

The Institute of Electrical and Electronics Engineers, Inc.

Secretariat:

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July 2006

Volume 29 Issue 2

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1. EDITORIAL

I had the privilege of attending the Region 10 Meeting in March 2006 and gained on insight into IEEE HQ and regional activities. There are so many activities happening in the Region 10 that we, in the NSW Section, should participate and get involved and expand our contribution to IEEE.

I have learnt a lot from fellow colleagues from other Sections as well as our IEEE President, Michael Lightner. He has a number of strategies and goals in place for 2006 and one of them is the membership drive. There is the Member-Get-A-Member program, which is an incentive program to all members who will get a US\$5 for each recruited new member through this program. IEEE noticed that half of the participants to the IEEE conferences were not IEEE members. So, I encourage all of you to reach out to your friends and colleagues to join IEEE and receive more benefits from IEEE. For more details of the program, please visit http://www.ieee.org/web/volunteers/membership_dev/mgm.html.

In addition to the membership drive, I appeal to all members in NSW Section to come forward as volunteers to serve and get involved with IEEE activities, especially for newly enrolled members. We can all contribute to make NSW Section a better one.

Our IEEE Past President, Cleon Anderson also encouraged more volunteers to be involved with IEEE activities at the Region 10 Meeting. For those interested in joining the Committee in 2007, I encourage you to fill up the form on the last page of this Circuit Newsletter and send or fax it back to IEEE.

To make our Circuit newsletter more interesting and personal, I would like to encourage all members to send in articles or ideas that you want to share with your fellow IEEE colleagues as this is your newsletter.

I look forward to seeing all of you at the coming NSW Section Annual General Meeting to be held on 25 November 2006.



Eddie Fong eddiefong@ieee.org
Circuit Newsletter Editor
NSW Section

2. Message From The Chair

In this edition I wish to talk about the way Sections depend on and succeed with the active participation of Chapters. Sections are responsible for many of the administrative aspects of the operation of IEEE activities and the co-ordination of activities at various levels within the organization.

On the other hand, it is the Chapters, acting as representatives of the Technical Societies that provide the technical content to our programs that is so important, and of such interest to our members.

One of the strengths of the IEEE is the range and depth of technical subject matter that is readily

available from Societies for the benefit of all members, and without active Chapters this can be sadly lost to members.

Chapters have a representative member on the Section committee, and the Section depends on the information that comes from the Chapter to the Section. While each Society provides technical magazines and articles for the benefit of their members, there is always a need for the Chapter members to have their own local technical networks whereby they can keep contact with other members of like interests. How this is done depends very much on each Chapter; if you are not satisfied with the way things are done, then you should involve yourself with your Chapter and give some much needed support to those who are involved.

There is within the IEEE what is known as 'the 2 year rule', which states in principle that any office in the organisation should not be filled for more than 2 years continuously by any one member. If you think you can make a contribution for the betterment of the organisation the opportunity is always there. Participate for the benefit of yourself and others, because it can be fun.

Our Section is fortunate to have a range of Chapters that try to cover the interests of most of the members, but there is always an opportunity for others to participate and help improve what is already done.

During my time as Chair we have established a 'new' Chapter which will soon integrate a previous Chapter in need of support, and there is a very strong move to establish yet another Chapter for a Society which is not represented by any other Section in Australia. For these things to succeed we need ongoing support and participation from even more volunteer members. In the next edition of CIRCUIT information will be provided regarding the Annual Meetings for the Section and all Chapters. Please read this, attend and participate if you are able, because your participation will be most appreciated, and beneficial to yourself.



Graeme Gwilliam gb.gwilliam@ieee.org.
Chair
NSW Section

3. News In Brief

3.1. 2007 NSW SECTION COMMITTEE NOMINATION

We are in the middle of 2006 and it is time for all members that have not stepped forward to be involved with the IEEE activities and Chapters' acitivies to join the NSW Section Committee for 2007. Interested members need to fill up the nomintation form which can be found at the back of this Circuit and fax it back to us before 24 September 2006.

3.2. 2007 IEEE MEDAL AND AWARD NOMINATIONS

You have until 1 July to nominate a colleague or company for an IEEE medal, corporate recognition, honorary membership, service award, or prize paper award to be presented next year. For nomination forms, visit the IEEE Awards Web site at http://www.ieee.org/portal/pages/about/awards/index.html or contact IEEE Awards Activities, 445 Hoes Lane, Piscataway, NJ 08855-1331 USA; tel: +1 732 562 844; fax: +1 732 981 9019; email:awards@ieee.org

3.3. RECRUIT COLLEAGUES AND FRIENDS

Earn credit toward IEEE dues through the IEEE Member-Get-A-Member program. Current members can receive a US \$5 credit toward next year's dues for every new member they recruit. And anyone who joins between now and the end of August 2006 pays half-year rates for a membership that runs through the rest of 2006. For details on the IEEE Member-Get-A-Member program plus tips on recruitment, go to http://www.ieee.org/web/volunteers/membership dev/mgm.html. Student members can take advantage of the IEEE Student-Get-A-Student program by visiting http://www.ieee.org/web/volunteers/membership dev/s gs.html.

3.4. New Online Tutorial Service

A new service called "Expert Now IEEE" offers online learning courses based upon IEEE conference tutorials, short courses and workshops. For a limited time, IEEE members may take three of these one-hour courses as a benefit of your membership. The preview classes include "Real-Time Computer Systems", "Transition to Management" and "Introduction to Wireless Ad-hoc Networks." For more information, visit:http://www.ieee.org/web/education/secure/Expert Now IEEE/trials.html

3.5. Submit Questions To IEEE President-Elect Candidates

With the annual IEEE elections pending in September 2006, IEEE members are invited to submit questions to the candidates running for 2007 IEEE President-Elect. Responses from candidates Lewis M. Terman and John Vig will be broadcast over the IEEE web site during the election period. Questions may be emailed to corp-election@ieee.org

For more information about IEEE's annual election, visit: http://www.ieee.org/elections

3.6. REGION 10 MEETING

The Region 10 Meeting is held annually and this year, it was held in Chiang Mai, Thailand from 26 - 27 March 2006. 87 IEEE Region 10 colleagues attended the Meeting.

The Region 10 Meeting was addressed by Seiichi Takeuchi – Region 10 Director, Michael Lighter - 2006 IEEE President, Cleon Anderson - 2006 Past President, Jeffry Raynes - IEEE Executive Director, Cecelia Jankowski – Managing Director for Regional Activities, Matt Loeb – IEEE Staff Director, Corporate Strategy & Communications, Lewis Terman & John Vig – 2007 President-elect candidates, and Hiroshi Iwai – 2004-2005 President of Electron Device Society



There were two announcements in this Region 10 Meeting. They were Region 10 Student and GOLD Joint congress to be held in Beijing, China from 13 to 17 July 2006, and the three candidates for Region 10 Director for 2007 are:

- R. Muralidharan (Bombay),
- Yong-Jin Park (Seoul), and
- Y. W. Liu (Hong Kong)

Presentation of Awards Ceremony was organized by Regional Awards Committee Chair, Y W Liu, during Banquet Dinner on 26 March 2006.

The membership Awards:

- 2004 Section Membership Growth Award -Hyderabad Section
- 2004 Section Sustained Membership Growth Award - Bombay Section
- 2004 Student Branch Membership Growth -Crescent Engineering (Madras Section)

Award:

 Mr. Venu Chettupalli, (Hyderabad Section) -Supporting Friend of IEEE

Region 10 Awards:

- 2005 Region 10 Distinguished Large Section Award to Kerala Section
- 2005 Region 10 Distinguished Small Section Award to Gujarat Section

The 2005 R10 Outstanding Volunteer Awards:

- Anthony Lobo, from Bombay Section
- Muhammad Mubashir Hussain, from Islamabad Section
- Raj Kumar Vir, from Delhi Section
- Satheesh Kurmar, from Kerala Section

Proposals for IEEE Region 10 Advisory Committee and GOLD Award were approved.

Malaysia and Perth, Australia Section were the two potential venues for the next Region 10 Meeting in 2007.

3.7. GOLD (GRADS OF THE LAST DECADE)

The CommSig lecture on 4 May 2006 was a joint GOLD function.

There will be a major push to re-launch GOLD in 2007, as there are benefits to GOLD members in terms of networking. Other benefits are only limited by your imagination. The NSW Section will arrange another GOLD function later in the year. Keep an eye on our News e-mails.

3.8. Welcome To Our New Members And Upgrade Members

From February to May 2006, we have the following new members or newly upgraded members:

Senior Member Grade

- 1. ANANDA M SANAGAVARAPU,
- 2. TORSTEN LEHMANN, and
- ROBERT A CURTIS.

58. NICHOLAS C MENZIES.

Member Grade

- 1. OLA S GARPENDAL,
- 2. ALLAN REID,
- SI THU,
- 4. RITESH R LAL,
- 5. MARK S CHAN,
- 6. GREG SULLIVAN,
- 7. GEOFF KNAGGE,
- 8. DR YAN LIU,
- 9. WEILI,
- 10. BRIAN IRWIN,
- 11. PHIL R RAMSAY,
- 12. DR KUN-CHAN LAN,
- 13. ANTHONY G POMFRETT,
- 14. COLIN A IRWIN
- 15. PROF GAMINI DISSANAYAKE,
- 16. VYOMESH M SHARMA,
- 17. BERNHARD ZUNK,
- 18. LACHLAN KANALEY,
- 19. NICK DAY,
- 20. ROBERT T CORKE,
- 21. RASITH T WICKRAMASINGHA,
- 22. STEVEN C YU.
- 23. PRAMA P MURUGASU,
- 24. GEOFFREY J GOELDNER,
- 25. CHEE W PHUA,
- 26. CANDICE J GILLMORE,
- 27. WEI ZHOU,
- 28. MARK GROOMBRIDGE,
- 29. ANDREW BURTON,
- 30. SUZANN S COOPER,
- 31. PROF MICHAEL FRY,
- 32. ABU R ULLAH,
- 33. RICHARD D KINDER,
- 34. JULIAN GAMBLE,
- 35. MICHAEL ABD-EL-MALAK,
- 36. BRAHAM BLOOM,
- 37. GRAEME S BOOKER,
- 38. DZEVAD LATIFOVIC,
- 39. DR DIKAI LIU,
- 40. ROBERT M LEIDL.
- 41. JAMES I PARKER,
- 42. BERNARD J CLARK,
- 43. PETER G DEBUS,
- 44. MARY K CUDMORE,
- 45. PETER WILSON,
- 46. WAYNE G PEPPER,
- 47. DR XIAODI HUANG,
- 48. AVRHAM ARDITI ARDITI AVI,
- 49. SIMON C MAURICE,
- 50. VARUN DAS,
- 51. MICHAEL J STUCKINGS,
- 52. ANTHONY CHAN,
- 53. JAMES S BRISTOW,
- 54. ROD F SANCHEZ,
- 55. MARK P COLLAROS,
- 56. JAYARAJ C SAMUEL,
- 57. ALEX NORTH, and

Associate Grade

- 1. NADER BEHMAN, and
- 2. VIJAY N PANDIT.

Affiliate Grade

- 1. JUAN C GUZMAN,
- 2. NATALIE C LECOMTE,
- 3. STEVE CHAN,
- 4. JOHN REDMOND,
- 5. ALBERTO CREMONESE,
- 6. LAI YOONG FOONG,
- 7. JIANHUI YANG,
- 8. ARTHUR ALEXIOU,
- 9. DR LESLEY P LAND,
- 10. ALEX CHEUNG,
- 11. ALOK BANSAL,
- 12. JOHN W BALLMENT,
- 13. PRASAD R PANDARI,
- 14. RAFAEL A CALVO,
- 15. VICTOR ROTARU, and
- 16. SHAMEER M SUBEDAR.

Student Grade

- 1. JAYSON BRYCE BADENHOP,
- 2. ALEJANDRO ROJAS,
- 3. IDO NEVAT,
- 4. OZGUR ISIK,
- 5. DANIEL RICHARD HECKENBERG,
- 6. TOMAS R DJUNAEDI,
- 7. QI Y ZHANG,
- 8. KA FAI TANG,
- 9. DEAN M WHEATLEY,
- 10. LIMING ZHU,
- 11. JOSHUA P TOOMEY,
- 12. JOSEPH T LIZIER,
- 13. SCOTT M LOLLBACK,
- 14. VAHID G TAEED,
- 15. ADRIAN M MEDIOLI,
- 16. JOE MOK,
- 17. WEIZHEN ZHOU,
- 18. STUART R THORNCRAFT,
- 19. KENI POPOVSKI,
- 20. GANESH S SHANKAR,
- 21. RONNIE TAIB,
- 22. BEN LESLIE,
- 23. WILSON ZHANG,
- 24. KATHERINE A WHEELER,
- 25. GEORGE ZI YI GUAN,
- 26. SPYRIDON REVITHIS,
- 27. RAJU B ADHIKARI,
- 28. LI MA,
- 29. BARRY J DUNBAR,
- 30. ANJANI PRASAD RAVI,
- 31. JAMES GOH,
- 32. MARCELO PEREZ,
- 33. YAO WANG,
- 34. ANDREW AGNEW,

- 35. FERDIE J DJUNAEDI,
- 36. ARUNEE POONSAWAT,
- 37. ARTHUR H YANG,
- 38. JOHN C MU,
- 39. TERRENCE J NEO,
- 40. GILBERT VERDIAN,
- 41. AARTHI NAGARAJAN,
- 42. ILENE CHEN,
- 43. ROSHAN G RAGEL,
- 44. SWARNALATHA RADHAKRISHNAN,
- 45. TEJAS SATHE,
- 46. SONJA MILANOVIC,
- 47. NAZEER KHAN,
- 48. FEDERICO RUEDA,
- 49. HENNY N ROMPAS,
- 50. KARIN AVNIT,
- 51. WEI WEI SUN,
- 52. SHOAIB DILAWAR,
- 53. JOO LIM,
- 54. STEPHEN E ANTOON,
- 55. MITCHELL M KUO,
- 56. ZHE XING,
- 57. ENG MOAD MAGHAYDAH,
- 58. BRYAN C LEE.
- 59. GUNAWAN HERMAN,
- 60. SABRINA ZHANG,
- 61. PRANAM S JANNEY,
- 62. MOHAMMAD A AZIM,
- 63. THOMAS XIAN HUA HUANG,
- 64. XIAO F DONG,
- 65. XIAOYUAN TA,
- 66. WILLIAM L LIEM,
- 67. YI HE,
- 68. WIBOWO HARDJAWANA,
- 69. WAI H HO,
- 70. XIAOMENG LI,
- 71. ANGELINE TAN,
- 72. YAGNESH B BHATT,
- 73. ARON MICHAEL,
- 74. JINGHUI WU,
- 75. TAO YANG,
- 76. ZHE XU.
- 77. MINPU GUO,
- 78. VU QUOC-ANH NGUYEN,
- 79. TRAN NAM NGUYEN,
- 80. THUSO BENSON BOIKANYO,
- 81. CHORBEL YOUSEEF OUTAYECK,
- 82. JASMINE POULADI,
- 83. ASSAD MEHMOOD,
- 84. FU SUN,
- 85. ZHAOHONG SOH,
- 86. RENEE CORY,
- 87. LEI ZHU,
- 88. FARHAN ZAHEER,
- 89. KAYSER LYNN,
- 90. PATRIC FORNASIER,
- 91. YOUHNA B BORGHOL,
- 92. ANDY HLO,
- 93. JOHNSON O,

- 94. TAO GUO.
- 95. BO ZANG,
- 96. SIN VON CHAN,
- 97. HAILUN TAN,
- 98. PENG XIAO,
- 99. LUCKY YULIUS JOENG.
- 100. WEI XIONG WONG,
- 101. BASTIAN KLUCKER,
- 102. XIANG LIU,
- 103. IVAN L TUNG,
- 104. URIYU XI,
- 105. SAMRAT NEUPANE,
- 106. ASTRIA N IRFANSYAH,
- 107. JIA YU,
- 108. NASSIM A SAADEH,
- 109. GILBERT H FOO,
- 110. YU SUN,
- 111. SARA HAKAMI,
- 112. AIK C OOI,
- 113. NING FENG OUYANG,
- 114. TUYEM T BUI,
- 115. CHAKRAPANI A SURAPURA,
- 116. DIMITRIOS MIKOS TESSERIS,
- 117. WENJING JIA,
- 118. RACHEL M PRICE,
- 119. MARCEL KRAWCZYK,
- 120. PAULA M MCEWEN,
- 121. TODD N HEALEY,
- 122. ANTON DELPRADO,
- 123. CHARLES GAMON,
- 124. ALISTER CORDINER,
- 125. YANG WANG,
- 126. TAO YU,
- 127. YI GUO,
- 128. ARIF TANVIR, 129. WILSON POK,
- 130. ENG HANI M ALZAID,
- 131. MUHAMMAD A MALIK,
- 132. ANJUM NAVEED,
- 133. REJI K MATHEW,
- 134. MAMATHA RUDRAPATNA, and
- 135. BENJAMIN B PLUMMER

4. CHAPTER NEWS

4.1. Power Engineering Chapter – Tony Zaglas, Chair

A one day workshop comprising three lectures by Distinguished Lecturer Professor Dr. Sivaji Chakravorti will be held on 20th July 2006.

This is a Power Engineering Society Distinguished Lecturer Workshop and is sponsored by the Power Engineering Society.

Lecturer: Dr. Sivaji Chakravorti, Professor of

Electrical Engineering, Jadavpur

University, Kolkata, India

Date: 20 July 2006 Time: From 9am to 5pm

Location: To be advised. Please contact Tony

Zaglas at antony@ieee.org or look up at

IEEE NSW Section Website: : http://ewh.ieee.org/r10/nsw

Cost: To be advised. Maximum \$20 (if any) to

offset expenses.

Topics include:

 Modern Tools for Impulse Fault Diagnosis in Transformers (3 hours approx)

The speaker has carried out advanced research work in this area for a significant period of time. The results and techniques developed have been published in international journals including IEEE Transactions. This lecture is based on the experiences gathered in the course of such research work and covers the following areas:

- i) Basics of impulse testing of transformers
- ii) Expert system for fault identification using frequency domain data
- iii) Fault identification using wavelet analysis
- iv) Fault identification using fractal analysis
- Electric Field Analysis in High Voltage Systems (2 hours approx)

The speaker has conducted state-of-the art research work in this area over the last fifteen years. The results and techniques developed have been published in international journals including IEEE Transactions. This lecture is based on the experiences gathered in the course of such research work and covers the following areas:

- i) Basics of Integral Equation Techniques
- ii) Capacitive-Resistive Field Calculation including volume and surface resistivities
- iii) Capacitive-Resistive Field Calculation under transient voltage
- Field Calculation including surface charging of insulators

3. Artificial Neural Network as an Optimization Tool in High Voltage Engineering (1.5 hours approx.)

The speaker has conducted notable research work on the application of artificial neural network in high voltage systems over the years. The methodologies and case studies have been published in international journals including IEEE Transactions. This lecture is based on the experiences gathered in the course of such research work and covers the following areas:

- i) Basics of artificial neural network
- ii) Artificial neural network as function estimator and also as optimization tool
- iii) Electrode Contour optimization using ANN
- iv) Insulator contour optimization using ANN

v) ANN coupled to other optimization techniques for application in HV systems

4.2. Communication/Signal Processing Chapter – Daviid Burger, Chair

We had a distinguished lecturer from California (USC) providing some strategic material on the future and direction of multi-media services and the roles of carriers and ISPs in what we see and hear in the future. The lecture "Digital Media Revolution" would have been suitable for senior executives of Australian carriers, radio, TV and print media. The lectures were conducted at a UTS venue in Ultimo by Dr C C Jay Kuo on the 4th and 5th May.

From 12-15 March 2006, the Wireless Broadband and Ultra Wideband Communications (AuS Wireless'06) Conference was held at the Mecure Hotel. This received wide publicity with attendees from over 12 countries. Many thanks to the efforts of Dr Sam Reisenfeld for making this conference a successful one.

4.3. AP/MTT CHAPTER – GRAHAM TOWER, CHAIR

There will be an AP/MTT lecture on Compound Semiconductors – Transistors in Technicolour to be held on 24 August 2006 evening.

The compound semiconductors provide a rich palette of possibilities for the design of advanced radio system chips.

EpiTactix was spun out of CSIRO to develop RF chips using exciting new device structures and processing concepts identified within this rich, largely untapped solution space.

The talk outlines some of the areas of semiconductor development undertaken by EpiTactix and the commercial strategies being developed to take its products to market. The lecture will be presented by Dr. Shaun Cunningham, Founder and CTO of EpiTactix Pty Ltd.

Lecturer: Dr. Shaun Cunningham, Founder and

CTO, EpiTactix Pty Ltd, Marsfield, NSW,

2122

Date: 24 August 2006

Time: From 5:30 pm (6 pm Start)

Location: Engineers Australia Auditorium, Ground

Floor, 8 Thomas Street, Chatswood, NSW

5. TECHNOLOGY & HISTORY

5.1. How THE ROCK WAS WON – PLANS VS POLITICS

Brigadier Owen Magee wrote a book titled "How the Rock Was Won – Plans vs Policies" last year. In Chapter 13, Owen talked about the first new building, the State Archives, to be constructed and owned by the Sydney Cove Redevelopment Authority. Incidentally, Jim Vasselen has written a paper on "The State Archives" in 1977.

The State Archives was officially opened by the Premier of NSW Hon. Neville Wran on 27 April 1977. It was the first building constructed with technical sophisticated services in the "Rocks" of Sydney and was designed to conform to the indigenous architecture of the area. The principal consultants were Fowell Mansfield Jarvis and Maclurcan Pty. Ltd. as architects, structural and electrical engineers. Jim Vaselen, Director of Electrical Engineering, was responsible for the design and supervision of the electrical, telephone and smoke detection services. He was also the electrical consultant for the supplier of the \$5m computer and its no-break power supply/UPS.

The State Archives had 6 levels with 1300 sq m on each level. The whole level 6 was constructed and designed for use as computer area. To protect the computers from RF interference, its walls, ceiling, windows, and false floor were completely screened as a "Faraday Cage".

The State Archives has 3 x 750 KVA S.C.C. substation located in Globe Street. The whole building was protected by a sprinkler system having "wet" heads for office areas and "dry" heads for special areas. A complex "Alpha 1000" microcomputer security system controls was used for all the external doors, some internal doors, fire stairs, loading bay roller shutters, lifts, store rooms, computer areas etc with the card key readers, alarm bells and key switches. In the public areas, a 24 hour closed circuit TV system was used with monitor located at the reception desk. For after office hours, the intercom system would be used at several external and internal points should any person experience difficulty.

Many factors were considered when evaluating the suitability of the equipment eventually installed in the building. The selected equipments represented the latest "state-of-the-art" throughout the world and together with the high standard installation, Sydney Cove Redevelopment Authority enjoyed many trouble free years.

5.2. IEEE COMPLETES FIRST SYSTEM STANDARD FOR CELL PHONE BATTERIES

The IEEE has completed a standard to make rechargeable lithium-ion and lithium-ion polymer batteries for cellular phones more reliable and robust. The new standard, IEEE Livium(TM) 1725, "Standard for Rechargeable Batteries for Cellular Telephones," is the first to adopt a systems approach in setting uniform criteria for battery design, production and evaluation. The standard considers cell and battery pack electrical and mechanical construction, process control, chemistries, charge and discharge controls, and packaging technologies, among other areas. It gives the battery and cell phone industries uniform criteria for creating and qualifying rechargeable battery systems and for verifying battery quality. Read more: http://standards.ieee.org/announcements/pr livium172 5.html

5.3. Mobile Phone Masts Predict The Weather

New research being conducted by scientists in Europe and the Middle East suggests that existing mobile phone masts can be used to predict the weather - in some case more accurately than meteorological equipment. When bad weather such as rain or electromagnetic activity is about to appear, automatic systems in the mobile masts boost their signals to ensure calls stay connected. The signal data from one provider in Tel Aviv, Haifa and Jerusalem was matched against data collected from the country's meteorological equipment, and found to be a match. The mobile masts, however, proved to cover more ground than the meteorological equipment. Researchers in the UK also used a similar method of collecting data from global positioning satellites to measure atmospheric humidity. Professor Hagit Messer-Yaron, of the University of Tel Aviv, says the information could be used to predict hurricanes and other catastrophic events before they happen. The next step would involve getting existing mobile service providers to hand over their mast's information on a regular basis. Meeser-Yaron also believes that with this knowledge, people will one day be able to use read their own cell phones' reception patterns and predict

their local forecast. Read more: http://news.bbc.co.uk/1/hi/sci/tech/4974542.stm

6. TECHNICAL MEETINGS & CONFERENCES

All members are cordially invited to attend these joint meetings with the Engineers Australia (EA), IEEE, ITEES and IEE. These joint meetings are held at 6.00 pm (with light refreshments at 5:30pm) at the Engineers Australia, Lecture Theatre, Eagle House, 118 Alfred St, MILSONS POINT, NSW unless otherwise stated.

All members should check the latest updates of the Meetings & Conferences a couple of days prior to the actual date at the IEEE NSW News bulletins at http://www.ewh.ieee.org/r10/nsw/subpages/news/news.htm and also the Engineers Australia at http://sydney.ieaust.org.au/weekevents.htm to prevent any potential disappointment due to last minute changes.

Date	Topic	Speaker	Sponsor (Contact) / Venue
22 Jun 06	Micro Sensors	Prof Kwok CheeYee	Joint (John Englefield) / 8 Thomas, Chatswood
3 July 06	IEEE NSW Section Meeting – Executive Committee	0.100.100	IEEE (David Tien) / North Sydney TAFE – TBA (7 to 9pm)
13 July 06	Transrapid rail system	B Luber-Siemens	Joint EA (George Fox) / 8 Thomas, Chatswood
13 to 14 July 06	Power System Planning (course fees apply)		EEA (03 9326 9888) / Sydney
20 July 06	Workshops: 1. Modern Tools for Impulse Fault Diagnosis in Transformers; 2. Electric Field Analysis in High Voltage Systems; and 3. Artificial Neural Network as an Optimization Tool in High Voltage Engineering	Dr. Sivaji Chakravort, Professor of Electrical Engineering, Jadavpur University, Kolkata, India	To Be Confirmed (Tony Zaglas)
27 July 06	Wave Energy	Dr Raymond Alcorn	Joint IEE (John Englefield) / 8 Thomas, Chatswood
7 Aug 06	IEEE NSW Section Meeting – Executive Committee		IEEE (David Tien) / North Sydney TAFE – TBA (7 to 9pm)
10 Aug 06	3G Hutchison Mobile Virtual Network Options	EA to advise John Englefield	Joint IEE (John Englefield) / 8 Thomas, Chatswood
12 to 21	Engineering Week	J	Joint EA (Richard Barnes, Michelle
Aug 06			Crowshaw) / UNSW
14 Aug 06	Eng week: Harricks Address: Intellectual Property: a key to Engineering growth		Joint EA (Richard Barnes, Michelle Crowshaw) / UNSW (5:30pm)
17 Aug 06	Eng week: The Great Engineering Challenge.		Joint EA (Richard Barnes, Michelle Crowshaw) / UNSW (10am)
18 Aug 06	Eng week: RedR Social Lawn Bowls Fundraiser		Joint EA (Richard Barnes, Michelle Crowshaw) / UNSW (6pm)
24 to 25 Aug 06	Power System Design Principles (course fees apply)		EEA (03 9326 9888) / Sydney
24 Aug 06	Power Electronics		Joint IEEE (lan Boyd) / 8 Thomas, Chatswood
4 Sept 06	IEEE NSW Section Meeting – Executive Committee		IEEE (David Tien) / North Sydney TAFE – TBA (7 to 9pm)
14 Sept 06	3G Hutchison Mobile Virtual Network Options	Consultant Maurie Dobbin/Upali	Joint IEE (Peter Hitchiner) / 8 Thomas, Chatswood
28 Sept 06	Enviro-mission Solar Tower	R Davey	Joint EA (George Fox) / 8 Thomas, Chatswood
9 Oct 06	IEEE NSW Section Meeting – Executive Committee		IEEE (David Tien) / TBA (7 to 9pm)
12 Oct 06	Mobile Positioning System, 911 / 000 systems.	EA to advise John Englefield	Joint IEE (John Englefield) / 8 Thomas, Chatswood
26 Oct 06	IEEE 802.11(x) Wireless Security (To be confirmed)		Joint IEEE (lan Boyd) / 8 Thomas, Chatswood

7. CONTINUE TO RECEIVE CIRCUIT BY POST

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