

# IEEE REGION 10 STUDENT / GOLD / WIE CONGRESS AUCKLAND 2011 PROGRAMME

Version 3.9



## DAY 1: THURSDAY 7 JULY

0900	Registrations	
1415	Delegates to be seated	Lecture theatre 401.439
<b>Opening addresses</b>		
1430	Address from the Congress Chair Hengjie Wang SMIEEE	
1440	Address from the New Zealand North Section Student Activities Chair Dr Nirmal Nair BE <i>Baroda</i> , ME <i>IISc</i> , PhD <i>Texas A&amp;M</i> , SMIEEE CIGRE	
1455	Address from the IEEE Region 10 Director Professor Lawrence Wong BSc PhD <i>Lough</i> , FIES SMIEEE MIET	
1505	Address from the IEEE Region 10 Student Representative <i>On behalf of the Region 10 SAC, GOLD and WIE Co-ordinators</i> Om Perakash Batra BS <i>NUCES</i> , GSMIEEE	
1510	Address from the Principal Sponsor, ABB New Zealand Grant Gillard BE ME <i>Auck</i>	
1525	Address from the Dean of Engineering, The University of Auckland Professor Michael Davies BSc(Eng) <i>Lond</i> , AKC, MPhil PhD <i>Camb</i> , CEng FICE FIPENZ FGS FRSE	
1540	Delegates' briefing	
1600	<i>Afternoon tea</i>	
1630	<b>Professional skills workshops (breakouts)</b> <b>Four concurrent sessions</b>	
	Leadership Laurence Moss BA(Hons) <i>De Mont</i>	Tutorial room 404.501
	Harnessing project management Karen Reid BSc <i>Massey</i>	Lecture theatre 403.403
	Technology and the public sphere Dr David Alan Grier BA <i>Middlebury</i> , PhD <i>Wash</i> , SMIEEE	Lecture theatre 403.404
	Visit to the Vector House of the Future (leaves at 1600) Gareth Williams BE <i>Auck</i>	Field trip
1800	Icebreaker, Quiz Night and BBQ	

**DAY 2: FRIDAY 8 JULY**

<b>Briefings from the Region Co-ordinators</b>		
0900	Briefing from the Region 10 Director Professor Lawrence Wong BSc PhD <i>Lough</i> , FIES SMIEEE MIET	Lecture theatre 401.439
0915	Briefing from the Region 10 Student Activities Chair and Student Representative Dr Takao Onoye BE ME DrEng <i>Osaka</i> , SMIEEE MIEICE Om Perakash Batra BS <i>NUCES</i> , GSMIEEE	
0930	Briefing from the Region 10 GOLD Co-ordinator Timothy Wong BCompSci BE(Hons) <i>UWA</i> , MIEAust MIEEE MIET	Lecture theatre 401.439
0945	Briefing from the Region 10 WIE Co-ordinator Associate Professor Takako Hashimoto BS <i>Ochanomizu</i> , PhD <i>Tsukuba</i> , SMIEEE	
1000	<i>Morning tea</i>	
1030	<b>IEEE geographic and GOLD/WIE forums</b> Delegates divide into smaller groups to discuss issues specific to their area	Tutorial rooms 404.501–504, Lecture theatres 403.401–404
1130	<b>Area initiatives</b>	Tutorial rooms 404.501–504, Lecture theatres 403.401–404
1200	<i>Lunch</i>	
1315	<b>Emerging technologies seminars</b> A series of 20-minute seminars (plus 5–10 minutes for questions) on emerging technologies See last page for details	Lecture theatres 403.401–404
1445	<i>Interval</i>	
1500	<b>Emerging technologies seminars</b> Continuation See last page for details	Lecture theatres 403.401–404
1530	<b>WIE: Addressing the gender imbalance</b> <i>This session runs concurrently with the last emerging technologies seminar, and continues until 1630</i> Imee Tribo BE <i>Auck</i> Syeda Synnia Tanveer StMIEEE Professor Susmita Sur-Kolay BTech(Hons) <i>IIT Kharagpur</i> , PhD <i>Jadavpur</i> , FIETE(India) FIE(India) SMIEEE MIET	Lecture theatre 401.439
1600	<i>Afternoon tea (with employers' forum)</i>	
1600	<b>Employers' forum</b> Employers (and other parties) have stalls in the atrium, delegates roam freely	Neon foyer
1730	Delegates return to accommodation	
1830	<b>Congress dinner</b> Dress code: lounge suit/cocktail dress or cultural equivalent	Floating Pavilion

**DAY 3: SATURDAY 9 JULY**

<b>Plenary speakers on IEEE topics</b>		Lecture theatre 401.439
0900	Overview of IEEE structure Dr Howard Michel BS <i>New Jersey IT</i> , MS <i>Sth Calif</i> , MS <i>Amhurst</i> , PhD <i>Wright</i>	
0915	Humanitarian Technology Dr Lewis Terman BS MS PhD <i>Stan</i> , LFIEEE FAAAS	
0930	IEEE Technical Activities Professor Toshio Fukuda BA <i>Waseda</i> , MS DrEng <i>Tokyo</i> , FIEEE FSICE FJSME FRSJ	
0945	IEEE GOLD Clustering Timothy Wong BCompSci BE(Hons) <i>UWA</i> , MIEAust MIEEE MIET	
0952	Global Integrated Network of IEEE (GINI) Prasanna Venkatesan BTech <i>NIT Warangal</i> , MIEEE	
1000	<b>Concurrent sessions</b>	
<b>Plenary speakers on IEEE topics</b>		Lecture theatre 401.439
1000	IEEE Foundation—helping you make a difference Dr Adrian Pais BE PhD <i>Auck</i> , MIEEE	
1010	Membership retention—how to retain our members? Ewell Tan BA(Hons) MScIB <i>Herts</i>	
<b>Engaging GOLD with Industry</b> Discussion facilitated by Peter Over SMNZEI MIEEE MNZIM		Lecture theatre 403.404
1030	<i>Morning tea</i>	
1100	<b>IEEE breakouts</b>	
Motivation—spirit of volunteerism Om Perakash Batra BS <i>NUCES</i> , GSMIEEE		Lecture theatre 403.401
Global Integrated Network of IEEE (GINI) Imran Ali StMIEEE		Lecture theatre 403.402
Engineering your career with GOLD Timothy Wong BCompSci BE(Hons) <i>UWA</i> , MIEAust MIEEE MIET Dr Darrel Chong BEng(Hons) <i>NUS</i> , PhD <i>NUS/Eindhoven</i> , MIEEE Dr Adrian Pais BE PhD <i>Auck</i> , MIEEE Noel Gomes BE <i>Auck</i> , MIEEE GIPENZ Lance McCallum BE(Hons) <i>Cant</i> , MIEEE		Lecture theatre 403.403
Panel discussion (WIE): Overcoming obstacles in career development Facilitated by Dr Mark Andrews BE PhD <i>Auck</i> Associate Professor Takako Hashimoto BS <i>Ochanomizu</i> , PhD <i>Tsukuba</i> , SMIEEE Dr Ramalatha Marimuthu BE MS <i>Anna</i> , MS <i>BITS Pilani</i> , PhD <i>Magadh</i> , DSADP <i>Annamalai</i> , FIETE LMISTE SMIEEE Rebecca Stevens BA BE(Hons) <i>Auck</i> , GIPENZ		Lecture theatre 403.404
1200	Photographs	
1230	<i>Lunch</i>	
1330	<b>IEEE breakouts</b>	
IEEE EPICS and TISP Ravendar Lal BE <i>NUCES</i> , MIEEE		Lecture theatre 403.402

	<p><b>IEEE Technical Societies</b> Dr Matthias Reumann MEng <i>S'ton</i>, PhD <i>Karlsruhe</i>, MIEEE Dr Nirmal Nair BE <i>Baroda</i>, ME <i>IISc</i>, PhD <i>Texas A&amp;M</i>, SMIEEE CIGRE Dr Takao Onoye BE ME DrEng <i>Osaka</i>, SMIEEE MIEICE</p>	Lecture theatre 403.403
	<p><b>Humanitarian Technology Hour</b> Amarnath Raja BTech <i>IIT Delhi</i>, MIEEE Dr Adrian Pais BE PhD <i>Auck</i>, MIEEE Kartik Kulkarni BE <i>Visves Tech</i>, MIEEE Mehwish Khan StMIEEE Shashank Gaur StMIEEE</p>	Lecture theatre 403.404
1430	<i>Interval</i>	
1445	<p><b>Panel discussions on topical issues</b> <b>Three concurrent sessions</b></p>	
	<p>Do intellectual property rights encourage or inhibit emerging technologies? Dr Lisa Wong BE ME PhD <i>Auck</i> Peter Harrison ITCP MNZCS Wes Jones BE LLB <i>Auck</i></p>	Lecture theatre 403.402
	<p>Should the engineering profession be more vocal in public policy? Dr Nirmal Nair BE <i>Baroda</i>, ME <i>IISc</i>, PhD <i>Texas A&amp;M</i>, SMIEEE CIGRE Dr Peter Staecker BS EE <i>MIT</i>, MS PhD <i>Polytech Brooklyn</i>, LFIEEE Tracey Ayre BE(Hons) ME <i>Cant</i>, GIPENZ</p>	Lecture theatre 403.403
	<p>Can innovation in technology solve sustainability? Lara Phillips BSc <i>Auck</i>, MSc <i>Cant</i>, PGDipSci <i>Auck</i> Dr Lewis Terman BS MS PhD <i>Stan</i>, LFIEEE FAAAS Dr Ir Ron McDowall BBS BSc <i>Massey</i>, MPhil PhD <i>Waikato</i>, CPEng IntPE(NZ) FIPENZ FNZIM MRSNZ</p>	Lecture theatre 403.404
1600	<i>Afternoon tea</i>	
1630	<p><b>Concurrent sessions</b></p>	
	<p><b>Delegates' forum</b> <i>Concurrent with GOLD session on career development</i> Forum for volunteers; see <a href="http://r10sc.auckland.ac.nz/?page_id=460">http://r10sc.auckland.ac.nz/?page_id=460</a> Seven speakers will each give eight-minute presentations, with four minutes for questions</p>	Lecture theatre 401.439
1630	<p>Bilingual education Balsam Sabiry BMathSc <i>Al-Must</i>, BE <i>UWA</i>, MIEEE GradIEAust</p>	
1645	<p>An IEEE outreach programme and promotion of research culture Muhammad Saqib Jamil StMIEEE</p>	
1700	<p>IEEE students can build nation's economy? Akhilesh Reddy J StMIEEE Samarth Deo StMIEEE</p>	
1715	<p>Challenges facing future of development—from development to sustainable development Devesh Mittal StMIEEE</p>	
1730	<p>Empowering females within our cultures Mehvish Zahoor BS(Hons) <i>GC Faisal</i>, GSMIEEE</p>	
1745	<p>Technologies make headway against catastrophe (The Great East Japan Earthquake) Yoshikazu Nakayama BEng <i>Tokyo Denki</i>, MIEEE</p>	

<b>GOLD: Session on career development</b> <i>Concurrent with delegates' forum</i>		Lecture theatre 403.404
1630	Leadership opportunities for young engineers Shreejan Pandey BE(Hons) <i>Cant</i>	
1700	Career transitions and decisions (Where are you going?—A journey your GPS will not help you plan!) Ir G. Richard Gibbons BSc(Hons) <i>City Lond</i> , DipBA <i>Massey</i> , CertCoDir CEng FIET CPEng IntPE(NZ) FIPENZ FNZIM AMInstD	
1730	Strategic networking in the 21 <sup>st</sup> century Colin Kennedy	
1830	Cultural night	

#### DAY 4: SUNDAY 10 JULY

0900	<b>Future directions in technology</b> Dr Peter Staecker BS EE <i>MIT</i> , MS PhD <i>Polytech Brooklyn</i> , LFIEEE	Lecture theatre 401.439
0930	<b>Address from the IEEE President &amp; CEO</b> Professor Moshe Kam BSc <i>Tel Aviv</i> , MS PhD <i>Drexel</i> , PE FIEEE	
1015	<i>Morning tea</i>	
1045	<b>Group discussions—where to from here</b> Dr Howard Michel BS <i>New Jersey IT</i> , MS <i>Sth Calif</i> , MS <i>Amhurst</i> , PhD <i>Wright</i> Dr Peter Staecker BS EE <i>MIT</i> , MS PhD <i>Polytech Brooklyn</i> , LFIEEE	Lecture theatre 401.439
1130	<b>Open IEEE forum</b>	
1215	Closing remarks	
1230	Check out begins	

Emerging technologies seminars are on the next page

**EMERGING TECHNOLOGIES SEMINARS DAY 2 (FRIDAY 8 JULY)**

	Lecture theatre 403.401	Lecture theatre 403.402	Lecture theatre 403.403	Lecture theatre 403.404
<b>1315</b>	<p><b>Power and energy</b></p> <p>Integrating renewable energy into the electricity network—issues and solutions</p> <p>Dustin Murdock BE ME <i>Wisc-Mad</i> ABB New Zealand (R10SC Principal Sponsor)</p>	<p><b>Medicine and biology</b></p> <p>High performance computing in health care and life sciences</p> <p>Dr Matthias Reumann MEng <i>S'ton</i>, PhD <i>Karlsruhe</i>, MIEEE IBM</p>	<p><b>Power electronics</b></p> <p>Can inductive power transfer drive future electric vehicles?</p> <p>Associate Professor Grant Covic BE PhD <i>Auck</i>, SMIEEE The University of Auckland</p>	<p><b>Software</b></p> <p>Why the cloud?</p> <p>Ryan Crawcour Intergen (Partner of Microsoft, R10SC Platinum Sponsor)</p>
<b>1345</b>	<p>Modern monitoring technologies for electrical integrity of generator plant assets at Mighty River Power</p> <p>Anirban Dey BE <i>NIT Silchar</i>, MBA <i>Baroda</i>, CIGRE Mighty River Power (R10SC Diamond Sponsor)</p>	<p>Bioengineering to keep hearts spinning</p> <p>Dr David Budgett BE <i>Cant</i>, PhD <i>Lond</i>, DIC Auckland Bioengineering Institute</p>	<p><b>General issues</b></p> <p>The influence of emissions trading on emerging technologies</p> <p>Lara Phillips BSc <i>Auck</i>, MSc <i>Cant</i>, PGDipSci <i>Auck</i> Fonterra</p>	<p>Support vector machines for financial time series forecasting</p> <p>Goce Ristanoski, Grad Eng <i>Skopje</i>, GSMIEEE University of Melbourne</p>
<b>1415</b>	<p>Trends in energy technology</p> <p>Gareth Williams BE <i>Auck</i> Vector</p>	<p>The role of medical device simulation in biomedical imaging</p> <p>Associate Professor M-Iqbal Saripan BEng <i>Uni Tek Malaysia</i>, PhD <i>Surrey</i>, MIEEE MInstP Universiti Putra Malaysia</p>	<p>Standards—the theory... and reality!</p> <p>Dr Andrew Myles BSc BE <i>Syd</i>, PhD <i>Macq</i>, MIEEE Cisco Systems / IEEE Standards</p>	<p><b>Communications</b></p> <p>Power line communication—role of multicarrier modulation techniques &amp; their variants for reliable data communication at the PHY layer</p> <p>Dr Sobia Baig BSc <i>UET Taxila</i>, MS PhD <i>GIKI Topi</i>, MIEICE CIIT Lahore</p>
<b>1445</b>	Interval			
<b>1500</b>	<p>Appliances on the smart grid</p> <p>Jeremy Stott BE(Hons) <i>Auck</i> Fisher &amp; Paykel Appliances</p>	<p><b>Mechatronics</b></p> <p>Mechatronics for smart devices</p> <p>Associate Professor Enrico Hammerle Dipl-Ing (FH) <i>Offenburg</i>, Dipl-Ing <i>Bochum</i>, Dr-Ing <i>Bremen</i> The University of Auckland</p>	<p>From idea to product—the design process</p> <p>Dr Simon Walton BE PhD <i>Auck</i> ABB New Zealand (R10SC Principal Sponsor)</p>	<p>Signal generation schemes towards simple and cost-effective radio-over-fibre architecture</p> <p>A.H.M. Razibul Islam BSc <i>Islamic Tech</i>, MS <i>Kyung Hee</i>, GSMIEEE University of Melbourne</p>
<b>1530</b>	<p>IEEE and smart grid</p> <p>Dr Nirmal Nair BE <i>Baroda</i>, ME <i>IISc</i>, PhD <i>Texas A&amp;M</i>, SMIEEE CIGRE The University of Auckland</p>	<p>Automating with robotics</p> <p>Kashyap Chandrasekar BE <i>Madras</i>, MSIT <i>Carnegie Mellon</i> INRO Technologies (R10SC Platinum Sponsor)</p>	<p>Factors affecting emerging technologies—the Nigerian experience</p> <p>Walter Yusuf Zakari StMIEEE Curtin University Sarawak Campus</p>	<p>Optical transport networks—40G and beyond</p> <p>Muhammad Maroof Raza BE <i>UET Lahore</i>, MIEEE Huawei Technologies</p>