

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

Version 3.9



DAY 1: THURSDAY 7 JULY

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| 0900 | Registrations | |
| 1415 | Delegates to be seated | Lecture theatre 401.439 |
| Opening addresses | | |
| 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&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 | Professional skills workshops (breakouts) Four concurrent sessions | |
| | 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

| Briefings from the Region Co-ordinators | | |
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| 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 | IEEE geographic and GOLD/WIE forums Delegates divide into smaller groups to discuss issues specific to their area | Tutorial rooms 404.501–504, Lecture theatres 403.401–404 |
| 1130 | Area initiatives | Tutorial rooms 404.501–504, Lecture theatres 403.401–404 |
| 1200 | <i>Lunch</i> | |
| 1315 | Emerging technologies seminars 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 | Emerging technologies seminars Continuation See last page for details | Lecture theatres 403.401–404 |
| 1530 | WIE: Addressing the gender imbalance <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 | Employers' forum Employers (and other parties) have stalls in the atrium, delegates roam freely | Neon foyer |
| 1730 | Delegates return to accommodation | |
| 1830 | Congress dinner Dress code: lounge suit/cocktail dress or cultural equivalent | Floating Pavilion |

DAY 3: SATURDAY 9 JULY

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| Plenary speakers on IEEE topics | | 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 | Concurrent sessions | |
| Plenary speakers on IEEE topics | | 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> | |
| Engaging GOLD with Industry Discussion facilitated by Peter Over SMNZEI MIEEE MNZIM | | Lecture theatre 403.404 |
| 1030 | <i>Morning tea</i> | |
| 1100 | IEEE breakouts | |
| 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 | IEEE breakouts | |
| IEEE EPICS and TISP Ravendar Lal BE <i>NUCES</i> , MIEEE | | Lecture theatre 403.402 |

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| | IEEE Technical Societies 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&M</i> , SMIEEE CIGRE Dr Takao Onoye BE ME DrEng <i>Osaka</i> , SMIEEE MIEICE | Lecture theatre 403.403 |
| | Humanitarian Technology Hour 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 | Lecture theatre 403.404 |
| 1430 | <i>Interval</i> | |
| 1445 | Panel discussions on topical issues Three concurrent sessions | |
| | 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> | Lecture theatre 403.402 |
| | 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&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 | Lecture theatre 403.403 |
| | 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 | Lecture theatre 403.404 |
| 1600 | <i>Afternoon tea</i> | |
| 1630 | Concurrent sessions | |
| | Delegates' forum <i>Concurrent with GOLD session on career development</i> Forum for volunteers; see http://r10sc.auckland.ac.nz/?page_id=460 Seven speakers will each give eight-minute presentations, with four minutes for questions | Lecture theatre 401.439 |
| 1630 | Bilingual education Balsam Sabiry BMathSc <i>Al-Must</i> , BE <i>UWA</i> , MIEEE GradIEAust | |
| 1645 | An IEEE outreach programme and promotion of research culture Muhammad Saqib Jamil StMIEEE | |
| 1700 | IEEE students can build nation's economy? Akhilesh Reddy J StMIEEE Samarth Deo StMIEEE | |
| 1715 | Challenges facing future of development—from development to sustainable development Devesh Mittal StMIEEE | |
| 1730 | Empowering females within our cultures Mehvish Zahoor BS(Hons) <i>GC Faisal</i> , GSMIEEE | |
| 1745 | Technologies make headway against catastrophe (The Great East Japan Earthquake) Yoshikazu Nakayama BEng <i>Tokyo Denki</i> , MIEEE | |

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| GOLD: Session on career development <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 st century Colin Kennedy | |
| 1830 | Cultural night | |

DAY 4: SUNDAY 10 JULY

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| 0900 | Future directions in technology Dr Peter Staecker BS EE <i>MIT</i> , MS PhD <i>Polytech Brooklyn</i> , LFIEEE | Lecture theatre 401.439 |
| 0930 | Address from the IEEE President & CEO Professor Moshe Kam BSc <i>Tel Aviv</i> , MS PhD <i>Drexel</i> , PE FIEEE | |
| 1015 | <i>Morning tea</i> | |
| 1045 | Group discussions—where to from here 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 | Open IEEE forum | |
| 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 |
|-------------|--|---|--|---|
| 1315 | <p>Power and energy</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>Medicine and biology</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>Power electronics</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>Software</p> <p>Why the cloud?</p> <p>Ryan Crawcour Intergen (Partner of Microsoft, R10SC Platinum Sponsor)</p> |
| 1345 | <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>General issues</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> |
| 1415 | <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>Communications</p> <p>Power line communication—role of multicarrier modulation techniques & 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> |
| 1445 | Interval | | | |
| 1500 | <p>Appliances on the smart grid</p> <p>Jeremy Stott BE(Hons) <i>Auck</i> Fisher & Paykel Appliances</p> | <p>Mechatronics</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> |
| 1530 | <p>IEEE and smart grid</p> <p>Dr Nirmal Nair BE <i>Baroda</i>, ME <i>IISc</i>, PhD <i>Texas A&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> |