# Vol 14 No 3 September 2011 CEG TO 18 No 3 September 2011 CEG TO 18



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# Marconi's first wireless tests get Milestones

ON 29 April 2011, the IEEE Italy Section dedicated an IEEE Milestone to honour Guglielmo Marconi's first experiments in wireless telegraphy.

Two plaques were presented by IEEE president Moshe Kam for each site where Marconi carried out his experiments: the transmitter in the garden of Villa Griffone, and the receiver on the far side of Celestine hill some 2km away.

Read the citations and historic significance of this achievement on the IEEE Global History Network webpages at www.ieeeghn.org.

The IEEE Italy section held the ceremony at Villa Griffone, Pontecchio Marconi, about 15km from



Guglielmo Marconi in 1986.



From this window of his laboratory, Marconi transmitted successfully a radio signal to the far side of Celestini Hill, a distance of about 2km.

Bologna, Italy. Welcome speeches were given by the president of the Guglielmo Marconi Foundation, Gabriele Falciasecca; the rector of the University of Bologna, Ivano Dionigi; and the mayor of Sasso Marconi, Stefano Mazzetti. The Princess Elettra Marconi gave a short speech commemorating her father Guglielmo.

After the Milestone dedication, a half-day workshop entitled 'Past, Present and Future of Radio Technology' featured keynote talks and panel sessions. The opening >

...continued on page 2



University student team demonstrates its Software Engineering project for Arabic sign language.

# Student Day puts undergraduates in competition across five topics

THIS year's IEEE UAE Student Day was hosted at Khalifa University, Sharjah Campus on 14 May.

This annual event builds on the continued success it has achieved since its inception six years ago. It has become the focal point of students enrolled on undergraduate engineering, science and technology programs in universities and colleges across the United Arab Emirates.

The key objectives of holding this student day are: enhancing the culture of competition among students, recognising outstanding achievements of IEEE student members, exchanging experiences between UAE IEEE students, enhancing leadership qualities of the IEEE students, and introducing the IEEE to the public.

The IEEE UAE Student Day 2011 included five competitions: a Common Design Pro-

ject, Senior Design Project, Software Engineering Project, Engineering Design Project, and Community Service Project. This year, 58 teams with nearly 185 undergraduate students from 11 universities across the UAE participated in the various activities of this truly exciting student-oriented event.

The participating institutions included Ajman University, American University of Dubai, American University of Sharjah, BITS-Pilani Dubai Campus, HCT-Abu Dhabi Men's, HCT-Al-Ain Women's, Khalifa University, Manipal University – Dubai, Petroleum Institute, UAE University, and University of Sharjah.

The Common Design competition was entitled 'Smart Guide for Blind People'. It required teams of students to successfully design, implement, and demonstrate a working prototype of a device that would • ....continued on page 2

A member of the Khalifa



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# Milestone marks the discovery of superconductivity

AN IEEE Milestone for the discovery of superconductivity in 1911 by Prof Heike Kamerlingh Onnes and his collaborators, Cornelis Dorsman, Gerrit Jan Flim and Gilles

Superconductivity is one of the most startling effects in physics in which, for certain materials, the electrical resistance drops to 'practically zero' for temperatures below a critical temperature, unique to each superconducting material. It was first observed on 8 April 1911 by Prof Kamerlingh Onnes and collaborators at the University of Leiden while measuring the resistance of mercury at temperatures just a few degrees above absolute zero (–273°C).

Holst, was dedicated on 8 April 2011 in Leiden, The Netherlands.

The plaque was was presented by IEEE President Moshe Kam, and accepted by Willem te Beest for the University of Leiden in the building where this discovery was made 100 years earlier.

The unveiling ceremony in the evening was conducted with the cooperation of the discoverers' descendants: Kamerkingh Onnes, Hans Holst, Gerrit Jan Flim and Wieb J Dorsman.

An all-day celebration included talks on the history of low temperature research at Leiden, the discovery and current applications of superconductivity, and prospects for future research in materials. More than 200 scientists and

engineers participated in the events which were organised and sponsored by the IEEE Council on Superconductivity, the University of

Leiden, the IEEE Benelux Section, the Museum Boerhaave (Leiden) and Philips Research.

The morning session of the '100 Years in Superconductivity' symposium was held in the beautiful theatres of the Leiden Schouwburg. Prof Dirk van Delft, director of Museum Boerhaave, described the early low temperature research

...continued on page 2



Moshe Kam presented the Milestone plaque.

# Student Day puts undergraduates in competition across five topics

continued from page 1...

act as an intelligent guide for blind people by facilitating their movement, warning them about nearby obstacles and dangers and thereby helping them in their daily activities. The guidance was to be provided in the form of audio instructions based on real-time situation.

The team from Ajman University (Mansour Taghadosi, Yusuf Ali and Ahmed Hassanin) won the first prize in the Common Design competition. The teams from American University of Sharjah and Khalifa University won the second and third prizes respectively.

The **Software Engineering** competition involved the development of hand gesture recognition software. The system would have to track a user's hands and respond to a set of hand gestures/postures. The team from Khalifa University (Buti Al-Delail and Mohammed Habeeb) won the first prize. The teams from Ajman University and Khalifa University won the second and third prizes respectively.

The **Senior Design** competition saw 25 projects covering a wide spectrum areas within the general field of electrical and computer engineering. The team from American University of Sharjah (Lara Kanbar, Hasna Rabbat and Adam Aboudan) won the first prize. The teams from Sharjah University and American University in Dubai won the second and third prizes respectively.

The Engineering Design competition, which targeted freshman engineering students, involved many innovative systems to sort marbles of different materials. The team from Ajman University (Tasnim Bassam, Ayat Magdy, Inas Magdy, Shamima Alam and Umber Mahrukh) won the first prize. The teams from Higher College of Technology – Abu Dhabi Men's and Khalifa University won the second and third prizes respectively.

To encourage engineering students' involvement in the community, the IEEE UAE Student Day Steering Committee introduced a specific competition to cover this aspect. The team from Ajman University (Amal DahThe winning team from Ajman University show their Engineering Design project for sorting marbles.





Competitions included a Community Service project, presented here by Ajman University students.

Awards were

representatives from the

teams during

the closing

ceremony.

given to

winnina

dal, Sewar Dahdal, and Eman Ahmed) won the first prize. Teams from Ajman University and Petroleum Institute won the second and third prizes respectively.

The Student Day was attended by Dr Eesa Bastaki (Chair of IEEE UAE Section), Prof Miroslaw Skibniewski (Khalifa University Dean of Engineering), Prof Mohammed Ismail (Director of Khalifa University Sharjah Campus) and faculty members from other universities. Khalifa University provided all the necessary resources to support the event and make it a success. Generous sponsorships were received from Emirates Advanced Investment and National Instruments.

### Mahmoud Al-Qutayri

Chair, UAE Section Student Activities and Student Day Steering Committee



# Region 8 Congratulate Victor's achievement

VICTOR Fouad Hanna, past-chair of IEEE France Section was appointed the rank Chevalier of the Legion d'honneur (National Order of the Legion of Honour) by the president of the French Republic. It is the highest decoration in France established in 1802, by Napoleon Bonaparte.

Victor also received the IEEE Microwave Theory and Techniques Society 2011 N Walter Cox Award "in recognition of exemplary service to the MTT Society in a spirit of selfless dedication and cooperation".

# Marconi's first wireless tests get Milestones

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► address was given via teleconference by the president of the Italian Authority for Communications (AGCOM), Corrado Calabrò.

The industry panel session was chaired by the director of the *Key4Biz* daily newsletter, Raffaele Barberio. The workshop was concluded with an outstanding talk by David Payne, chairman of the Marconi Society.

**Stefano Bregni** Politecnico di Milano, Italy



Attending the presentation of the IEEE Milestone in front of Celestini Hill were (left to right): Stefano Mazzetti, Silvano Donati, Francesco Vatalaro, Gabriele Falciasecca, Maria Elettra Marconi, Ivano Dionigi and Moshe Kam.

# Milestone marks discovery of superconductivity

continued from page 1...

▶ and the liquefaction of helium by Kamerlingh Onnes and co-workers in 1908. Prof Peter H Kes spoke on 'The Notebooks of Kamerlingh Onnes and the Discovery of Superconductivity', describing the

intriguing story of how Kamerlingh Onnes's lost laboratory notebooks were rediscovered in the archives of the Museum Boerhaave.

At the nearby Museum Boerhaave, the Dutch National Museum of the History of

Science and Medicine, many interesting exhibits tell the story of low temperature research at Leiden.

Dr Johan Overweg of Philips Research described the principles and the medical applications of magnetic resonance imaging

magnetic resonance i (MRI) that use superconducting magnets as an enabling technology. Prof Jan Zaanen described the latest status of recently discovered high temperature superconducting materials and how they play a central role in modern physics research.

To find out more, please visit the IEEE Global History Network: www.ieeeghn.org



Benelux Chairman Wim van Etten opened the Symposium.



shows the Benelux banner covering the plaque.



Victor Fouad Hanna receives his medal from Didier Lombard, general president of France Telecom & Orange (and Commander of the Legion of Honour), on 5 April.

## **One IEEE** Change is inevitable, but then 'if it ain't broke, why fix it?' by Roger Pollard

THERE are few certainties in life, but one thing we can be sure about is that today's technologies will become obsolete and be replaced by others, many of which we cannot yet envision.

With changes in technology happening so quickly and frequently, one of IEEE's biggest challenges is keeping pace with emerging technologies and supporting our members who want information and to form communities. We need to be agile and flexible in welcoming people working in technologies that are outside our present comfort zones and help them to create new technical communities.

Many of the problems of sustainability and improving the quality of life have been expressed in terms of 'grand challenges'. These encompass topics as new sustainable ways for the provision of energy, protection and development of the environment, healthcare, medicine, security, information, knowledge and automation tools.

All of these are interdisciplinary and most of them sit in IEEE fields of interest. We need to recognise that today's IEEE mostly operates in the discipline space, but it is the multi-disciplinary problem or solution space that defines the real issues facing society in the

21st century. There are many examples in the life sciences, as well as Smart Grid, Cloud Computing, Electric Vehicles, and so on. To support members operating in multidisciplinary technology, we need to see the creation of New Multidisciplinary Technical Communities which may cross the boundaries of several existing technical societies and open up new areas where an IEEE Society does not yet exist.

We also need to work to broaden the technology curriculum - to recognise that we need technologists to work on many topics outside of engineering science; to help our graduates become prob-

lem solvers with a perspective on what is needed by society, not merely discipline specialists; and to put more emphasis on policy, environment, teamwork, ethics and communications.

Watch the video at http:// solutionists.ieee.org and begin to think of our community of technologists as multi-disciplinary problem solvers who contribute to a better society.

IEEE ain't broke, but it can be improved!

Roger Pollard is currently IEEE Secretary, having previously served as Vice-President for Technical Activities, MTT Society President and as a Chapter and Section Chair in Reaion 8. In 2011, he is running for election as IEEE President and, if elected, would be the first from outside North America.



LM Committee Members and Regional LM Coordinators at the LM Committee Meeting in Alexandria, Virginia, USA.

# Now is a good time to form a group for Life Members

IN Region 8 we have Life Member Affinity Groups (LMAGs) in seven Sections: Croatia, France, Israel, Italy, Spain, Switzerland and UK&RI. Many other sections in Region 8 have enough life members to form LMAGs and would benefit from starting one.

Congratulations to the 2011 Outstanding LMAGs in Region 8: Section LMG Chair

Jacob Baal-Schem Israel UK&RI Roland Saam

### **Oualifications & benefits**

To qualify for Life Member status, a member must be at least 65 years of age and have been a member of IEEE or one of its predecessor societies for such a period that the sum of his/her age and his/ her years of membership equals or exceeds 100 years. Benefits of Life Membership are:

- Dues and regional assessments are waived.
- For qualifying Life Members, society fees are also waived.

- Individuals may receive reduced member rates at IEEE sponsored conferences
- Life Members continue to receive the same benefits that are available to other IEEE members.

### What you can do

Life Member Groups should organise at least two meetings during the calendar year to remain active. Life Members can help a lot in Section history activities, and participate in the Milestone program. They can help in Section Operation and especially in upgrading members and in membership recruitment, retention and recovery.

Life Members Groups are authorised by the IEEE Life Members Committee an annual budget, not exceeding US\$1,000, towards meetings or activities.

Aleksandar Szabo IEEE Region 8 Life Members Coordinator a.szabo@ieee.org THE first IEEE Forum on Signal Processing for Radio Frequency Systems (IEEE FSPRFS) was held on 28 March at the Telecommunications Research Center (FTW) Vienna.

Over 35 attendees followed nine high-quality presentations covering many aspects of the merging fields of signal processing, radio frequency systems, and circuit design.

A student presentation competition took place in the afternoon. The winner was Robert Dallinger from Vienna University of Technology, who gave a convincing talk about 'Adaptive Digital Pre-distortion based on Two-block Models'.

The event intends to be an annual open forum for discussing early research results, future trends, and for cooperation. Its sponsors were the IEEE MTT-S Austria chapter, the Austrian Center of Competence

# **Austrian SP for RF** forum signals success



in Mechatronics (ACCM), the Telecommunications Research Center Vienna (FTW) and x.test GmbH, which demonstrated the latest Agilent measurement equipment for LTE testing.

> Andreas Springer and Christian Vogel

# Webzine focuses on global awareness



EARTHZINE (www.earthzine.org) is an online publication that fosters earth observation and global awareness. Earthzine is a contribution of the IEEE committee on earth observation in support of the Global Earth Observing System of Systems (GEOSS).

Earthzine gives you information about the technology underlying Earth observations and the need and utility for information about the planet.

Go to www.earthzine.org/ subscribe-to-our-newsletter Saurabh Sinha



Your editors: Zhijia Huang (left) and Roland Saam

# Silence isn't golden: make your voice heard in 2011

DID you know that IEEE has an an organisational structure that is upside down - an inverted tree?

The base of this tree is at the top: it contains all 340,000+ voting mem-

bers. The next layer comprises the volunteers, somewhere between 20,000 and 200,000 people (see past president John Vig's arithmetic in *The* Institute. June 2009). At the bottom are the 1.000 staff who bring professional and business skills.

According to a survey, the most cited reason for volunteering is "helping others and creating a better society". So my message is: get

Just remember that your local IEEE organisation at Chapter, Section, Student Branch, WIE or GOLD level are also volunteers, so you'll want to remind them often of what you would like to do.

By the time you read this in

September, it will be IEEE voting time (election ballots close 3 October). I mentioned above the number of voting members. That probably includes you. Please vote now if you have not already done so. Most Region 8

members in the past did not bother to vote, so you need not wonder why the Regions 1-6 dominate the elected offices. Don't complain, vote - and help your choice to get elected. Then IEEE will reflect your wishes.

Roland Saam

# IEEE Day 2011: make it even better second time around

MARK the date: 6 October will the second time in IEEE history where all electrical and electronic engineers around the world are going to celebrate IEEE Day.

As a leading organisation, IEEE defines

standards and directions in technology, but as a leader, it is also responsible for future generations of engineers. The theme of the IEEE Day this year focuses on Empowering Members to Create the Future.

The IEEE Day Team is composed of volunteers from Region 8 and IEEE staff. The main task for the team is to initiate, motivate and coordinate events and efforts to celebrate this day worldwide.



Scan me with your smartphone to join in IEEE Day 2011.

We have prepared a new website with new features and enhancements. The all-essential social networks have been filled with new IEEE Day content, and even a new T-shirt logo has been designed.

We also encourage you to participate in the photo contest. The ten best pictures will be awarded a \$500 prize, designated for unit activities. Moreover, all the photos will be gathered in one video and published at IEEE.tv.

Share your excitement, visions and joy with engineers worldwide. See you at www.ieeeday.org.

> Rafal Sliz **IEEE Day Team**

# region8news

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### Submitting articles

We welcome news, articles and letters from any member of the IEEE. Please send these to the editor as plain text by email to r8news@ieee. org, remembering to type 'Region 8 News' in your email subject line. If sending photos or graphics, please make sure they are high-resolution files. Read our full guide to writing and submitting articles at www.ewh. ieee.org/reg/8/news/contributors.html

### **Deadlines for upcoming issues**

December 2011 issue	deadline: 1 October 2011
March 2012 issue	deadline: 1 January 2012
June 2012 issue	deadline: 1 April 2012
September 2012 issue	deadline: 1 July 2012



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'Communication and information security' was the topic of a conference held in March, supported by IEEE Iraq Section.

# **Conferences cover core theme** of communication within Iraq

THE Second Iraqi Communication Conference was held on 14-16 March at Baghdad, supported by IEEE Iraq Section. 'Communication and information security' was the keynote topic.

An international conference is planned for early 2012, themed:

a workshop in the Training and Development Center of the Ministry of Electricity. A conference on 'Electricity and Power and their status in Iraq' is planned, again with the Ministry of Electricity.

'Communication security in Iraq'.

On 21 April, the Section held



A trainina workshop was held at the Ministry of Electricity in April.

# **Elevator technology proves to be** a lift for IAS/PELS/IAS gathering

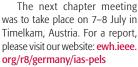


FOR its first meeting in 2011, the joint Germany Chapter IEEE Industry Applications/Power Electronics/Industry Electronics Societies (IAS/PELS/IES) gathered on 24–25 March at ThyssenKrupp Elevator AG plant in Neuhausen, near Stuttgart, Germany, where elevators including motors, drives, controls, and cabins - are developed and manufactured.

Our host, Dr Stephan Rohr, head of R&D, introduced us to the industry and his company. This was followed by a discussion of types of motors and their energy consumption during transient operation. Then a presentation about modeling and commissioning of elevator systems which comprise a cabin, a counterweight, a suspension rope and compensation rope

to balance the rope masses. Even a three-mass model shows considerable deviations from a multimass model or the solution of the partial differential system.

After lunch, we visited production facilities. Of special interest were high-rise systems which have a high pole number, and large inverters built from smaller ones by parallel coupling one inverter to one segment of the motor. The meeting ended with the concept of the twin elevators where two cabins share the same shaft.



Andreas Wagener IEEE Joint IAS/PELS/IES Chapter



introduced the tonic of elevator systems

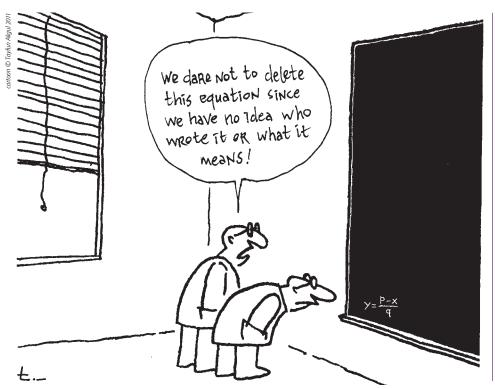
# **LETI hosts ComSoc heads during visit to St Petersburg**



Alexander Gelman, ComSoc CIO, met IEEE Russia North West Section members at St Petersburg, Russia, on 16 May.

Lee's talk, 'Era of communications convergence', and Gelman's IEEE', stimulated interest and many questions. The meeting was hosted by St Petersburg State Electrotechnical University (LETI) and attended by 45 IEEE members.

> Sergey Shaposhnikov Russia NW Section vice chair



# **Hungary Section** creates Student **Branch at Óbuda**

ÓBUDA University, Hungary, saw the creation of a new Student Branch in January. This is the fourth SB in Hungary, joining the Technical University, Veszprém University and Pázmány Péter Catholic University.

On 14 April, the KTE Rail Section and IEEE Industry Applications Society Chapters organised a lecture: 'The economy and energetic role of the electric car - or really green?'

On 8 April at Óbuda University, Germano Resconi gave a presentation about morphotronics. This theory represents an improvement to traditional computation models used for analysis of mechatronic systems. Resconi is a professor in Artificial Intelligence at the Catholic University in Brescia, Italy.

We have also celebrated 50 years of IEEE membership of György Gergely.

Peter Kadar IEEE Hungary Section vice chair



From left: Dusanka Boskovic (Bosnia and Herzegovina Section Chair), Prof Nermin Suljanović (University of Tuzla) and Matej Zajc (Slovenia Section Chair).

# InTsikt information technology symposium looks at Smart City

THE Seventh IEEE International Symposium on Information and Communication Technologies (InTsikt) was organised in Tuzla, Bosnia and Herzegovina.

It is an annual event where industry and academia exchange knowledge and experience in the ICT domain. The symposium is organised by the Faculty of Electrical Engineering Liubliana and Faculty of Electrical Engineering in Tuzla, with the strong support by the Communication Regulatory Agency of Bosnia and Herzegovina.

This year, the InTsikt main theme was Smart City, and the symposium received technical co-sponsorships from two IEEE Sections: Slovenia and Bosnia and Herzegovina.

Dusanka Boskovic



# **Education and research awards are** highlight of Iran Section meeting

THE annual meeting of the IEEE Iran Section was held on 18 May in Amirkabir University of Technology concurrently with the 19th Iranian Conference on Electrical Engineering (ICEE'2011).

The chairman of the Iran section, Soltanian-Zadeh, gave an annual report of the section's activities and the awards and recognition officer Khaki-Sedigh, delivered a talk on Research Ethics.

The section's Education and Research awards were presented to Prof Parviz Jabedar-Maralani of the University of Tehran and Prof Jawad Salehi of Sharif University of Technology, respectively.

The Young Investigator Award was presented to Dr Keivan Navaei, Associate Professor of Tarbiat Modares University.

Farzaneh Abdollahi **IEEE Iran Section** 



From left: Prof Shahidehpour (IEEE Fellow), Dr Nobakhti (Iran Section Secretary), Prof Salehi (IEEE Fellow), Prof Khaki-Sedigh (Iran Section Awards and Recognition Officer), Prof Vahidi (Iran Section Vice-Chairman), Dr Akhavan-Bahabadi (ICT Vice-Minister) and Prof Soltanian-Zadeh (Iran Section Chairman) during presentation of the Iran Section's Research Award to Prof. Salehi.



# **Computer scientists in Fez embark on Technical English Program Initiative**

IEEE members in Morocco are well aware that they need to improve their English to excel in their professional career, bearing in mind that Morocco is among the countries where English is the third scientific language after Arabic and French.

We started a Technical English Program in Informatics - TEPI - at the University of Sidi Mohamed Ben Abdelah in Fez. The main objectives are to improve the technical English skills at the University of Sidi Mohamed Ben Abdellah of Fez (USMBA), and to expand the IEEE community in Fez.

The TEPI-Fez is a series of one-day workshops scheduled on a monthly basis during the whole academic year. The participants are 20 professors and six PhD students who are all working in the field of computer sciences. The training started on May 2010 and will run till October 2011.

Beginning with a refresher of basic English, the remaining sessions are aimed at achieving improvements in relation to computer sciences. This will help professors to give their master courses in English and also give oral presentations in conferences and talks in workshops. In order to meet this objective, a specific topic in the domain of computer sciences is selected for each session, so that they can get familiar with the vocabulary of the chosen topic.

We also planned advanced grammar activities, so better comprehension (not necessarily technical), communication, reading and writing can be achieved.

The entrance level for TEPI (B1, which is not a very advanced) has been taken into account. The instructor is Malak Zouiten, a native English speaker with a master degree in computer sciences from the USA and also an IEEE member.

We measure the program's success by collecting the participant's feedback on each session. A technical English certification for basic, intermediate and advanced levels is under preparation and will be run at the end of this year.

We invite any interested IEEE Sections

or Chapters to collaborate to contact us and exchange their experiences regarding TEPI development.

> Ahlame Begdouri IEEE TEPI chair a.begdourin@ieee.ma Mohammed El Mohajir IEEE Morocco Section vice-chair m.elmohajir@ieee.ma www.ieee.ma



# **Hamburg hosts forum** on intelligent transport



MOBILITY is an important topic in our society. Transportation is supposed to be fast, flexible, convenient, ecological and low priced. People want to travel in a very comfortable and safe way. Transportation organization and optimization are important technical and economic tasks.

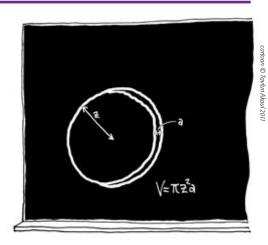
The Workshop on Intelligent Transportation (WIT 2011) was held in Hamburg on 22-23 March, a forum for research results and discussions of new ideas.

WIT 2011 was attended by 95 scientists from over 10 different countries. It was organised by the department of telecommunications of Hamburg University of Technology with technical sponsorship of IEEE Communications society Germany chapter. See http://wit. tu-harburg.de/files/WIT2011 Final Program.pdf.

Topics included radar and lidar sensors, car-to-car communication and wireless sensor networks. http:// wit.tu-harburg.de

> Hermann Rohling Chair, IEEE ComSoc Germany Chapter





(Thank to mustafa Yaga)



STAR workshop helped young adults combine physics, chemistry and maths.

# **Phateng's high schoolers** learn WIE rocket science

THE IEEE Women in Engineering Affinity group, IEEE South Africa Section, held a STAR day as part of the 2011 Student, Teacher and Researcher/Scientist (STAR) program on the 15 April.

At Phateng Comprehensive School in Mamelodi, Pretoria, 21 high school learners in grades 10 to 12 participated in the day's events.

An exciting hands-on Experilab rocket building workshop began with teaching the learners about the fundamentals of physics, chemistry and mathematics that are used in rocket science. Many different disciplines come together to create a rocket.

Each learner then had to build their own rocket, to include a fuselage, parachute and engine. They were then launched outdoors so that everyone could compare how high their rockets could fly and how well the parachutes deployed for landing. In principle, the rockets were capable of reaching a height of 250 metres.

Two informative talks were given by the University of Pretoria Student Branch and GOLD Northern Region members: 'Why consider studying engineering?' and 'What it is like being an engineer in the workplace?'

The day concluded with a presentation session where learners had to document and present what they had learned during the day. Feedback revealed their enthusiasm for the STAR workshops and appreciation of the STAR math tutorials that are held throughout the year.

> Chioniso Dube **IEEE** Women in Engineering South Africa Section

# **Student transition event gives** aid to young entrepreneurs



Lizanne Conradie, Marlize Naude (Wits Student Branch Chair), Dr Kerrin Myres and Keoikantse Marungwana (GOLD AG Chair).

THE IEEE GOLD (Graduates of the Last Decade) Affinity Group, Northern Region of the IEEE South Africa Section proudly hosted the Student Transition and Elevation Partnership (STEP) event on 14 April, in collaboration with the Wits IEEE Student Branch (University of the Witwatersrand).

The event brought together graduating Engineering students and Engineering professionals from different specialisations for networking opportunities and knowledge sharing on career development strategies.

The event hosted two highly experienced speakers who presented the two career progression routes available to



Justin Wernick receives his raffle prize: an Amazon Kindle with WiFi + 3G.



ExComs of GOLD and Student Branches of Universitises of the Witwatersrand and Pretoria.

young engineers after graduation. Lizanne Conradie of the University of Pretoria's Career Office discussed career planning and successful job search strategies for the traditional career progression path. Dr Kerrin Myres, sirector of the Centre for Entrepreneurship at the Wits Business School. focused on the entrepreneurship route of starting your own business.

Important skills for career development such as personal branding, networking, effective communication, CVs and interview skills were highlighted. The event had two networking and refreshments sessions, at the start and end of the program, providing ample opportunity for some of these skills to be practised.

Keoikantse Marungwana



The Education College for Women, Kufa University.



The Kirkuk Technical College – Technical Foundation.

# Women stand up to the challenge at scientific conference in Iraa

THE Second Iragi National Scientific Conference was held on 30-31 May at the University of Babylon by the Iraq Section.

Highlights included a keynote by Hivam Alyasiri, cellular communication advisor for the Iragi Ministry of Communication. There was also a session on 'Iraqi women in scientific research: status and challenges', delivered by Hanaa Alhamady, the representative of ICDL. The Iraa Section promotes education for women in the Kufa University and submitted the petition for a WIE chapter.

# **Finland's modest GOLD AG gets** its keys to the Hall of Fame

FINLAND GOLD has won a 2011 IEEE GOLD Affinity Group Hall of Fame Award. The MGA judges were impressed by the record of activities and selected GOLD Finland as one of three recipients in the inaugural year of this award.

This team has contributed immensely to the visibility of IEEE in Finland and all over the world. Some members have progressed from local to wider regional responsibilities (Rafal Sliz was nominated to R8 GOLD Committee), in addition to making multiple publications in different IEEE media (R8 Newsletter, GOLDRush).

Despite the small size of the

group, we were able to successfully plan and arrange multiple diverse events: educational lectures, attended IEEE Day at University of Oulu, STEP event, and so on. GOLD Finland also establishing a new Section in Tampere, which is alive and well.

All in all, this group, though fairly small, has beaten the odds and made a significant impact. The award is sure to encourage many other groups that have enthusiastic members who are willing to surf the waves of innovational change no matter how rough they may seem.

Chibuzor Eneh & Rafal Sliz GOLD Finland

# **Student projects enter** competition to create a Smarter Planet



Scan me with your smartphone to get more information.

A NEW competition co-sponsored by IBM and IEEE provides teams of university students with an opportunity to bring some of the world's most compelling social and commercial challenges into the classroom.

The IBM/IEEE Smarter Planet Challenge: Student

Projects Changing the World will debut in IEEE sections in Boston and the United Kingdom & Republic of Ireland (UK&RI) during 2011, before being expanded worldwide next year. In the first-year pilot phase, up to three awards will be provided to each section to student teams that propose classroom projects derived from a menu of topics identified by the worldwide IBM Smarter Planet project that confront technology professionals, business leaders and policy-makers.

Cash prizes of \$3,000, \$2,000 and \$1,000 for the best student team proposals will be awarded by IBM and IEEE. The deadline for submission of project proposals is 15 November. A panel of judges is expected to announce award recipients by mid-December. Full details about application procedures and selection criteria are available at smarter planet challenge.

### Al-Balga' Applied University, Jordan

# **Re-opened SB leads** way for refreshed WIE



A MEETING was held by Bushra Habashneh on the occasion of re-opening the IEEE Student Branch WIE Group Al-Balqa` Applied University, Jordan. Since she was an active member when the branch was established, we took advantage of the event to gain from her experiences in voluntary activities in IEEE-WIE.

We discussed several topics, including: organising a new structure for WIE Affinity Group for the Student Branch; arranging to hold meetings periodically for the officers and the active members; planning activities to encourage students to join IEEE and WIE; and beginning to prepare for activities due to take place during the summer.

To share our experience, we will arrange several visits to other Student Branches. And we also touch on the technical and softskill activities later in the year, for example, with HTML and Matlab workshops and a 'how to write your CV' course.

Amal Abu Ayyash

# **News from Your Region 8 Student Activities Team**





R8SAC striving for world domination: Martin, Jan, Eva, Jorae and Elias at the MGA SAC meeting

### **Region 8 Awards**

The Region 8 Student Activities Committee has been very busy evaluating the record number of entries received this year for its various awards and contests. Many excellent submissions were received and the decision in some categories was not easy. Congratulations to all the winners: they are listed in the panel below.

For more information about these awards and contests and how to participate please check the Region 8 SAC website www.ieeer8.org/sac.

### **CeuSBC** report

Jorge and Eva visited Linz for the first ever Central European Student Branch Congress (CEuSBC) in May. The program was sparked with workshops. social interaction and technical visits to the Science Park and the Ars Electronica museum, giving a good insight into branch operations and events. Congratulations to Christian Schmid and his team of SB Linz for the perfect organisation and a very successful congress. Check out www.ceusbc.org for further information. The CEuSBC 2013 will be hosted by SB Opole, Poland.

### **MGA SAC participation**

Last June, the global IEEE MGA SAC committee got together in Seattle, WA, USA for another yearly

meeting. Region 8 was very well represented by Elias, Martin, Eva, Jorge and Jan Verveckken. Many topics related to student activities were discussed. In a contest that took place during the meeting, the Region 8 team was ranked first among all IEEE regions for the best student activity concept. The winning concept was the Twin Student Branch Program implemented in Region 8. For more information about this program and how your student branch can join please visit the Region 8 SAC website.

### **IEEEXtreme**

Mark your calendars for the upcoming 2011 IEEEXtreme 24-hour programming competition which will be held on Saturday 22 October. For more details, check out the IEEEXtreme news at www.ieee.org/ xtreme and on Facebook.

### **Reminder for Online reporting**

Since last year, all students reporting takes place online, in a much easier and quicker way! Please don't forget to report your activities yearly (http:// sbr.vtools.ieee.org), and your officers after each election (http://link.ieeer8.org/officer\_reporting). This will help us know how you're doing, give you access to the yearly rebates, and will be a required condition to apply for awards!

> The Region 8 SAC Team: Elias, Jorge, Eva, Mohamad, Hosam, Jef and Djordje

### AWARD WINNERS

### **Region 8 Website Contest**

1st: Pretoria Student Branch (South Africa) 2nd: Alexandria University Student Branch (Egypt) 3rd: IEEE Greenwich Student Branch (UKRI) Runner-up: ENIS IEEE Student Branch (Tunisia) Runner-up: University of Ibadan Student Branch

Runner-up: KTH Student Branch (Sweden)

### **Outstanding Branch Counselor** and Advisor Recognition Award (R8 Nominees)

Tracey Cassar, University of Malta Student Branch

Mona Ghassemain, IEEE Greenwich Student Branch (UKRI)

### **Region 8 Exemplary Student Branch**

Student Branch Leuven (Benelux) - Global Finalist Princess Sumaya University Student Branch (Jordan) Bilkent University (Turkey) IRE-Kharkiv Student Branch (Ukraine)

AlexSB (Egypt) METU Student Branch (Turkey) Cairo University Student Branch (Egypt) Southampton University Student Branch (UKRI) University of Malta Student Branch (Malta) UCG Student Branch (Greece)

ITU IEEE (Turkev)

YTU IEEE SB (Turkey)

### Larry K Wilson Award

Sinan Sabih, ME-SBC 2011 Chairman (Qatar)

# Winners celebrate successful 2011 Student Paper Contest



The finalists: (front row from left) Hossein Hajimirsadeghi, Amel Ksibi, Ralph Tanbourai. Andrew Paverd. Shailesh Kulkarni (second row, from left) Carlos Lopez-Barrio, George Paunovic, Jozef Modelski, Ali El-Mousa, Manuel de Medeiros Silva

REGION 8's Student Paper Contest 2011 oral finals were organised in Lisbon, Portugal, during the EUROCON 2011 Conference.

The Student Paper Contest (SPC) has been a long-standing event in the Region, with SPC oral finals already being organised in Portugal in the 1980s at the R8 MELECON Conference.

SPC 2011 was announced in June last year with the deadline 15 December 2010. 32 papers were submitted, 29 of which were finally accepted and graded, with contestants from 17 Sections and 22 Student Branches/Institutions.

After finishing the oral finals, the jury awarded three prizes from the IEEE Life Member Fund: first prize to Shailesh Kulkarni, Patrick Reynaert, Cicero Vaucher, Domine Leenaerts and Maarten Tytgat, from Katholieke Universiteit Leuven SB; second prize to Jaymin Mankowitz and Andrew Paverd from University of the Witwatersrand SB;

and third prize to Ralph Tanbourgi from Karlsruhe Univ SB. The KU Leuven Student Branch, from which the first prize winner of the SPC 2011 came, also received the R8 Dick Poortvliet Award. The official recognition of the winners, finalists and SPC Jury was organised during the EUROCON 2011 Gala Dinner on 28 April. All finalists papers were included in EUROCON 2011 Proceedings and in IEEE Xplore base, and will be posted to SPC Internet pages.

The invitation to participate in 2012's Student Paper Contest has already been sent to Student Branch Chairs and Counselors, and to Section Chairs. The deadline to send full papers is 15 December. All selected finalists will be invited and financially supported to present their papers at IEEE MELECON 2012 Conference on 25-28 March 2012 at Yasmine Hammamet, Tunisia.

> George Paunovic Region 8 SPC coordinator



### Yarmouk University, Jordan

# Yarmouk students work off a lot of steam

IEEE Yarmouk University Student Branch organised a trip to Agaba city in Jordan with Yarmouk University's Hijjawi faculty for engineering technology and the college's Electrical Power and Machine Engineering department to work with Central Electricity Generating for three days from 15-18 April.

Two experienced engineers from the power engineering department (Sameer Seelawi and Rami Shonnag) explained all details about the generation station in Aqaba city and then we visited the linked station between Jordan and Egypt. The Agaba Thermal Power station consists of five units, each one producing 350mW from steam. All students benefited from this trip by getting to experience power generation in action, and seeing the generator from the inside, the control room and transformers.

Nadeem Ahmed

Yarmouk University Student Branch



### **University of Babylon, Iraq**

# **Iraq Section petitions** for CS student chapter

IT is well known that through the last three years since the establishment the Iraq Section, the majority of its student members have come from the University of Babylon, principally the Computer Science department. At the end of the first quarter of this year, about 25 postgraduate students signed a petition to form a Computer Society Student Chapter.

The Section supports students in most of the activities held at Iraqi universities.

For example, the Section celebrated the nomination of the best students in the Computer Technology College for the first time, and sponsored a Special Track in the First Scientific Conference held at Babylon University. It has also held many scientific workshops for students in most Iragi universities, and has nominated 17 students to participate in the Students Congress held at Texas A&M in Qatar in March. Not least, it celebrated the nomination of the best students at the Computer Science Institute (CSI) - Sulimanya Technical Foundation.



Students from the Computer Science Institute (CSI) Sulimanya - Technical Foundation.



Students from the Electrical Engineering department of



Prime minister of the Palestinian Authority, Salam Fayyad, meets students Mohammad Alsharif (centre) and Safwat Haddad (left), demonstrating the robot.

### **Palestine Polytechnic University**

# **Chess players should** check this robot mate

A RECENT project involving members of the Student Branch concerned the development of a chess-playing robot at the university. Helping the student members Mohammed Alsharif and Safwat Haddad was their supervisor Dr Radwan Tahboub

The project achieved the first prize at the fourth IT EXPO contest held in April at Birzeit University in Hebron.

> Addie Hiiazi Palestine Polytechnic University



### **Johannes Kepler University, Austria**

# JKU Linz students host the very first CEuSBC

THE first Central European Student Branch Congress took place from 13-15 May 2010 at the Johannes Kepler University in Linz, Austria. The event was attended by more than 40 participants from seven countries and was organised by the Student Branch at JKU Linz.

Workshops and talks covering intelligent music processing, patent law, energy issues and social/professional skills were accompanied by social events. The participants used the opportunity to exchange their know-how of shaping a successful Student Branch. One of the highlights of our event was the guided tour of the ARS Electronica Center, the museum of the future.

During the party night, every participant was invited to comment on "I am an engineer/IEEE because..." The resulting video is available on the conference webpage www.ceusbc.org.

We are proud to have been given the opportunity to organise this successful event. We are looking forward to meeting the dedicated representitives again at the next SBC and CEuSBC, respectively.

> Norbert Eidenberger and Gregor Gerstorfer SB JKU Linz officers

### **United Kingdom & Republic of Ireland**

# **One year on: Student Branch Initiative** bears rich fruit throughout UK&RI

THE past 12 months have been an exciting time for student activities in the United Kingdom and Republic of Ireland Section.

Since the Section's Student Branch Network Initiative was launched in autumn 2010, the number of active Student Branches in our Section has more than doubled to 14 at the time of writing, with even more to come.

In order to develop the Student Branches into a vibrant and sustainable Section-wide community of students, new opportunities for the student volunteers to network and to exchange their ideas and experiences were needed.

In February, a new series of biannual meetings of the chairs of all active Student Branches was initiated, bringing together the leaders of the student community. In addition, the second UK&RI Section Student Branch Congress took place at Queen Mary University London. It succeeded the previous highly successful event at the University of York held in 2007.

### Highly active

Many of the local student groups are highly active and organise outstanding activities. Whether it is the e.quinox project at Imperial College recently wining the GE Ecomagination Challenge, the Green Talks seminar series at the University of Greenwich showcasing future trends in eco-friendly technologies, the Student Branch at the University of Southampton supporting the Tarka Solar Boat Racing Team or Queen Mary University Student Branch organising this year's section SBC - all these activities highlight the enthusiasm and enterprising spirit of our young student volunteers.

In organising these and many more activities, the student leaders not only prove their commitment but also provide a great service to their fellow students at their institutions and the IEEE student community in our section as a whole.

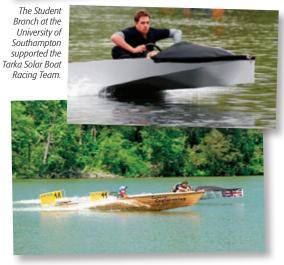
Stay tuned and look forward to future exciting student activities in the UK&RI section.

> Andreas Koltes **Student Activities Chair UK&RI Section**





Imperial College's e.auinox project recently won the GE Ecomagination Challenge.





**Notre Dame University, Lebanon** 

Two students

showcasina

their car anti-

theft project.

# **Communications competition** attracts Lebanese students

THE First IEEE Lebanon Communications Student Competition 2011 (IEEE LCSC'11) was held at Notre Dame University (NDU), Zouk Mosbeh, Lebanon on 28 June.

Students from several Lebanese universities competed on the basis of their final year projects that are related to the communications

field. After they briefly presented the main innovation of their work, the students had the opportunity to show demonstrations of their projects.

The jury members, representing major companies and universities in Lebanon, selected the best projects for the three top prizes.

The event also included presentations by Zaher Dawy, chair of the IEEE Communications Society Lebanon Chapter, and Elias Nassar, chair of the IEEE Region 8 Student Activities Committee.

A keynote speech entitled 'Opportunities for Technopreneurs' was given by Nicolas Rouhana, director of the Berytech Technological Pole.

For more information about IEEE Communications Society Lebanon Chapter activities, please go to http://ewh.ieee.org/r8/lebanon/ com/home.html.

Elias Nassar

### **Ajman University of Science and Technology, UAE**

# Wireless monitoring is focus for Ajman seminar

FOR the second year in a row, the College of Engineering in Aiman University of Science and Technology hosted the semester approach seminar. The seminar, which took place on 14 April, focused on Wireless Monitoring and Remote Measurement Applications.

The seminar started with a lecture given by Elie Abou-Nasr, guest speaker from National Instruments Middle East, on designing and deploying remote monitoring applications. Prof Ali Abou El-Nour, deputy dean of the College of Engineering at AUST Fujairah, presented a paper on reliable wireless monitoring networks for health applications.

The seminar concluded with a presentation on IEEE and WIE in the UAE Section and Region 8, given by Maryam Al-Thani, IEEE WIE Global committee member and project manager Dubai cable company DUCAB.

After attending the seminar, the students were encouraged to start their own IEEE Student Branch and WIE Affinity Group.

> Amina Fellan **UAE Section**



### **University of Cyprus, Greece**

# **Greek conference plans** spark major collaboration

THE Student Branch of Cyprus has taken the lead in organising a Greek-speaking Student Branch Conference next summer, which all branches are invited to attend.

We travelled across Greece to share our vision for the event and gain the support of the Universities - and achieved so much more.

We kicked off in Athens, followed by a visit to the island of Agistri the following morning. Members of eeStec, an organisation friendly to IEEE and our cause, had been kind enough to invite us to their multi-cultural event. There we came across fellow IEEE members and discussed our plans. Then we visited the university back in Athens, where our plans were well-received by the institution's president.

We moved on to the city of Lamia, where we were accommodated by the IEEE branch of University of Central Greece. We then visited Thessaloniki where many Greek Student Branches had gathered, including branches from Aristotle University of Thessaloniki, Technological University of Thessaloniki, Democritus University of Thrace and the University of Western Macedonia. We discussed our plans in detail and outlined courses of action; each branch agreed to pursue our common goals.

We managed not only to fulfill our objective of gaining the trust and approval of our Greek student members, but we also initiated a new era of unprecedented collaboration between the Greek-speaking Student Branches. This was networking at both a professional and personal level: the IEEE way!

Charis Maranaos Secretary, University of Cyprus Student Branch



# **BAU** is back with electrifying visit to AEI

BAU Student Branch organised a scientific tour to the Arab Electrical Industry company (AEI), on 7 May.

The manager of AEI, Mahmoud Algisi, welcomed us with general information about the company and its developmental stages. Employees at the company took us to a tour and provided the group with information about their work. such as the way they produce wires and cables used in production, and identified some types of distribution boards and connections.

Least but not last, we went to the company exhibition and took the opportunity to see some of



its complete model productions such as chandelier, single- and three-phase panels and switches.

Many activities were conducted while travelling to and from





the site, including playing amazing games, discussing modern inventions and listening to a brief about IEEE and WIE.

Abdulmunem Jamal