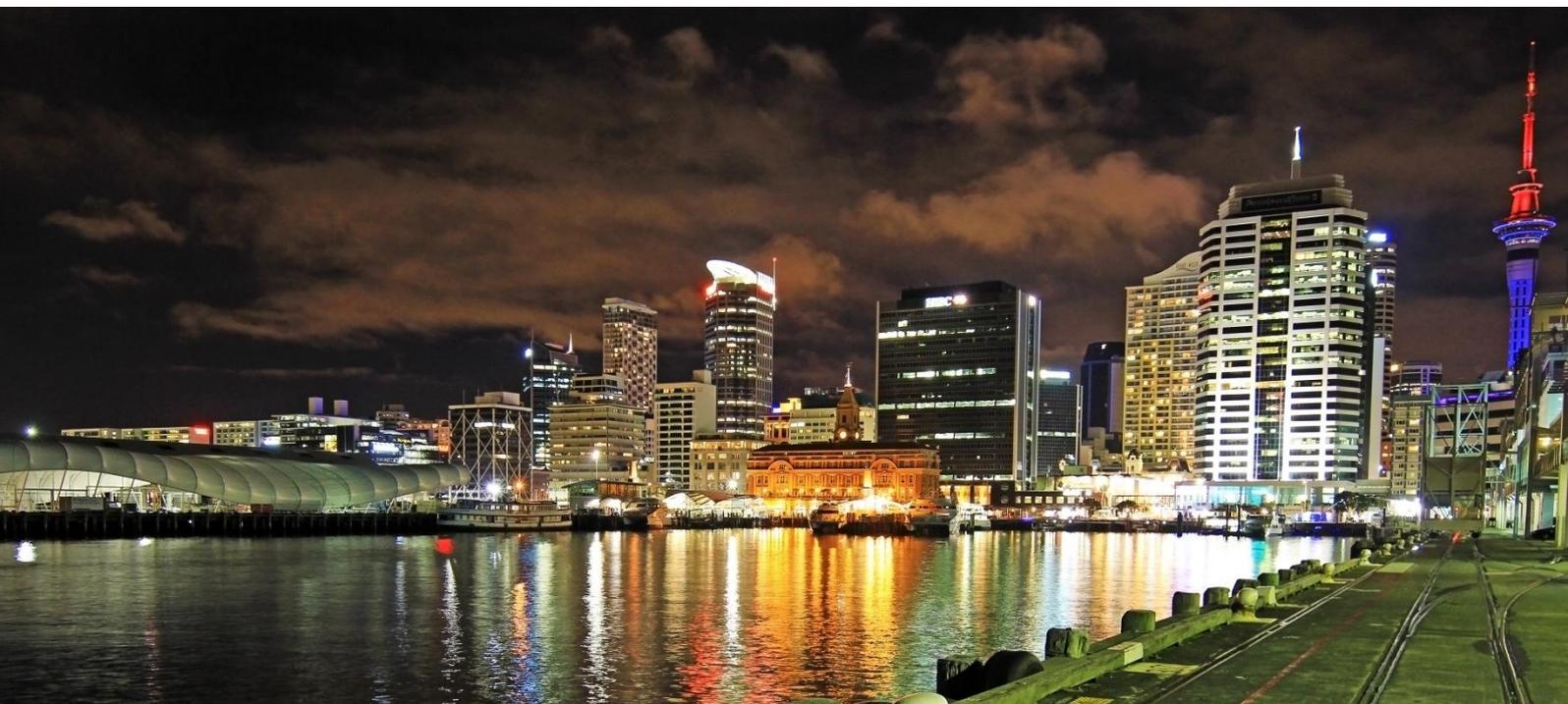
The University of Auckland is New Zealand's leading university and the largest with 41,000 students and 4700 staff on five campuses. It offers the most comprehensive range of courses and has a strong focus on quality with selective entry to all programmes.

Auckland is the only NZ university ranked among the world's top 200 universities in the Times Higher Education World Rankings. It is also the highest ranked New Zealand university in the QS World University Rankings and the Shanghai Jiao Tong Academic Ranking of World Universities.

There are eight faculties and two large-scale research institutes, along with unique opportunities for interdisciplinary studies and conjoint degrees. Auckland also has the biggest graduate school in NZ, the largest annual number of postgraduate research student completions and the highest level of research income. Its research commercialisation company, Auckland UniServices Ltd, generates more than \$NZ120 million per annum in income.

Close to 5000 students from more than 90 countries study at The University of Auckland. Its Auckland Abroad Student Exchange programme allows NZ students to spend one or two semesters at one of the University's more than 90 university exchange partners around the world.

The University's location in NZ's major business city enables staff and students to rub shoulders with leading practitioners in their field, and engage in collaborative research. Medical students work alongside leading specialists at Auckland City Hospital while the Faculty of Law is within walking distance of the courts and major legal firms. The Business School has a close relationship with leading Auckland companies, and academics from the Faculty of Engineering, School of Population Health and School of Architecture and Planning serve on think-tanks helping to shape the city's future.



The University of Auckland IEEE Student Branch

The University of Auckland IEEE Student Branch is one of the largest and most successful Student Branches in Region 10. With a history dating back to the 1980s, The Student Branch had a renaissance in 2002 led by then-Chair Adrian Pais. It has since grown to well over 200 members, is a two-time recipient of the Region 10 Exemplary Student Branch Award (2008 and 2010) and recently won the Region 10 Outstanding Student Branch Award for 2011.

Dr. Nirmal Nair, The University of Auckland IEEE SB Counsellor since 2005, remarks that the Branch has come a long way in terms of strategic and sustained growth and for the quality of activities it offers to its members. He is particularly delighted with the fact that the Branch has served as a wonderful incubator for leadership amongst its Student Branch volunteers. Our membership consists of students studying Computer Science, Electrical, Software, Computer Systems and Mechatronics Engineering, and we have expanded in 2011 to also encompass Biomedical Engineering and Engineering Science.

The Student Branch Executive Committee, both past and present, have worked hard and deserve commendations under the leadership of 2009-2010 Past Chair Chuan-Zheng Lee and current Chair Hengjie Wang. We'd also like to thank those whom, at the beginning of our Branch's long history, have created the foundations of which our Branch has built on top of – Past Chairs Adrian Pais, Abhinabh Duffadar, George Gordon and their respective teams. Also, all Branch members deserve a big thank you for supporting and attending our events and contributing to the Branch's success.

Our Student Branch offers many local activities for its members. Its flagship event, the annual Practice Interviews, sees members have mock interviews with real industry representatives, and earned the Student Branch the Darrel Chong Student Activity Award in 2008. It also organises an annual job skills seminar, quiz night, indoor soccer tournament and various field trips to industry, including trips to see the communications equipment at the top of Auckland's foremost landmark, the Sky Tower. Its members have keenly participated in IEEEExtreme; in both 2009 and 2010 its contingent of fourteen teams was among the largest in the IEEE, and in both years one of its teams plucked out the second place in the entire world!

As well as catering locally, the Student Branch also has a proud history of commitment to international activities, with past chairs taking an active role. 2007–2008 Chair George Gordon brought GINI to New Zealand after its launch at the 2008 Chennai R10SC and 2009–2010 Chair Chuan-Zheng Lee played an influential role in discussions at the 2009 Singapore R10SC that would lead to the inaugural IEEE Australia and New Zealand Student Congress (ANZSCON). The current GINI Co-ordinator for Australia and New Zealand, Amit Pandey, is also a volunteer from The University of Auckland Student Branch.

Our Student Branch believes that the true benefit of IEEE membership is the insight we get into what it means to be a professional engineer. From professional skills such as interviews and CVs, to keeping up-to-date with the latest advances in engineering research, to networking widely with others in our field, the IEEE is able to provide what is beyond the core objective of a university degree. It is this attitude that has driven The University of Auckland Student Branch's successful programme, and it is this vision that made us excited hosts of the IEEE Region 10 Student/GOLD/WIE Congress 2011.



For more information about the Student Branch, please visit <http://ieeesb.auckland.ac.nz> or email us at sb.auckland@ieee.org

The R10SC Organising Committee, primarily consisting of University of Auckland Student Branch Committee members

The University of Auckland IEEE WIE Affinity Group

The Auckland IEEE Women in Engineering Student Affinity Group was formed in March 2006 under the IEEE New Zealand North Section. Currently involving budding female technical professionals in the fields of Electrical, Software, Computer Systems and Mechatronics Engineering, we are looking to expand our reach to that of the Computer Sciences as well as Biomedical Engineering and Engineering Science.

Our WIE affinity group (AG) is actively involved in organising and running successful field trips, interactive networking sessions and seminars. Our calendar engages our members from different backgrounds to meet and gain insight from each other; they thrive on the opportunity to network and share experiences with leaders in their respective fields.

This year the WIE AG has developed pro-active initiatives to improve participation and retention rates of women in areas that are currently under-represented. By mobilising teams to speak at schools in our city, Auckland, we hope to give female students a better understanding of what a global technical organization like the IEEE. We hope that as hosts we were able to create a stimulating environment in which students, young professionals, dignitaries and women in the industry are able to explore ideas surrounding the IEEE and emerging technologies.

IEEE New Zealand North GOLD Affinity Group

The IEEE Graduates Of the Last Decade New Zealand North Affinity Group (AG) has approximately 100 electrical, electronic or computer engineers. With a reach covering the upper North Island, we are one of the most recognised, leading and active affinity groups in the Region 10.

Our GOLD AG has run a successful programme that enables excellent career development opportunities with events that include a mix of technical, non-technical and social networking events.

Our main events for the past year comprise of technical events like a day-long field trip down to Nga Awa Purua geothermal power station in Taupo and a site visit to a modern CBD installation and non-technical events for professional development which include inviting a renowned international speaker to conduct a leadership workshop for our members.

On the networking front, we have organised social events at local restaurants and initiated connections with The University of Auckland and Auckland University of Technology Student Branches. Further social activities include rock climbing and movie outings.

This year for the first time ever, our affinity group was nominated for the GOLD Hall of Fame Award. This puts us in the top 3 best performing AG's for the year out of 20 in the Asia Pacific region. This is a significant achievement for IEEE in New Zealand and recognises our on-going contribution to the IEEE.

We believe our ability to organise and successfully run a variety of quality events that foster professional development has earned us the recognition within the region. We hope that we provided a Congress that is memorable and provides true opportunities to showcase the IEEE, emerging technologies and New Zealand's innovative spirit.

For more information on the New Zealand North GOLD Affinity Group, please visit

<http://www.ieeenzn-gold.org>



Day One

Once delegates were all registered, the R10SC began with a well-spoken round of welcome addresses by key individuals. The opening address was given by the R10SC Chairman, Hengjie Wang, followed by the New Zealand North (NZN) Section Student Activities Chair, Dr. Nirmal Nair. Region 10 Director, Professor Lawrence Wong and R10 Student Representative, Om Perakash then also shared their views on the importance and impact of such Congresses as the R10SC. In addition, Grant Gillard, Managing Director of ABB (R10SC principal sponsor) and Professor Michael Davies, Dean of Engineering at The University of Auckland, gave their outlook on where the wider engineering profession stands in relation to the IEEE. After a briefing from the R10SC Programme Director, Chuan-Zheng Lee, delegates and dignitaries then split off into various professional skills workshops.

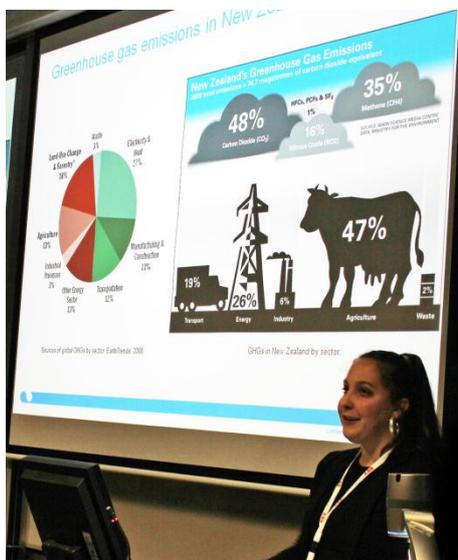


Dr. Nirmal Nair's welcome speech

There were three professional skills workshops, where one covered Leadership, another Project Management and the third was a webinar by Dr. David Alan Grier on "Technology and the Public Sphere". Additionally, some delegates opted to visit the Vector 'House of the Future' – showcasing exciting upcoming technologies that will change the way we live.

Day-time networking opportunities were complemented with a range of after-hours social activities. Overall, this was a key component in the forging of many friendships. The first night had everyone take part in a 'Bingo game', where everyone found out interesting facts about others, a Barbeque dinner – in true Kiwi style and a 'Quiz Night', where mixed teams competed to answer the most number of questions correctly. Some of these questions were quite challenging, humorous and others encouraged teams to think outside the box! Quiz questions were aimed at the global audience, with questions on geography, politics, the IEEE as well as current technologies.

Day Two



Lara Phillips talking about the impact of emissions trading on emerging technologies

Day two brought a focus on what was currently happening in the IEEE and technology spheres. Briefings from key individuals from IEEE Region 10 Leadership explored the current situation around the region in terms of Student, GOLD and WIE activities, and current issues that are being faced. IEEE Geographic and GOLD/WIE Forums then allowed Student Branches and GOLD/WIE Affinity Groups to discuss issues pertinent to their respective areas. Delegates learned what others had found to be successful or not successful in terms of running their respective IEEE units. Additionally, this was an invaluable opportunity for geographically close groups to share ideas for future collaboration.

“It was great to meet other volunteers, share our issues and learn new methods for our own groups.”

This was then followed by the Emerging Technology Seminars – a series of four parallel tracks consisting of 20 sessions. Topics covered included: Smart grid and its applications, the product design process, Auckland-based bioengineering research into modelling and powering artificial hearts, robotic automation of forklifts, the theory and reality of standards, the novel Inductive Power Transfer technology



and its applications, topics on renewable energies, mechatronics as well as cloud computing.

After a day of IEEE briefings, geographic forums and emerging technology related sessions, day two ended on an exciting note with the long-anticipated Congress Dinner. Delegates and dignitaries dressed-up and enjoyed a buffet-style three course dinner on a floating restaurant. Amidst the photo-taking, eating and networking, this was also the time where the various Region 10 SAC awards were presented. Congratulations once more to all prize winners and their respective Student Branches and Sections. Furthermore, a host of delegates and special guests stayed behind after the dinner and subsequently got to sample Auckland's nightlife.



Cake-cutting ceremony at the Congress Dinner

Day Three

Day three hosted sessions on a number of IEEE related activities and units, such as GINI, GOLD clustering, the IEEE Foundation and other IEEE Humanitarian groups. They were then followed by a series of panel discussions on topical engineering issues: "Do intellectual property rights encourage or inhibit emerging technologies?", "Should the engineering profession be more vocal in public policy?" and "Can innovation in technology solve sustainability?"

"It was a great experience being able to socialise with many cultures at the same time."

Followed by a Delegates' Forum and sessions on career development, attendees set up their stalls for the Cultural Night – where attendees from different countries showcased and celebrated their diversity. An exciting and energy-filled night, those in attendance shared gifts, cultural dances, national anthems and even got to watch a Sumo wrestling match.



Day Four

Looking forward, day four set the scene for where the IEEE and technology may be heading in the near future. Sessions that involved President-Elect Candidate Dr. Peter Staecker, MGA Vice-President Dr. Howard Michel, and IEEE R10 leadership allowed delegates to give feedback for requests for change. Group photos then captured the relationships that had been forged over the last few days, and with the closing remarks came a round of appreciation for the organisers at the end of formal proceedings.

Delegates then collected their R10SC T-shirts and certificates – after which a group of delegates went on a tour that was put together by the Organising Committee. Those that remained behind enjoyed the remainder of their stay (some even went sightseeing around New Zealand) with their newly found friends, walking away from The University of Auckland with smiles and bright visions for the future.

The Organising Committee would like to extend their personal thanks to everyone who came and participated, we wish that you build upon the friendships forged here in Auckland and that you use your experiences as a pillar for your own professional growth.

“The sessions were highly informative and educational. The opportunity to interact with such learned speakers and personalities was indeed more than we could have hoped for.”



Aryo De Wibowo M.S.

Summary of Experience

One of the most important experiences during the Congress is that I was able to make friends with many delegates of Region 10. After coming back to Indonesia, I sometimes get in touch with some of them through E-mail and Facebook. Of course, I made friends with all delegates and now we have got into contact with each other.



Though we always speak Indonesian and rarely get in touch with people from other countries in Indonesia, I have got to know people of various nationalities and various cultures in Auckland. In particular, I was able to make friends with delegates of Korea and Japan.

Participating in this Congress, I learned about other Branches' activities which I did not know about beforehand, and compared our Branch activities against theirs. I found that our Branch is not as active, so I thought we that we should become more active like other Branches.

The IEEE Region 10 Student/GOLD/WIE Congress provided unique and unprecedented opportunities for some of the most qualified students in the world to get to know each other and a number of eminently respected and influential leaders of the IEEE. The event was made more special with the presence of dignitaries like Prof. Lawrence Wong (R10 Director).

Things and issues learned

In Indonesia a large issue for us is recruiting new student members, mostly because of financial problems.

The presentation at the Leadership Training Workshop was the most valuable experience to me. In this workshop, I learned how our Branch should play an active role and how I should take an active part as a leader in our Branch.

Finally, thank you all delegates and the IEEE Region 10 Student/GOLD/WIE Committee.

Best Regards,
Aryo De Wibowo M.S.
Chair, IEEE Institut Teknologi Telkom

Hui Zhang – IEEE Region 10 Student/GOLD/WIE Congress Experience

It was a great opportunity for me to attend the IEEE Region 10 Student/GOLD/WIE Congress in Auckland, New Zealand, from the 7th – 10th of July 2011. As an attendee, I believe that this congress achieved great success and I really appreciate the organizing committee providing a great communication platform for us. It is the first time for me to realize that there are a lot of volunteers around R10 who think about the same things as I do, and they are trying to motivate the IEEE activities in their school. The ideas about working together, bureaucracy free, and advancing technology for humanity suddenly made much more sense.

During the congress, I met Prof. Takao and other members of SAC, and made a lot of friends. Everyone had specific characters, however, they all have the same passion for their engineering career. Talking to highly motivated volunteers from different countries, different areas, and different schools, I learned more information about IEEE, new ideas about activities, and developed a new picture of IEEE.

Some volunteers get involved with IEEE from college and keep volunteering after graduate. A touching sentence I heard: “what can IEEE do for me, what can I do for IEEE”. During the congress, I also met many volunteers that were undergraduate students. I think that it is admirable thing to start career or journey with IEEE as an undergraduate student with their energy and enthusiasm. Most of student members in China are graduate students and a lot of people do not realize that the compelling reasons to join IEEE include opportunity to volunteer and participate. In my opinion, IEEE could be the bridge between undergraduate students and engineering, providing direction and guide.



For the next year, I will try my best to motivate the development of IEEE Student Branch in my school, and volunteer in GINI to improve the networking between schools.

I believed that there are some things we should do, e.g., improving the volunteer experience by providing better training and mentoring, increasing the publicity, increasing communication, and breaking the communication barrier between people.

Regards,
Hui Zhang

Dr. Mahesi B. Dissanayake

IEEE Women in Engineering Activities at the IEEE Region 10 Student/GOLD/WIE Congress Auckland 2011



IEEE WIE is an IEEE society which discusses the issues faced by women in Engineering and Science disciplines of around the world. The main focuses of the R10 Congress 2011, WIE sessions were on the bottlenecks faced by women engineers and students in terms of gender imbalance and career development. The corresponding sessions made the delegates aware of the common issues faced by developing world countries, especially where the society looks negatively on women in careers in engineering and science discipline and the steps taken by the regional WIE chapters to overcome these identified problems.

The WIE panels discussed the lack of female role models in the field of Engineering and Science areas, and the peer and society pressure faced by prospective engineering students and the lack of moral support provided to them by society. Also, the delegates expressed their opinion on career development related obstacles associated with women in engineering work environments, especially when they are trying to balance their career with family life. Further, the representatives discuss about the means and measures taken by their corresponding countries to strengthen and encourage young female students to take on careers in the fields of engineering and steps taken by them to educate the parents on the importance of science educations in modern days.



Since the IEEE WIE chapter is not established in Sri Lanka yet, the sessions gave me a good insight to the issues faced by females in the engineering disciplines. Also, it gave me a common ground to discuss the problems faced by Sri Lankan Women in Engineering and a better opportunity to bring these issues to the attention of the world wide arena. It further made me aware of the hardship faced by the older generation of Women in Engineering and their courage, dedication, commitment for bringing the Women in Engineering to a level, where today a young girl can take on the path to become a Women Engineer with ease.

Kind Regards,
Dr. M. B. Dissanayake.

Srikanta Patanjali

A report on the visit to R10 Student Congress at Auckland, New Zealand

It all started as a chain mail regarding the sudden drop in the airfare to NZ and before anyone could realize there were more than 15 delegates who took off from the City of Gardens, Bangalore on the same date. With a 13hr long flight, it gave us a perfect start to interact with other IEEE members and sync up with individual agenda for the Student Congress.

A long & tired journey didn't stop us from exploring the beautiful 'City of Sails', Auckland. Auckland is a fantastic place with great bunch of people. Losing your way is next to impossible here with help around the corner everywhere. Its calm nature in the day leads to a very vibrant night life with plenty of pubs around. Its landscape and multi-cuisine food helps us to keep us full and energetic. Exploring the city with the fellow IEEE members just added to the whole fun.

Before the Congress some R10SAC members were invited to the dinner hosted by Om and Prof. Takao at the soothing 'Oh! Calcutta' restaurant. The dinner was followed by a fruitful discussion on IEEE student activities in R10 and status quo of many initiatives taken in this region. This was also a great chance to catch up with other R10 SAC team members.

The Congress started off with a good note with half a day sessions on topic which were relevant to the young members. The evening's ice breaker saw many of us getting introduced to IEEE Members from other countries and the thus the IEEE network began to grow. The second day had lot to offer in terms of parallel tracks with GOLD session being on my agenda. It was a good experience to share the stage with successful GOLD affinity groups in R10 where we exchanged the best practices followed. The third day was the busiest day with sessions on GINI and numerous meeting with delegates from other countries. This was followed by the Congress Dinner. This happened on the breathtaking Floating Pavilion. Most of us spent the night roaming around the city experiencing its active night life. Our flights were scheduled on the noon of 4th day and we bid farewell to our fellow delegates with the congress t-shirts and lots of good memories of the city!



One of the long-night walks where IEEE delegates met near the water front.

Finally I would like to thank R10 through Prof. Takao & Om for helping us get the sponsorship to attend the Student Congress without which participation in the congress would not be possible.

Regards,
Srikanta Patanjali

Yusuf Walter Zakari – The Kiwi Experience

Alumni of Curtin University Sarawak Campus, I graduated in July from the Dept. Of Electrical and Computer Engineering with a BTech in Computer Systems and Networking, then I volunteered as the IT head of IEEE.

I am currently Interning with DTMF Networks Sdn Bhd in Malaysia as a System Administrator and broadening my understanding of IEEE GOLD

It started with a 9 – 10 hour flight (longest straight flight ever for me), not knowing what to expect in Auckland, but expecting the best. The IEEE Student/WIE/GOLD event was definitely a meeting of great minds. I was challenged, motivated and most of all made a lot of friends. Below are a few things amongst others that caught my attention.

In 'Career transitions and decisions' by Ir. G. Richard Gibbons GM Linetech Consulting Ltd, he spoke about Career Transition with points that stuck with me. They included:

- Who are you
- Know your personality –e.g. Myers Briggs analysis
- What will you be happy doing?
- What's driving you?
- Generalist vs. Specialist – which he spoke about reading wide if you want to be a generalist and streamline if you intend to be a specialist.
- Understand others!

I was also fortunate to listen to Leadership Opportunities for Young Engineers by Shreejan Pandey where he spoke about his experience discovering himself through relating with local communities in Nepal. A lot of things sharpened our ideas and outlook on life. Being adventurous redefined him, listening to him made me ask myself a question: "what is my motivation?" I thought I already knew the answer.

Furthermore, the sessions on Humanitarian Technology amongst others gave me more insight into being part of community projects and affecting other people positively. Experiences shared by Dr. Adrian Pais and his team definitely gave me a shove in the right direction.

Here are some links I got to know for the first time at R10SC, and they have been guiding my knowledge on humanitarian activities since my Kiwi Experience: <http://humanitarian.ieee-elearning.org/>, <https://www.engineeringforchange.org/home> .

Finally, I would say I was happy, made a lot of friends and was highly motivated in Auckland to get involved, be more focused and professional. For me it was more than an event; it was a re-awakening.

Regards,
Yusuf Walter Zakari



The chart above further explains Ir. G. Richard Gibbons' slides

Kasun Chamika Sirimanna

My Experience of the IEEE R10 SWG Congress 2011

The Region 10 Student, GOLD and WIE Congress (R10SC) is the largest IEEE event for students and young professionals in the Asia-Pacific region. The Region 10 Student Congress was first held in 2002 in Singapore, attracting 57 delegates. The event has since been held in Hong Kong (2004), Beijing (2005), Chennai (2007) and Singapore (2009). In 2011, this prestigious event was held at the University of Auckland, New Zealand.

I attended this Congress as a student representative from the IEEE Student Branch, University of Moratuwa. There were three delegates from Sri Lanka. Lalintha Gayan Polpitiya and Dr. Maheshi Dissanayaka were the other delegates from Sri Lanka

Day 1:

The very first day was scheduled for opening speeches. IEEE Region 10 Director Professor Lawrence Wong and Student representative Om Perakash Batra gave their thoughts about the importance of congress and how we get the maximum from it. The Organizing committee and Congress sponsors also shared their thoughts among delegates. The professional skill workshops were started at the evening. I was able to visit a demonstration of a next generation power management system.

Day 2:

The second day started with the daily briefings of the respective fields. IEEE Geographic forums for Student Branches were started after the briefings. I participated in the IEEE Sri Lanka/Pakistan/Bangladesh geographic forum. We discussed the following sub topics.

- Committee structure

We discussed about the Student Branch structure, roles of executive committee, how many members should be on executive committee etc.

- Finances and fundraising

We discussed about how to keep Bank accounts and financial reports in a perfect manner. I understood that we are lagging in organizing fund raising activities. But we are leading in the industrial sponsorships compared to other Student Branches.

- Events and Activities

Student Branches can organize events in Social, Professional and Technical category. We (IEEE UOM) are organizing events in all these categories each year. I shared our experience of organizing the IEEEExtreme competition which is the highest participation from a single university of the region.

- Membership recruitment and retention

I explained about our recruitment procedure. Some delegates had a different membership drive programmes.

- Relationships with external parties

Some Student Branches have relationships with external industry companies regarding internships and Job opportunities. Pakistan has started using the GINI program.

In discussion with Indian student delegates, we shared our thoughts on how to make Student Branches more powerful. We also pointed out to organizing a South Asian Student Congress as the equality of

Kasun Chamika Sirimanna

My Experience of the IEEE R10 SWG Congress 2011–(Continued)

our culture and the economy. After the Geographic forum, we had emerging technology seminars. The evening was amazing due to the official congress dinner.

Day 3:

We had plenary speeches on IEEE topics

- Overview of IEEE structure by Dr. Howard Michel
- Humanitarian Technology by Dr. Lewis Terman
- IEEE Technical Activities by Professor Toshio Fukuda
- IEEE GOLD Clustering by Timothy Wong
- Global Integrated Network of IEEE (GINI) by Prasanna Venkatesan

A special session for IEEE GINI was held on this day. Imran Ali and Prasanna vankatesan explained about the GINI Project. The Global Integrated network of IEEE is a networking structure to create a link between Student Branch and the Section.

GINI in my view:

- Very effective in Sections where 20-30 Student Branches present.
- Good approach to keep every Student Branch active.
- Most Student activities are organized by the Section (Student activity committee) and Student Branches can attend in these event.
- Can go further with GINI-IR (industry relations) where students will get more benefits from the industry
- Applicable to Sri Lanka

After this we had the delegate's forum and cultural night in the evening.

Day 4:

Day 4 was the final day of the Congress. Dr. Peter Staecker delivered a valuable speech about the future directions in technology. We were asked to give our comment and ideas about how to improve the quality of the IEEE Student membership. Closing remarks were done at the end by organizers and we didn't forget to thank all the organizers to make this event a success.



At The University of Auckland



Ice Breaking Activities



The Congress Dinner



Cultural Night



IEEE Geographic Forum for Student Branches

Regards,
Kasun Chamika Sirimanna
Chairman, IEEE Student Branch, University of Moratuwa