Editorial

It is amazing how the world has changed in the last few years.

In wireless telecommunications, we have the good old GSM and then the 3GSM. In television broadcasting, we have good old FM analogue transmission and then, the digital transmission. In the automobile industry, we have the good old fossil fuel combustion engine car and then the gas fuel or electric engine cars, and so on that we have developed and made a lot of innovative and creative technologies and products with the hope of having a better lifestyle.

With all these engineering developments to the world, the environment has also evolved with these changes. Floods have severely hit many parts of the world - places like Malaysia, Indonesia, USA etc. Snow or hail storm happens on a summer day. Earth quakes and tsunamis happen more frequently than before. All these natural disasters are the challenges for you and I as the professional engineers in developing tools and means to analyse and predict these disasters in providing early warnings to those that will be affected by the disaster to stay alive and survive.

We need ideas and creativity in the hope that all these can be put to good use to save lives and improve living conditions for our next generation. So, I encourage all of you to send in your ideas and creative solutions to share with other professionals in the hope for a better world.
May 2007. Rob has kindly maintained our website over the past two and half years, including sometimes updates from sporting events overseas. Our website also needs an overhaul to conform to the new IEEE look and feel.

Each year a student congress is held in Region 10, and while we may have missed bidding for the 2008 event, we will certainly be able to target and lobby for the 2009 event once we get our GOLD and WIE Affinity groups running. We also welcome Mark Gordon to our GOLD committee, and the whole section committee will be getting behind this to secure some social/speaking functions into our calendar of events. With three members of Committee qualifying for the GOLD program, this marks a first for NSW, and we look forward to more engaging activities for recent graduate members.

Bringing some fun and interesting activities to the fore is also a key objective this year, and while they will need committee review, some ideas include a “IEEE NSW Industry Leadership Award”, “A Mindstorms Robotics’ Competition”, and some other ideas you feel like championing.

We welcome your participation, attendance and your contributions to this year events.

![David Burger](image)

David Burger  k3hz@ieee.org
Chair
NSW Section

2. News In Brief

2.1. 2007 IEEE NSW Section Executive Committee

Chair: David Burger
Vice Chair: David Tien
Treasurer: Rob Curtis
Secretary: Antony Zaglas
Circuit Editor: Eddie Fong
Fellow Search: Walter Lachs
Membership Development: Bruce Poon
Professional Activities: Graham Gwilliam

Educational Activities: Kim Chin
Student Activities: Mark Gordon
GOLD: Mark Gordon
Awards and Recognition: Jim Vasseleu
Life Member Activities: John Robinson
Nominations:
  Chair: Graeme Gwilliam
  Committee: Jim Vasseleu
  Committee: Bruce Poon
Historian: Ramutis Zakarevicius
Webmaster: Rob Menegon
Committee: Karu Essella

2.2. 2007 IEEE NSW Section Chairs

AP/MTT: Ananda Sanagavarapu
LEOS/C&S/SSC: Graham Town
Communications & Signal Processing: Sam Reisenfeld
Computer: Vacant - (TBA)
EMBS: Caroline McGregor
PEL/IAS/IE: Danny Soetanto
Power Engineering: Antony Zaglas

2.3. IEEE NSW Section Web Master Wanted

As Rob will be overseas from April 07, we are currently looking for an IEEE member to be the Web Master in taking care of the IEEE NSW Section Web site and its contents. Interested parties please contact David Burger by email k3hz@ieee.org or mobile 0414328877.

2.4. Invitation for IEEE NSW Section Computer Chapter Chair

If you are a member of the Computer Chapter and would like to be the Chapter Chair, the please contact direct to the Nominations Chair, Graeme Gwilliam
2.5. Nominations for Elected Officers in NSW 2008

This is a call for those wishing to nominate for any elected office in the New South Wales Section for 2008. Election is for a 1 year term, (casual vacancies notwithstanding) with the possibility of re-election for a further 1 year term. Occupancy of an elected office for longer than a 2 year continuous term requires appropriate approval.

The Section elected offices are Chair, Vice Chair, Secretary and Treasurer. Chapter Chairs are also elected, however Chapters have the freedom to make their own local arrangements provided the RAB requirements are met. One requirement is that, ideally, at least two names be placed on the election paper for each position.

Nominations are to be sent to Graeme Gwilliam (gb.gwilliam@ieee.org) by the end of April 2007. Whilst ‘seconded’ nominations are preferable, self nominations will be accepted.

Those nominees so wishing can have personal profiles included in the July edition of CIRCUIT. The details of the election processes will be advised later in the year.

Graeme Gwilliam gb.gwilliam@ieee.org
Chair
Nominations Committee, NSW Section

2.6. Former IEEE President

1974 IEEE President John Guarrera died on 7 December in El Cajon, Calif., at the age of 82. For more information, go to http://www.ieee.org/web/aboutus/briefs.html#Guarrera

2.7. Former IEEE Executive Director

Dan Senese, who served as executive director of IEEE from 1995 to 2004, passed away on 6 January 2007 after a brief illness. For more information, visit http://www.ieee.org/web/aboutus/briefs.html#senese

2.8. Student Branch Event

The Institute wants to hear about interesting IEEE student branch events taking place this year. If your branch is holding a robotics competition, teaching youngers about technology, holding a student congress, planning a plant tour, coordinating a career fair, or other event, send the details to <mailto:institute@ieee.org>


IEEE Spectrum Online has created a new Tech Alert for both members and non-members who want to receive groundbreaking news on technology and science. The alert features exclusive online interviews, articles, podcasts, and Web events with leading technology innovators and is e-mailed biweekly in an html or plain-text format. Sign up now at http://www.spectrum.ieee.org/industryfocus

2.10. Recognize Your Achievement

Has your company or a volunteer organization recognized you with a promotion, appointment, or award?

We publish the names of members who've received such recognitions. Send your name and a brief description of your accomplishment to the editor eddiefong@ieee.org

2.11. MyIEEE Adds New Features

The IEEE's membership portal, myIEEE, has just updated its career development features. From the Profession Desktop, members can now get listings from the IEEE Job Site, which is updated daily. New modules link members to IEEE's Mentoring Connection site and IEEE-USA's Career Navigator site, where they can get career advice.

2.12. Fellow Nominations for 2008

Time Is Running out for 2008 Fellow Nominations. The deadline for nominations for the IEEE Fellow class of 2008 is 1 March 2007. The rank of IEEE Fellow is the institute's highest member grade, bestowed on senior members who have contributed "to the advancement or application of engineering, science, and technology".

2.13. Welcome To Our New Members And Upgrade Members

From Oct 2006 to Jan 2007, we have the following new members or newly upgraded members:

Life Member Grade
1. MICHAEL KASSLER
2. ROGER F EVANS
3. ALBERT F SORRELL
4. ABBAS JAMALIPOUR
5. DAVID J SKELLERN

**Fellow Member Grade**

4. ANTHONY G PLACE
5. DAVID S TAUBMAN
6. IAN E BOYD
7. STEPHANIE BOYD
8. CAROLYN P MCGREGOR
9. JOHN D BUNTON

**Senior Member Grade**

1. ANTHONY G PLACE
2. DAVID S TAUBMAN
3. IAN E BOYD
4. STEPHANIE BOYD
5. CAROLYN P MCGREGOR
6. JOHN D BUNTON

**Member Grade**

1. PRATIK DAS
2. BRADLEY J GAY
3. SANJIB BISWAS
4. LI ZHENG
5. FEI XIN
6. LEI SHANG
7. KIT-MING T CHEE
8. ALBERT Y CHUNG
9. ZHONGWEI TANG
10. JUN ZHANG
11. ADAM G WIGGINS
12. FRANCIS CHAN
13. SEBASTIAN W KHOR
14. DEREK J CORBETT
15. MATTHEW R MCKAY
16. RUKMI D DUTTA
17. STEPHEN HERBORN
18. ELENA M YAP
19. ZHENGDONG ZHOU
20. RICHARD SHIH C CHIU
21. JASON J LI
22. JAN M MIKKELSEN
23. GOVIND GANESHWARAN
24. DANIEL C POND
25. COSTANZO M COSTA
26. KAI LU
27. SAIF U ZAMAN
28. ADAM B HUDSON
29. YING P QUE
30. CARLO F SOGONO
31. BYRON K NG
32. PATRICK W CHU
33. MIN CHUNG KIM
34. FARZANA MUSTAFA
35. KUAN LUN HUANG
36. ROHIT DHAWAN
37. SUHRAWARDI ILYAS
38. ADRIAN M MEDIOLI
39. LI MA
40. FERDIE J DJUNAEDI
41. SWARNA LATHA RADHAKRISHNAN
42. TEJAS SATHE
43. SONJA MILANOVIĆ
44. HENNY N ROMPAS
45. MITCHELL M KUO
46. SABRINA ZHANG
47. WILLIAM L LIEM
48. MINPU GUO
49. ASSAD MEHMOOD
50. FU SUN
51. ZHAOHONG SOH
52. RENEE CORY
53. YOUHNA B BORGHOL
54. TAO GUO
55. WEI XIONG WONG
56. SAMRAT NEUPANE
57. GILBERT H FOO
58. AII C OOI
59. DIMITRIOS MIKOS TESSERIS
60. DAVID W SULLIVAN
61. MUHAMMAD A MALIK
62. XINWEI YOU
63. YU TU
64. SUKKIM CHIN
65. JASON KING TAO NG
66. ANDREW MCGILL-MORTON
67. JOANNE M CURRY
68. CHRISTOPHER J DE VANEEY
69. WAI JACKY KEUNG
70. DEHONG YU
71. PETER KWOK KWONG TANG
72. ROBERT MICHAEL
73. CHRIS GALLAGHER
74. YUAN GU
75. NORMAN DONG
76. MARK D FACER
77. GARY F BRENNAN
78. WILLY SUSILO
79. ROMAN FISCHER
80. STEVEN Y GAGAU
81. IROSH FERNANDO
82. ROBERT L GILLAN
83. MAX VECHI
84. KOSTIA A ROBERT
85. PAUL G FUDGE
86. MUHAMMAD ALI BABAR
87. TONY YOUNG
88. THEO DRAKAKIS
89. BRENTON D THOMAS
90. JIE LU
91. SCOTT J DOUGLAS
92. AKEMI T CHATFIELD
93. CHENGJI ZHAO
94. ACHUT K MYNENI
95. LAURIE A CHISHOLM
96. BARRY DAVIES
97. SUNGHEUK JUNG
3. Chapter News

3.1. Power Engineering Chapter

2006 was a reasonably good year but there is always room for improvement. I would like improved links with Academia as well as Industry and more effective communication with members.

Membership has increased over the past year and as of the end of January stands at 135 (up 12 from same time last year). I believe that a significant number of members are eligible for Senior Member grade and would urge those of you that qualify to apply. If you require any further information please contact John Robinson, myself or visit 

http://www.ieee.org/organizations/rab/md/smelev.htm

I will endeavor to have two PES lectures in the Joint lecture program. I would ask PES members to try and attend more lectures and IEEE Section functions, as well as volunteer their services in running the chapter. Officers are required to be elected annually and normally the term is limited to two years.

I would urge you all to get an IEEE web account and email alias. It is free and very easy, the web address is http://www.ieee.org/web/accounts.

NSW PES 2007 Officers are the same as last year

- Chair- Antony Zaglas (antonyz@ieee.org)
- Vice Chair - Dan Candotti (dcandotti@kemaconsulting.com)
- Secretary/Treasurer - John Robinson (jl.robinson@ieee.org)
- GOLD - Mark Gordon (gordon@ee.usyd.edu.au)

Tony Zaglas antonyz@ieee.org
Chapter Chair
Power Engineering Chapter, NSW Section

3.2. EMBS Chapter

I am delighted to continue as EMBS NSW chapter in 2007.

Broadly, our chapter services the needs of industry professionals, academics and students with an interest in the domain of Engineering in Medicine and Biology.

Our new website is now accessible via http://www.ieee.org/go/embsnsw/. Over the coming weeks you will see new content and details added to our website so make sure you bookmark this link and check it regularly! Soon you will be able to access our website via the NSW Section. So keep watch at http://www.ewh.ieee.org/r10/nsw/index.htm !

I am pleased to announce that I am the Australian representative on an international EMBS Senior Member Elevation initiative for 2007. I am sure that many of our EMBS members actually qualify for senior member, but have not yet taken the time to go through the Member Grade Elevation process, or have had difficulty located senior members to support your
elevation. So please look at the qualification requirements at http://ieee.org/web/membership/grade_elevation/grade_elevation.html. Over the coming months, if the EMBS records indicate that you would likely qualify, either I or one of my senior member representatives from within our EMBS chapter will be contacting you to support you through the senior member elevation process. I plan to establish teams of senior members who can themselves work as a team to support further senior member elevations. Alternatively, if you are a member of EMBS and believe you qualify for elevation, you are welcome to contact me via email c.mcgregor@ieee.org.

Our first on-site technical meeting was held at ResMed in December 2006. This event was extremely successful with 50 EMBS guests together with many ResMed staff. Resmed COO Rob Douglas gave a presentation on ResMed and this was followed by a factory tour. We are planning more technical meetings for 2007.

The IEEE EMBS flagship conference EMBC will run in Lyon, France in 2007. Details on the conference can be found at: http://www.embc07.ulster.ac.uk/index.htm. I am thrilled to be assisting with the organization of Theme 12: “Career and Professional Development in Biomedical Engineering” as co-chair of a new track established this year entitled “Women in Biomedical Engineering and Health Informatics”. I will also be representing the NSW chapter at the Chapter Chair meeting. I hope to see you there!

As a mother of young children and recently returned to work from maternity leave, I know that fitting in attendance at Technical Meetings or during and outside of work hours can sometimes be difficult. If you are even able to arrange to attend one event each year, this may give you networking contacts that you can stay in touch with for the rest of the year.

I look forward to meeting you at one of our upcoming events. Together with your EMBS NSW committee we look forward to providing local EMBS support and assistance.

Carolyn McGregor  c.mcgregor@ieee.org
Chapter Chair (Founding Officer)
EMBS Chapter, NSW Section

3.3. Communications and Signal Processing Joint Chapter

Welcome to the Communications and Signal Processing Joint Chapter local activities for 2007. We will schedule a number of lectures during the year on topics of current interest. There will be concentration on the rapidly advancing areas of Wireless Communications and Wireless Networks and their applications. Other important areas in Communications and Signal Processing will also be covered. Our lectures provide excellent background information on topics valuable to you and also provide an excellent opportunity for you to meet with many of your colleagues from industry, research laboratories, and the universities. I look forward to speaking to you at our 2007 local activities.

Sam Reisenfeld  samr@uts.edu.au
Chair
Communications and Signal Processing Joint Chapter, NSW Section

4. Technology & History

4.1. Middle East’s First Computer Named History Milestone

Built in 1954 in Rehovot, Israel, the Weizmann Automatic Computer (WEIZAC) became the Middle East’s first computer and put Israel in the global technology loop. That’s why WEIZAC was recognized with an IEEE Milestone in Electrical Engineering and Computing on 5 December 2006, at the place where it was built.

4.2. Chemists Achieve Crucial Step Toward the Creation of Molecular Computers

A crucial step toward the development of molecular computers has been reached, according to a January
Being part of the CA scheme provides incentives to providers who adhere to the idea of being a "certifying authority." These incentives include membership in a collective that increases security and reduces congestion.

A new wheelchair commanded by thoughts is currently in development by researchers at the University of Zaragoza in Spain. The chair will use a process called brain-computer interface, or BCI, which involves attaching electroencephalogram electrodes to a rider's scalp, which then record brain rhythms and convey them to the chair's computer. Two 800-MHz Intel computers mounted on the wheelchair will process these readings and send instructions to the wheels. While the signals are crude, advances in decoding algorithms are making it possible to train the software to recognize simple commands such as turn left or turn right. Over time, more specific commands, such as moving to a certain room by thinking of it, will become understood by the software. To combat misinterpreted commands, a laser will be attached to the front of the chair to avoid collisions with the surroundings. The technology is still a couple years away from being perfected, and the researchers are looking at 2008 or 2009 before they will have a working prototype.

A new report published by IEEE Computer Society proposes a new means of fighting harmful online transmissions such as viruses and spyware by developing software that monitors a computer's traffic. This would control threats at the origin point, rather than trying to screen them at a receiving point. The authors suggest introducing a certification mechanism that induces service providers to voluntarily accept some degree of accountability, without interfering with the underlying decentralized protocols. Such a mechanism could propagate incentives through the network, ensuring that distributed participants coordinate their efforts to increase security as well as reduce congestion. Providers would then be given membership in a collective that adheres to the idea "certifying authority" (CA). Being part of the CA scheme provides incentives and offers compensation for attacks. Additionally, settings on a user computer would be able to allow only transmissions stemming from other certified ISPs, a notion that works well for businesses wanting to avoid mail containing unblocked virus. Ultimately, the plan could create a new standard, which eliminates a significant amount of malware.

The latest technology for next generation mobile devices was showcased at the International Consumer Electronics Show in Las Vegas by chip manufacturers Qualcomm and Broadcom, who say that in addition to high-speed wireless networks, the new devices will require powerful hardware to handle business applications, multimedia such as music and video, and Web browsing.

Cord-free chargers that use electromagnetic induction could be on the market in 2007, according to manufacturer Fulton Innovation, whose eCoupled technology debuted this year. The technology transfers energy from one device to another through a shared magnetic field, the firm says, and will work with common consumer electronic devices such as cellular phones, digital music players and PDAs. The technology uses a feedback and control system that queries an individual device in real-time, determining power needs and the age and charging habits of its battery, insuring the charger delivers the right amount of power to keep a device at high efficiency.
4.7. Cell Phones Developed With Miners in Mind

In an effort to ameliorate rescue operations for trapped miners, three companies have joined forces to develop a cell phone that can make a call from 1000 feet inside a mine. The first tests of the phone were successful, having been completed last month in a former mine in Pittsburg, Pennsylvania (US). The phone is able to complete its calls using a technology called Internet Telephony, or VOIP for short. Additionally, the system relies on routers set up inside that create a path to the outside. The routers are configured to find the optimal path for the signal, so that if one were to collapse due to a cave in, another could pick up the signal. Once outside, the signal is converted to analog and sent over traditional phone lines. The first of the phones, called MP1, are in development and will also come with homing technology to track each individual miner. Read more:
http://www.informationweek.com/story/showArticle.jhtml?articleID=196802591&cid=RSSfeed_IWK_News

4.8. Get Certified With IEEE Computer Society’s Certified Software Development Professional Program

The IEEE Computer Society's Certified Software Development Professional (CSDP) program, a certification program for mid-level software engineers, will offer two testing windows in 2007. The application deadline for the 2 April - 30 June testing window is 2 April. The application deadline for the 1 September - 30 November testing window is 1 September. For more, visit: www.computer.org/certification

4.9. Engineers Model Superfluid Behaviour with Lasers

Superfluids, frictionless liquids that are difficult to create and study, can be modeled using lasers, according to electrical engineers at Princeton University, who say that the technique allows them to simulate experiments that are difficult or impossible to conduct with superfluids. The researchers say that they validated their technique by generating results that matched data from previous superfluid experiments. Particles in superfluids move together instead of at random and the same behavior has been observed in light waves that pass through certain materials known as nonlinear crystals. The research could heighten the current understanding of condensed matter physics as well as lead to advances in sensor technology, atomic trapping and optical communications. Read more:
http://www.theengineer.co.uk/Articles/297586/Lasers+shed+light+on+liquids.htm

4.10. See-through Displays

Transparent, high-performance transistors embedded in glass or plastic can power see-through displays, according to a Northwestern University chemist, who says the technology could lead to displays that are indistinguishable from plates of glass when not displaying an image. Applications could include car windshields that display maps, giant billboards and a variety of applications for new electronics, according to the chemist who says he has launched a start up to commercialize the technology and could have products on the market by 2008. Read more:
http://blog.wired.com/gadgets/2006/12/seethrough_dis p.html

4.11. Mobile Gigabyte DRAM

The first 1-gigabyte DRAM for mobile products, using 80-nanometer process technology, has been developed by Korean electronics giant Samsung. The synchronous DRAM is intended for use in a range of handset applications, digital still cameras, portable media players and portable gaming products, according to Samsung. The new DRAM uses the same packaging technique as the 512-megabyte double-die stack, but includes a temperature-sensing feature. Samsung claims its temperature-compensated self-refresh feature reduces power drain in standby mode by 30 percent over conventional memory chip designs. Samsung said it plans to mass produce the new device beginning in the second quarter of 2007. Read more:
http://www.eetimes.com/news/latest/showArticle.jhtml;j sessionid=F4BELYO01LHUEQSNDSCKHA?articleID =196702063

4.12. Healthy Cell Phone Chip Will Battle Harmful Emissions

At the recent GSM World Congress in Barcelona, Spain, one emerging company made itself heard byouting its new healthy mobile phone chip. Created and patented by Exradia, a London-based technology company only a year old, the ASIC Chip is embedded into a mobile phone's battery to neutralize potentially harmful emissions, generating the noise field signal that drives a wire coil to produce the noise field itself. It's based on Noise Field Technology and works by superimposing a low frequency randomized magnetic field over the man-made regular electromagnetic field (EMF) emissions that such components output. The added noise essentially manages to mimic low-level erratic EMF emissions that occur in nature, causing human biological cells to ignore them. Read more:
5. Technical Meetings & Conferences

All members are cordially invited to attend these joint meetings with the Engineers Australia (EA), IEEE, ITEES and IET. These joint meetings are held at 6.00 pm (with light refreshments at 5:30pm) at the Engineers Australia, 8 Thomas Chatswood, NSW unless otherwise stated.


<table>
<thead>
<tr>
<th>2007</th>
<th>Event</th>
<th>Speaker</th>
<th>Host</th>
<th>Contact</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>28/2/2007</td>
<td>RMV Queen Mary 2 - Electronics</td>
<td>John Jeremy</td>
<td>Joint (EA)</td>
<td>George Fox</td>
<td>Chatswood RSL, 446 Victoria</td>
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<tr>
<td>5/3/2007</td>
<td>IEEE NSW SECTION - Meeting</td>
<td></td>
<td>IEEE</td>
<td>Antony Zaglas</td>
<td>7:00-9:00pm Seminar Room 1 - Library Gore Hill TAFE</td>
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<tr>
<td>6/3/2007</td>
<td>Woods Hole Oceanographic Institute - Topic</td>
<td>Sandy Williams</td>
<td>IEEE</td>
<td>David Burger</td>
<td>Midday to 2pm - Lecture Theatre - 570 George St, SYDNEY</td>
</tr>
<tr>
<td>8/3/2007</td>
<td>National Electricity Market</td>
<td>Dr Brian Spalding, NEMMCO CEO</td>
<td>EA</td>
<td>George Fox</td>
<td>8 Thomas Street, Chatswood</td>
</tr>
<tr>
<td>12/3/2007</td>
<td>Introduction to High Performance Computing (free of charge)</td>
<td>Dr Joachin Mai, Australian Centre for Advanced Computing &amp; Com</td>
<td>IEEE Computer &amp; Joint members</td>
<td>M Arif Khan <a href="mailto:mkhan@ics.mz.edu.au">mkhan@ics.mz.edu.au</a></td>
<td>1pm to 2pm, conference room level 2, Building E6A (Room #211), Macquarie University</td>
</tr>
<tr>
<td>18/3/2007</td>
<td>Sydney Harbour Bridge 75th Anniversary - Walk [keeping engineers fit program]</td>
<td><a href="http://www.ourbridge.com.au">www.ourbridge.com.au</a></td>
<td>EA Heritage</td>
<td>1300 884899</td>
<td>Listed out of special interest, albeit non electrical in nature, Free to Walk over it, $3 to drive over it, FROM $169 to walk to the top of it.</td>
</tr>
<tr>
<td>22/3/2007</td>
<td>Demand Management - relationship between energy efficiency, greenhouse abatement and peak demand</td>
<td>Paul Myors, EnergyAustralia</td>
<td>IET</td>
<td>David Bruce-Steer</td>
<td>8 Thomas Street, Chatswood</td>
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<td>2/4/2007</td>
<td>IEEE NSW SECTION - Meeting</td>
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<td>IEEE</td>
<td>Antony Zaglas</td>
<td>7:00-9:00pm Seminar Room 1 - Library Gore Hill TAFE</td>
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<tr>
<td>24/4/2007</td>
<td>ESA Terahertz Technology</td>
<td>Dr. Peter DeMaagt</td>
<td>??</td>
<td>??</td>
<td>???</td>
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<tr>
<td>April 2007, date TBA</td>
<td>Internet 3.0: Ten Problems with Current Internet Architecture and Solutions for the Next Generation</td>
<td>Prof. Raj Jain</td>
<td>IEEE Comsig</td>
<td>IEEE Asia Pacific Operations Centre, Singapore Science Park 1</td>
<td>Internet Conferencing Presentation using IEEE LiveMeeting conference center.</td>
</tr>
<tr>
<td>12/4/2007</td>
<td>Quantum Dots and Nanowires</td>
<td>Professor Chennupati Jagadish</td>
<td>Joint (IEEE)</td>
<td>Graham Town</td>
<td>8 Thomas Street, Chatswood</td>
</tr>
<tr>
<td>1/05/2007 - 3/05/2007</td>
<td>CeBIT Australia. <a href="mailto:CeBIT@hannoverfairs.com.au">CeBIT@hannoverfairs.com.au</a></td>
<td></td>
<td>Industry</td>
<td>Hannover Town</td>
<td>Sydney Convention and Exhibition Centre</td>
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<td>7/5/2007</td>
<td>IEEE NSW SECTION - Meeting</td>
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<td>IEEE</td>
<td>Antony Zaglas</td>
<td>7:00-9:00pm Seminar Room 1 - Library Gore Hill TAFE</td>
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<td>10/5/2007</td>
<td>Siemens - Future directions</td>
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<td>8 Thomas Street, Chatswood</td>
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<td>24/5/2007</td>
<td>Electrical Systems for the water poor</td>
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<td>Joint (IET)</td>
<td>8 Thomas Street, Chatswood(SEMINAR)</td>
<td></td>
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<td>4/6/2007</td>
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<td>IEEE</td>
<td>Anthony Zaglas</td>
<td>7:00-9:00pm Seminar Room 1 - Library Gore Hill TAFE</td>
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<td>14/6/2007</td>
<td>The commercialization of Photonics technology, case studies</td>
<td>Ian Clarke (Optium Inc)</td>
<td>Joint (IEEE)</td>
<td>Graham Town</td>
<td>8 Thomas Street, Chatswood</td>
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<td>28/6/2007</td>
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<td></td>
<td>Joint (EA)</td>
<td>Peter Hitchiner</td>
<td>8 Thomas Street, Chatswood</td>
</tr>
</tbody>
</table>

- The 7th International Conference on Power Electronics and Drive Systems (PEDS'07) will be held in Bangkok, Thailand, 27 to 30 Nov 2007.
Call for Papers

AusWireless’07
http://auswireless.eng.uts.edu.au/

27 - 30 August 2007
Crowne Plaza Hotel, Darling Harbour, Sydney, Australia
Organised and Sponsored by University of Technology, Sydney, Faculty of Engineering, Australia
Supported by Springer Netherlands

All papers accepted for this conference will be published by the IEEE Computer Society (CPS) and appear in the IEEE Xplore and the extended versions of the best papers will also be published as a book by Rive Publishers Denmark.

IMPORTANT DATES
Full papers due: 31 March 2007
Notification of Acceptance: 15 May 2007
Camera Ready due: 15 June 2007

PAPER SUBMISSION INSTRUCTIONS
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All papers will be peer reviewed. Accepted and published papers will be included in the conference proceedings published by Springer. Selected best papers from the conference will also be published as a book by Springer Netherlands.

Seminar on High Performance Computing organizes by MQ IEEE Student Branch.

Date: Monday, 12th March
Time: 1:00pm to 2:00pm
Venue: Conference Room Level 2, Building E6A (Room # 211), Macquarie University, Sydney

Topic: "Introduction to High Performance Computing"
Speaker: Dr. Joachim Mai
Australian Centre for Advanced Computing and Communications (www.ac3.com.au)
Charge: No fee for attending this seminar.
Contact: M Arif Khan mkhan@ics.mq.edu.au (PhD Student, Electronics Department, Macquarie University)

Abstract:
Introduction to High Performance Computing (HPC)
General introduction to HPC for beginners. Covering different hardware architectures as well as software concepts. Introduction to the super computers available at ac3 and APAC.

1) General introduction into High Performance Computing
   a) Different system architectures (Hardware)
   b) Different programming strategies (Software: MPI, OpenMP, PVM, Parallel Libraries, commercial software)
2) Hardware and Software available at ac3 and APAC.
3) Choosing the right hardware/software for your problem
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