# www.ieee.org/rs Vol 8 No 2 June 2005



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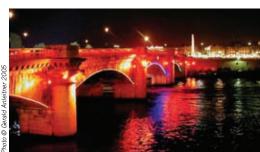
# IEEE Board of Directors joins Region 8 committee at April conference in Paris

THE LATEST twice-annual meeting of the Region 8 committee took place in Paris on 15-17 April. The IEEE Board of Directors also came to Paris to hold their meetings, giving everyone attending a chance to get together. Some 200 persons attended, representing nearly 50 IEEE Sections.

The event was opened by Region 8's Director, Baldomir Zajc, who noted that, in the past, IEEE Region 8 tended only to talk about services and benefits. In future, he wanted to turn the discussions towards the public awareness of engineering.

"Right now in Europe, engineers don't have influence anymore," said Zajc. "Lawyers and economists decide everything." One of the things he admired about the IEEE Board of Directors and the Region 8 committee was that they are all engineers. "IEEE has lawyers but they are not visible, and yet everything runs very fluently." He expressed a desire for engineers to step into the front line more than they do now, and so increase their influence.

Emphasising the multicultural aspects of Region 8, Zajc spoke of the 46 countries that comprise the region and its 30 or so languages. This means most of the member countries have their own language, with only a few being able to share one, such as the Arabic states or Germany and



Austria, for example. Such communication challenges, according to Zajc, make the successful running of Region 8 all the more impressive.

Zajc's opening remarks were followed up by Cleon Anderson, IEEE 2005 President, who said: "We are joined in a common vocation that transcends our national borders and builds

friendships around and among our countries."

Anderson spoke of the IEEE vision of promoting the engineering community worldwide. The organization, he said, should engage in advancing global prosperity "by fostering technological innovation and enabling our members' careers."

See page 2 for more photos.

# **Prof Kotelnikov**

Academician Vladimir A. Kotelnikov passed away on 11 February 2005 in Moscow, Russia, at the age of 97. Professor Kotelnikov was the founder of radio astronomy. His name is given to asteroid number 2726 to commemorate his outstanding contributions to the world science.

Kotelnikov was the Dean of Russian Communication Scientists and Engineers, and the founder and Honorary Director of the Institute of Radio-engineerig and Electronics at the Russian Academy of Sciences. An IEEE Life Fellow, Kotelnikov received many Russian and international awards, including the prestigous IEEE Alexander Graham Bell Gold Medal.

Henrich S. Lantsberg IEEE Russia Section

# **Dual logo proves to be a success**

A DUAL-LOGO cooperation agreement between the International Electrotechnical Commission (IEC) and the IEEE has begun to bear fruit, To date, seven IEEE standards from the Computer Society/Design Automation Committee and the Instrumentation and Measurement Society have been approved and published under this agreement. An IEEE standard from the Power Engineering Society is currently under ballot.

Another 70 documents have been identified as possible future candidates, and their maintenance procedures are already complete and approved. Two IEC TC

Plenaries have been hosted at the IEEE Operations Center: TC93 Design Automation and TC27 Industrial Electroheating Equipment.

The original agreement was signed at the IEC General Meeting in Beijing on 29 October 2002, allowing the logos of both organizations to appear on IEEE standards accepted and approved by the IEC. Under the agreement, the IEC evaluates IEEE electronics, telecommunications, power generation and other electrotechnical standards for international status.

This broadens the International Standards collection of the IEC, allowing it

to benefit from the valuable work undertaken by the IEEE. IEC endorsement also gives selected IEEE standards greater market acceptance.

In this way, IEEE and IEC have responded to the World Trade Organization's expressed wish for openness, due process, coherence and market relevance in global trade. The agreement demonstrates that major technical standards developers are cooperating to create global standards and to eliminate expensive and unnecessary duplication.

Ingo Ruesch R8 Standards Coordinator See page 14: Global standard for mobile phone exposure.

# **EUROCON 2005**

**∲IEEE** 

The International Conference on Computer as a Tool

21-24 November 2005 · Belgrade



Computer-Aided Design, Simulation, Modeling, Signal Processing, Information and Communication Technologies, Knowledge-Based Systems

# - Sava Center, Belgrade, Serbia & Montenegro -

Organized by: IEEE Region 8, YU IEEE Section
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# More from the Region 8 conference in Paris





Taking time out to visit the sights of Paris, including the Louvre.

In parallel with the Region 8 meeting, two other important IEEE committee meetings took place during the event in Paris:

- IEEE Board of Directors operating committee (including the past 2004 president Arthur Winston and the 2006 presidentelect Michael Lightner)
- IEEE Regional Activities Board led by Marc Apter

# **Eight new Education Society Chapters under development**

I received good news from Rob Reilly, the Chair of the IEEE Education Society Chapters Committee. Eight new Education Society Chapters in R8 are under development: United Kingdom and Ireland, Portugal, Turkey, Northern Italy, Poland, Benelux, South Africa and Egypt. Congratulations! Have a look at www.ewh.ieee.org/soc/es/chapters.html for more information.

The existing 12 Education Chapters that already comprise Region 8 are: Austria, C&S Italy, Croatia, France, Germany, Greece, Nordic (Norway, Denmark, Finland, Iceland and Sweden), Romania, Saudi Arabia, Slovenia, Spain and Switzerland.

This means we shall have 20 Education Chapters in our region very soon. But

we shouldn't stop with the formation of new education chapters. Education is one of our main goals in IEEE and I believe we should have a chapter in every section or group of sections with strong education activities.

Aleksandar Szabo



# Hans Schmitt collects award

LAST ISSUE we reported that the former treasurer of Region 8, Professor Hans Schmitt of Aachen, Germany, was selected as this year's recipient of the Larry K. Wilson Transnational Award.

The award itself was presented to Prof Schmitt (pictured top, right) in Paris by the IEEE Vice President for Regional Activities, Marc Apter (left).

# Call for wireless information and researchers

WE ARE a group of German engineers seeking collegues eager and able to contribute sound knowledge and research time to explore the possibility of wireless power transmission, based upon but not limited to the work carried out by Nikola Tesla and others.

If you think you match our group please get in touch.

Jörg Rösch roesch@ieee.org

# DID YOU KNOW?

# Free Internet newsletters

18 IEEE Technical societies offer their newsletters on the Web. To access them, go to:

www.ieee.org/organizations/ pubs/magazines/nlist.htm

This page gives links to the 18 societies which have their newsletters published by IEEE publications department. They are free and convenient, and give instructions how to receive regular email notifications about new issues.

# **UAE Women In Engineering section features at WETEX 2005 in Dubai**



IEEE-WIE accepts the WETEX Marketing Team's award. Left to right: Rana, Maryam, Shaikha (student members at the University of Sharjah); Marko Delimar (R8 VC Student Activities), Eisa Al Suwaidi, Maryam Al Thani (IEEE-WIE UAE section Marketing Officer).

EARLIER THIS year, IEEE-WIE UAE section participated in the annual Water & Energy Technology & Environment Exhibition—WETEX (www. wetex.ae). This year's event was held at Dubai's World Trade Center (www.dwtc. com) on 1-3 February.

The WETEX organizer team from Dubai Electricity and Water Authority (DEWA—www.dewa.gov.ae), IEEE UAE section (ewh.ieee. org/r8/uae) and Al-Wakeel School suppliers sponsored

the IEEE-WIE participation at this exhibition.

### **WETEX** aims

The exhibition most typically targets environmental committees, industry, trade and service companies, planning and engineering services, scientists, engineers, water protection and waste experts, and various associations, institutes, universities and technical colleges.

Due to an exponential population growth and in-

creasing urbanization that contributed to an increased demand for water and power supply in the Gulf, regional governments have realized the severity of the situation. Their efforts now focus on the development of new strategies and technologies to improve current water utilization and management.

This exhibition is all set to provide an ideal platform for buyers and sellers to forge new business alliances or to reinforce current business relationships. The exhibition showcases companies pioneering new technologies and solutions for better management of water, energy and environment.

# **Experts on tap**

WETEX benefits extensively from environmental experts attending the exhibition and the accompanying seminar, representing environmental agencies, government legislators and regulators, local authorities and commercial organizations drawn from the water, energy and environment industries.

The exhibition is essential for decision makers who have direct influence on water and energy management or the environment in the region.

### At the WIE stand

IEEE-WIE UAE section were represented by their active volunteers from University of Sharjah (www.sharjah. ac.ae)—Rana, Shaikha, Maryam, Khadeejah and Noura—and from American University in Dubai (www. aud.edu/main.htm)—Elias, Nancy, Mahmood, Sametta and Ametta. They introduced IEEE to visitors who want to know more about us and explained more about IEEE

UAE section and IEEE WIE group for UAE section.

Many visitors appreciated our WIE group work and showed their interest and willing to support us in our future activities.

### **Finding out more**

Photos of our activities were on display at the stand using an overhead presentation projector. WIE volunteers worked hard to inform visitors about our group and distribute the IEEE UAE Section *EE-vision* newsletter, IEEE WIE brochures and some WIE gift items. Showing Arabian hospitality, our active volunteers were welcoming visitors with dates, chocolates and Arabian traditional coffee

Luckily, During WETEX, Region 8 committee officers were holding a regional meeting in Dubai. They took the opportunity to visit our WIE booth, encourage our volunteers and appreciate their hard work.

Also, the WETEX organization team thanked us for our valuable participation and our volunteers' hospitality by awarding us the WETEX trophy and appreciation certificate.

Rana Iskandrani University of Sharjah

# **WIE update**

THE UNIVERSITY of Sharjah now has two campuses: one for boys and one for girls. A Women in Engineering (WIE) student branch is planned.

WIE student members are very active in the Univeristy. As well as working at WETEX 2005 (see above), they contribute in translating *EWeek* material (through IEEE WIE student members Mohammed Bamakrama and Rana Iskandrani).

They have also given a presentation on the IEEE to the American University of Sharjah students as part of a student branch co-operation (see page 7). In addition, WIE contributes to *EWeek* along with the IEEE boys' student branch.

www.sharjah.ac.ae

# **Encouraging even more women into engineering**

IEEE WIE UAE section Chair, Maryam Al-thani, was invited to give a lecture to top high school girl students in the Emirate of Sharjah. The lecture, delivered in Arabic on 23 March, was entitled Your Future In Your Hands.

The main purpose of the lecture was to encourage the superior students to stay on track for achieving excellence and career success. It was organized by Al-Qasimia Primary School in Sharjah, the Special Needs Section at Ministry of Education, and the Sharjah branch of IEEE WIE UAE section.

The lecture was held at Sharjah Supreme Family Council and attended by top-flight students from three secondary schools in Sharjah: Al Noof, Al Heerah and Roqayah.

Mrs Maysoon Al Abdouli, Teacher of Special Education at Al-Qasimia Primary School, opened the proceedings by welcoming the guests and introducing Maryam to the audience. Maryam began





her talk by explaining IEEE and WIE Activities at UAE section, before tackling the theme of different definitions of 'superiority'. The lecture discussed how to fulfil your potential and obtain a University place. The aim was to show the girls the value of their achievements and how their continued success is important to the community.

At the end of the lecture, Maysoon thanks Maryam for her dedication and her effort toward encouraging girl students.

Maysoon Al Abdouli

June 2005 region@news

# How do you keep 50,000 members in touch?

THREE MONTHS is a long time—except when you have to prepare the next issue of Region 8 News! Fortunately, this is a team effort. You, the readers, and volunteers keep the editor's office supplied with information, stories, photographs. I and our student news editor, Basak Yüksel, then edit and plan that material into what we hope is an attractive newsletter for you to enjoy.

Region 8 is one of the largest Regions in the IEEE with more than 50,000 members in eastern and western Europe, Africa and the Middle East. Governance of IEEE is the job of members who volunteer their time. There are no staff employed by IEEE in Region 8.

The Region 8 operating committee, whose names appear alongside, are just the tip of the iceberg. The names you don't see are the hundreds of members who plan meetings, write articles, organize conferences, and so on. Go to the Region 8 web page at www.ieee.org/r8 and click on the 'Sections' link. From there, you can contact your local IEEE volunteer.

### New memory skills

Technology is very important. IEEE volunteers operate a truly 'distributed' organization. I constantly use the Internet and computers to find and manage information.

Sometimes my adopted technology needs a new kind of memory skill. New software frequently needs many hours to learn its operation and to adapt working practices. The effort to learn is soon forgotten but so also is what you had to learn.

Last year, I bought a disk recorder (NetMD) which I used for voice recording. It has a data cable to transfer recordings to my computer. I did this operation many

times. Later, I bought another digital voice recorder—much smaller, similar functions, different software, different procedure. Today, I cannot remember how the first one operates and I spend hours trying to rediscover what I had already 'learned'. Sigh...

### **Remarkable VolP**

There are many messaging and voice-over-Internet Protocol (VoIP) products. A few months ago, I discovered a service—designed in Region 8 by some IEEE members in Sweden and Lithuania, I'm told-that is truly useful for talking over the Internet. Try it at www.skvpe.com.

What it does is remarkable. It has all the benefits of a messaging system, but with voice instead of keyboard input/output. You'll need a computer with a reliable Internet connection but the software is free and there are no sticky advertisements.

# **Good connections**

Question: How many readers do not have reliable, accessible Internet? I live in London and I guess the service is pretty good here. It costs me about 40 euros per month for a constant broadband 500,000 bps (bits per second) connection. That's good enough-I feel like a world citizen. It was all very different two years ago, with dialup at 28,000 bps, cost unpredictable, used miserly.

Let me know your experience. There is much pressure to push IEEE services over the Internet and email. I suspect this results in a lot of non-delivery!

Even without the Internet, I know that it is very hard to keep up without the latest in computer software. So how many people do not use a computer in 2005?

> Roland Saam Editor

# regionsnews vol 8 No 2

Region 8 News is published quarterly by the Region 8 committee of the Institute of Electrical and Electronics Engineers, and distributed free with IEEE Spectrum, to more than 50,000 IEEE members. Read past issues online at www.ieee.org/r8.

### **REGION 8 OPERATING COMMITTEE**

Bylaws and descriptions of the committee offices — refer to www.ieee.org/r8

### **EMAIL ADDRESSES OF REGION 8 COMMITTEE OFFICERS 2005/6**

### Officers and Vice Chairs

# **Appointed Members**

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Past Director Tony Davies tonydavies@ieee.org

Secretary Christian Borgert c.borgert@ieee.org

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V/C Membership Activities Jaafar Al-Ibraham jaafaribraham@ieee.org

V/C Student Activities Marko Delimar m.delimar@ieee.org

V/C Technical Activities Jozef Modelski modelski@ieee.org

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Advertising For rates and deadlines, contact the editor.

Region 8 Web site www.ieee.org/r8

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Graphics, photos and images may be uploaded to the Region 8 website using the file transfer protocol ftp://ewh.ieee.org/r8

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Submitting articles We welcome articles from any member of the IEEE. Submit your articles to the editor as plain text, RTF or DOC files. Photographs may be emailed separately or transferred to ftp://ewh.ieee.org/news as high resolution JPG (300dpi) files. Please put R8 News in your email subject line.

### Deadlines for upcoming issues

September 2005 issue	1 July 2005
December 2005 issue	1 October 2005
March 2006 issue	1 January 2006
June 2006 issue	1 April 2006

# Joint effort for new product development in Munich

IN A joint effort, the IEEE Student Branch of the Technische Universitaet Muenchen (Munich University of Technology), the IEEE GOLD Group Munich and the Engineering Management Chapter of Germany invited the IEEE members of the Munich area to a talk about new product development. On 28 January, about 40 IEEE members from Munich met at a seminar room of the Technical University of Munich to hear a lecture by Darrel Chong on *The Impact of Time Pressure on Teams in New Product Development*.

With this lecture, the EMS Chapter continues its activities in the area of new product development. In addition, the joint activity, togeth-

er with the GOLD Group and the Student Branch, stresses the effort of different IEEE bodies to interact and to offer additional value of membership to all IEEE members.

# **Chong invokes Dyson**

The lecturer, Darrel Chong, is working towards his PhD in a research project at the National University of Singapore (NUS) and the Technische Universiteit Eindhoven (TU/e). In addition, he is a member of the IEEE GOLD Committee 2005 and active within student branch and GOLD activities in Singapore.

As Chong noted, Martin McCourt, CEO of Dyson Ltd, explained at the International Engineering



IEEE members pack a seminar room at the Technical University of Munich.

Management Conference in 2004 that Dyson is focusing and investing in developing new products to achieve the company's long-term goals. Organizations operating in high-growth markets, such as Dyson, essentially have to compete on time. Time plays a crucial role.

However, how fast can product development get given that speed unavoidably induces time pressure on its teams? Studies have found that time pressure has myriad effects on the team processes, in particular the way team members share information. Given that communication is a key driver of new product development success, how time pressure impacts upon team communication to affect new product development performance is a question of great importance to managers.

# **Different perspective**

In his lecture, Darrel Chong explored the impact of time pressure on individual and team processes, and how the phenomenon could impair performance. The aim was to provide a behavioral and theoretical perspective to the professionals developing new products and discuss how managers can mitigate the negative effects of time pressure.

The lecture received very positive feedback from participants, and en-



Darrel Chong delivers the lecture.

ergetic discussions took place at the end. The various IEEE entities will make sure to continue their common effort as the 'IEEE Community Munich'. We are especially grateful to the IEEE Germany Section for supporting this event.

# Joint symposium in Egypt

IEEE EGYPT section GOLD and IEEE Alexandria Student Branch organized a huge event in cooperation with Bibliothica Alexandrina, the famous library of Alexandria in Egypt.

This was the Einstein Symposium Pre-event, comprising two days of seminars, held in February this year. It was a marvellous occasion, attended by more than 450, and is the first major event to take place at the library. This was considered a very big step for IEEE here, at such a state-of-the-art science centre. For more details on how it went, see page 8.

Ramy Ibrahim Omar R.I.Omar@ieee.org



Prof Ismail Serag El-Din leads the opening seminar.

# **GOLD** coordinator update

LET ME introduce myself as the new GOLD Coordinator in Region 8. Many of you may still know me as the 1999-2000 R8 Director.

Region 8, which is an active and dynamic region in many fields, is an underdeveloped unit with respect to GOLD Affinity Groups (AGs) and GOLD activities for several reasons:

- R8 has over 45 sections. Right now we have only about 15 groups.
- R8 has many active student members. After graduation, however, a new life starts, involving looking for jobs, relocating and forgetting about IEEE and its benefits. Only an average of about 30-35% worldwide remain as members.
- Some drop membership

after graduation for various reasons such as professional challenge, stress and family pressures.

Our students are the future of IEEE, so we have to start working on improving this poor picture of our students. We have to remind them about the many benefits of being an IEEE member during their professional life. I want to accomplish this with an active GOLD program in R8, which has actually to start in our student branches.

I plan to establish an R8 GOLD Team of 8-10 team members, each being responsible for a specific geographical area, for example for up to four neighbouring sections. They should also assist and consult the section

coordinators and/or AG chairs in their activities.

Members who are interested to work as a GOLD volunteer are invited to contact me or your Section Chair. As soon as I have the team members available, I will invite them to a meeting for training and education on GOLD programs and activities, best practices, and so on, and to provide them with promotion materials.

Please visit the GOLD area on the Region 8 website for regularly updated news. During 2005 I will also send a R8 GOLD email newsletter to our team members, GOLD coordinators and AG chairs to keep them informed and updated on our regional GOLD activities.

I look forward to working with all of you in 2005.

Rolf Remchardt r.remshardt@ieee.org

June 2005 region≴news

# region student news www.ieee.org/r8sac

WELCOME BACK! Let me start this new issue with warm wishes.

From the moment that I began receiving your e-mails from all over our region after the last issue appeared, I realized that my hopes had been met. Ever since joining the IEEE, I have actively made use of the benefits that membership brings to student members and have encouraged others to do so too. The IEEE offers more than you might think.

Some years ago, IEEE student branches were only active within each university, but now you can 'network the world'. IEEE student membership gives you the unparalleled opportunity to meet up with other IEEE people outside your university and cooperate with them.

All over Region 8, the many student branches are organizing National Student Branch Congress events to bring together IEEE student members in their section.

Student branches are also organizing technical trips and exchange events with other nearby branches, even with some of the more distant ones in our region, and the number of regional student conferences, meetings and competitions is increasing all the time. In this issue, you can find out more on these national and international activities, in addition to local student branch news.

I am also very pleased to announce the official launch

of the Regional Robotics Competition. This has been organized entirely by IEEE student members from all over our region. After talking about it in previous issues, we received a lot of feedback, suggestions and offers of help, and now at last it's ready to go. Look for the *Call for Applications* in this issue for more information.

Finally, please keep that feedback coming in! Here at *Region8News* we want to know what you think about



our reports and we welcome fresh ideas to help improve the service we offer. Tell us what you want to see more of and what you would like to see changed!

> Basak Yüksel R8 Student News Editor

# **R8 student activities update**

REGION 8 students rock again! Once more we are the IEEE Region with the highest increase in student membership, and with fewer students discontinuing their membership than ever. The IEEE is an organization based around its members, and without them, IEEE would just be another service.

Numerous new student branches, branch chapters, and affinity groups were formed this year in Region 8. Student branches are the soul of local student activities and the base for local student membership benefits. If you do not have a branch at your college or your branch appears to be somewhat dormant, give us a howl and we'll help you wake up the old branch or set up a new one. Yes, it is really that simple!

# Student web portal

I have been fortunate enough to visit several student branches throughout the Region this year and I was very impressed by the amount of activity going on at branch level. These activities need to be communicated between student branches so that we can all exchange ideas.

This is why, as you read this, Region 8 students are building their own web portal—a powerful space for exchanging thoughts, ideas and activities throughout



Ricardo (left) and Marko in New Orleans.

the Region. Do please keep sending us your input so that we might publish it in the Region 8 Student Activities web site as well as Region 8 Student News.

# **GSM** advantages

IEEE students now have two membership grades: Student Membership (StM) and Graduate Student Membership (GSM). The difference between the grades is very simple: the GSMs qualify for a Member grade (i.e. already have a degree in an IEEE designated field) while both still have to carry at least 50% of the normal full-time academic program in an IEEE designated field. The total cumulative allowed period for a member to hold the StM and/or GSM grade remains eight years.

The really great news is that GSMs have the same rights and privileges as full Members, including the right to vote. Also, if they are interested in volunteering, GSMs can enjoy the same privileges as Members. This gives Region 8 roughly no less than 7,000 new voting members and a large pool of new volunteers.

The IEEE dues for student members in both grades, of course, remain the same (US \$25) but now you also get the *Potentials* magazine free in electronic form!

Get involved—let us know what you are up to and what you think. All of your questions, thoughts and comments are welcome.

Marko Delimar R8 Student Activities Chair m.delimar@ieee.org

# New membership grade and student competitions

A NEW door has opened for volunteers in Region 8 to help the IEEE grow better and further. The new GSM membership grade, available to those of you studying for a PhD or Masters degree, allows thousands of students in Region 8 the right to vote and hold positions in Sections, Chapters and other IEEE units. We'll keep you updated on GSM in future.

### **Ethics competition**

An initiative coming from the Ethics and Member Conduct Committee, this competition pits student teams against ethical-related problems extracted from real life situations that must be solved according to the IEEE Code of Ethics (and a bit of common sense). We expect

to organize the competition during the next Regional Student Branches Congress, hopefully with the help of volunteers from the American University of Sharjah.

### **Multimedia promos**

Has your branch created a video, Flash animation or local radio advert? In our Multimedia Promotionals Contest, we are looking out for all types of multimedia used for promoting the IEEE and/or our fields of interest. This initiative is being coordinated with volunteers from the Student Branch of Princess Sumaya University for Technology (PSUT).

Have fun and do well! Ricardo Varela Region 8 Student Rep phobeo@ieee.org

# **Communicate within Region 8**

Let me introduce myself—my name is Michael Gloegl and I am working on this year's SAC as Student Branch Coordinator. My job is to improve communication, and this year we want to try to get news and interesting information moving faster and more easily across all the student members, branches and officers of the Region 8. You can hook into our electronic information flow in three ways:

- Region 8 Students E-Mail List (to subscribe, send an email to listserv@listserv.ieee.org with SUBSCRIBE R8STUDENTS in the body of the e-mail)
- Region 8 SAC Website (www.ieee.org/r8sac)
- Region 8 Students Virtual Community (www.ieeecommunities.org/region8sf)

Michael Gloegl, R8 SAC Student Branch Coordinator m.gloegl@ieee.org

# **American University of Sharjah, UAE:**

# **Latest events from the United Arab Emirates**

THE AMERICAN University of Sharjah (AUS) IEEE Student Branch organizes conferences, visits and many other activities. Here are some of the most recent:

### ICCST/ICMSA0

We were actively involved in the organization of two major international conferences: the First International Conference on Mathematical Simulation and Applied Optimization (ICMSAO '05) and the Fifth International Conference on Composite Science and Technology (ICCST/5) which took place in the AUS campus on 1-3 February 2005.

# **Scholarship contest**

Haitham Kaddoura came second in the 2004 Best Student Paper Competition for the Lance Stafford Larson student scholarship, a contest organized by the IEEE Computer Society. Thank you to the IEEE UAE section for all their support.

### **Educational visits**

Our Student Branch has initiated a series of educational trips in which Electrical and Computer Engineering students visit various sites of interest. The first of these trips was to the Etisalat Data Center on 2 March 2005. 20 students have participated in this trip. Some of the key facilities of the center were the data storage services, web hosting and e-commerce services, and security solutions and consultancy services.

We also organized a trip to the Thuraya Satellite Station in Al-Dhaid on 9 March 2005. 30 students participated in the trip, including four SB Board Members, in which they were shown the antennas by which the station communicates with the satellite.

### **Letaief seminar**

The Student Branch arranged a talk by Dr. Khaled El Letaief from Hong Kong University



Educational trip to the Etisalat Data Center.

of Science and Technology on 9 March 2005 in AUS campus. The main aspects explained in the lecture were future improvements in wireless communications areas, including 3G, 4G and Ultra Wide Band (UWB).

# **WIE Affinity Group**

We organized a seminar Your Future Within Your Hand by Maryam Al Thani, UAE IEEE WIE Section Chair. She gave a seminar to top high school girl students on 23 March 2005 in the Emirate of Sharjah. The main purpose of this lecture was to encourage the superior students to

keep on for excellence and continuous success. This seminar was supported by Al-Qasimia Primary School in Sharjah, the Sharjah Branch of the Special Needs Section at Ministry of Education, and the UAE IEEE WIE Section.

During the lecture, discussion was raised about superiority, its definition, how to keep on success and end up with life at University. The lecture aimed to support these girls and to show them the importance of their success and how it is important to the community. [contributed by Mrs Maysoon Al Abdouli]

# **Forthcoming events**

AUS IEEE SB is organizing a technical trip to Germany. We plan to visit some of the most important centres and plants in Germany.

Mohammed El Korek Executive Assistant mkorek@ieee.org

Further contacts: Hazim Abu-Shaban, SB Activities Coordinator; Ammar Sajwani, SB Public Relations Officer; Ghaleb Al Habian, SB Vice Chair



Technical visit to the Thuraya Satellite Station in Al-Dhaid.

# **Jury picks 2005 Student Paper Contest finalists**

25 PAPERS were submitted by 24 Student Branches from 14 countries for the 2005 IEEE Region 8 Student Paper Contest. The jury has now selected the following papers to be read at the oral finals at Eurocon 2005, the 'Computer as a Tool' International Conference in Belgrade, Serbia & Montenegro, 21-24 November 2005:

• Simon Oblak (University of Ljubljana, Slovenia)—Interval fuzzy modeling in fault detection for a class of processes with interval-type parameters.

- Elke De Mulder and Pieter Buysschaert (Katholieke Universiteit Leuven, Belgium)—*Electromagnetic analysis attack on a FPGA implementation of an elliptic curve cryptosystem.*
- Eric Hoekstra (Twente University of Technology, Enschede, Netherlands)— Large signal excitation measurement techniques for random telegraph signal noise in MOSFETs.
- Hansjörg Oliver Prinz (University of Karlsruhe, Germany)—Design and development of a broadband real-time

100-175 GHz frequency measurement system for gyrotron diagnostics.

• Ioannis Yiakoumis, Markos Papadonikolakis, and Haralambos Michail University of Patras, Greece)—Efficient smallsized implementation of the keyed-hash message authentication code.

These will be printed in the Eurocon Proceedings, and the winning paper will appear in *Potentials* magazine.

Martin Bastiaans Region 8 SPC Coordinator M.J.Bastiaans@tue.nl DID YOU KNOW?

# More than a GOLDen link?

Transition of an IEEEactive student to industry or academic career

IEEE PLAYS a vital role in the transition of students to industry and academia. The core theme of the IEEE is 'networking the world', and centred on this theme, the IEEE focuses on establishing student branches all across engineering institutes globally. One of the ways in which student branches keep active is by gaining experience from recently graduated members of their student branch and IEEE Graduates of the Last Decade (GOLD) members.

Experiences gained can vary from participation at IEEE technical meetings, such as technical discussion forums, seminars and training courses, to non-technical events. IEEE student branches are often expected to get involved in the organisation of many of these events. The challenge is to cooperate with GOLD people in organizing them.

On a larger scale, the Region 8 Student Branches Congress (SBC) is also organized jointly with the Region 8 GOLD Congress. This joint venture promotes the exchange of knowledge and ideas between students and GOLD members coming from not only different industries and academia, but also from various different continents.

If you are currently an active IEEE member, then contact the GOLD members in your section in order to increase cooperation. If you are graduating soon or have already graduated, contact your GOLD people in order to become a GOLDen yourself and become active in your country.

Saurabh Sinha R8 SAC Membership Development & Awards Coordinator ssinha@ieee.org

# Region 8 Robotics Competition: call for applications Competition, the winning team receive

8-9 OCTOBER 2005: This is the date for the Region 8 Student Robotics Competition, taking place in Twente, Netherlands. Organized by Twente University IEEE Student Branch, this is a new, unique and exciting event for Region 8. The organizing team at Twente already runs a similar robotics competition locally within the University, called 'Createch'.

If you would like to participate, just form a team and fill out an application at the competition website:

www.ieee.utwente.nl/robotics

We are expecting about 10 teams to take part, each team consisting of four students. All the technical documentation you need can either be found at the competition website or will be provided to participating teams in advance of the cut-off date. A few weeks before 8 October, the organizing team will send out a description of what task your robot must perform. In this limited time, all teams have to build a robot that performs the supplied task as well as possible.

The competition itself takes place at Twente University on 8-9 October, when all the teams will be expected to demonstrate their robots. A panel of robotics professionals will act as judges. As well as the honour of coming first in the IEEE Region 8 Robotics

Competition, the winning team receives \$500 from the IEEE for its Student Branch.

Accommodation will be arranged for the teams, and we have been working on the ways to make the event financially more attractive, such as by helping pay for travel, offering free parts for robots, assisting with your construction budget, and so on. As more details emerge, they will be posted to the competition website, so keep checking back. You can also obtain regular news updates and contribute your own ideas by joining our mailing list—just send an email to robotics@ieee.utwente.nl.

The Region 8 Robotics Competition is run as a cooperative event by the Twente University IEEE Student Branch, the Region 8 Student Activities Committee, and the IEEE GOLD Committee, among others. We also have continuing links with the IEEE Robotics and Automation Society. The organizing team would like to thank the IEEE Region 8 Student Activities Committee and IEEE Financial Advantage Program for their active support.

The final deadline for team applications is 2 September 2005.

Stefan Henzen
IEEE R8 Robotics Competition
Organizing Team Chair
robotics@ieee.utwente.nl

# **Belgrade University, Serbia & Montenegro:**

# Belgrade reaches final stage in the Future Energy Challenge



University of Belgrade Student Branch Mini Drive Team.

EVERY OTHER year, four IEEE societies (Power Electronics, Industry Applications, Power Engineering and Industrial Electronics) run a worldwide Future Energy Challenge competition. All graduate and post-graduate students from all over the world are encouraged to take part.

The Laboratory for Digital Control of Electrical Drives in the Faculty of Electrical Engineering at Belgrade University applied on June 2004. 20 students led by two post-graduates presented the first results at an IEEE conference in Seattle on 6-9 October 2004. Our team was the only non-American team to reach the final stage of the contest which will be held in Chicago, USA, on 15-19 August 2005.

This year, the goal of the contest is to make a single-phase adjustable speed motor

drive with characteristics that comply with strict standards. The most important criteria is the production price that should be under US\$40.

The competition allows students to get creative while at the same time improving their knowledge on the particular subject. This project is also useful for students in gaining experience in delivering conference papers and writing technical documentation. Not least, it is highly motivating to realize that something they developed will have some practical value.

If you would like to find out more about our work on this project, please get in touch at the contacts below.

Miloš Rakic Nikola Milivojevic Belgrade-MiniDriveTeam ddc@etf.bg.ac.yu www.md.etf.bg.ac.yu

# **Alexandria University, Egypt:**

# **Interact! Einstein Symposium pre-event**

EGYPT'S IEEE GOLD and Alexandria University Student Branch, in cooperation with the Planetarium Science Center (PSC) of the world-famous Bibliotheca Alexandrina, organized two days of seminars in advance of the Einstein Symposium. Entitled Interact with Today's World, this special preevent took place on 11-12 February 2005.

The opening talk was given by Dr Ismail Serag El-Din, the Director Of Bibliotheca Alexandrina. in which he traced the development of technology since the beginning of the world, discussing the roles played by Isaac Newton and Albert Einstein in the scientific revolution. He also talked about the Einstein Symposium, to be held in the library on 4-6 June 2005. Nobel Prize winners as well as other scientists from all



Student attendees take time-out for a photo call.

over the world, and many students too, will attend.

Dr. Mohamed Younis, Chair of IEEE Egypt Section, delivered a brief talk on the IEEE and its benefits to members. This was followed by the seminar programme, covering topics such as Modern Signal Processing Techniques in Multimedia Communications, Robotics, Human & Machine, Wireless LANs, Engineering Work Ethics, How to Build your Life Goal, How to be an Effective Communicator. How to Start

Your Own Business, and How to Build Your Charisma.

Also on show were successful student projects, including those from the AAST 2003 Winner Robocon Team and a model helicopter built by students at Alexandria University.

392 of the 464 attendees were students, including 110 women, and 151 were IEEE student members.

Gihad Nader and Ahmed Harfoush alexsb@ieee.org www.alexsb.org

# Istanbul Technical University, Turkey: Return to home from Silicon Valley

ISTANBUL TECHNICAL University (ITU) IEEE Student Branch organized a seminar, Return to home from Silicon Valley, on 3 March 2005 in Istanbul. The seminar was held in the ITU's Electrical and Electronics Engineering Faculty. The speakers were the founders of Air Ties Wireless Networks which is based in Turkey.

The seminar focused on reverse brain migration, using information about Silicon Valley in California and R&D in Turkey. Nearly 200 students from Istanbul Technical University and the

other universities in Istanbul attended. Students found the concept very interesting and informative.

This seminar was the first step in a project, *Projectcity 2005*, organized by the Student Branch for 3-5 May 2005 in Istanbul. This event includes a student project competition and covers all IEEE Student Branches in Turkey and at large. It also includes seminars on R&D and enterprise.

Alper KILIÇ ITU IEEE Student Branch Public Relations and Advertisement Coordinator

# **Patras University, Greece:**

# **Arthur Winston leads engineering profession conference**

THE UNIVERSITY of Patras was established in 1964 but its IEEE Student Branch was only set up in September 2003 with the help of Fillip Konstantinou, the former chairman of the IEEE Greek Section. Since then, the membership has grown from 20 to over 130, and rising.

Well over a dozen events have been organized by the Student Branch to date, focusing on technical, social and industrial themes. These have included lectures, conferences, meetings, social activities and the establishment of working groups. The Student Branch has also developed a website and a member support service where our office is an one-



stop shop for every student interested in becoming an IEEE member.

### **Prof Winston visit**

Our most recent important event was the visit of Prof Arthur Winston, 2004 IEEE President, to Greece. The professor spent seven

attended many meetings with the local IEEE agents, university representatives and research centres. He also met with representatives from the Technical Chamber of Greece (TCG) and promoted a memorandum of understanding between the IEEE and TCG.

days in the country and

The highlight of Prof Winston's official visit to Greece was a conference that took place on 6 December 2004, entitled *The IEEE, the Profession of Engineer, and the Technological* 

Left: A view of the conference auditorium.

Below: Prof Winston and IEEE student members make a technical visit to the Rio Antirio 'smart' bridge.

Developments in the field

of Electrical and Computer

Engineers. There were two

main sessions: Profession of

Engineer (TCG and IEEE),

and Emerging Technologies

in the Field of Electrical and

the keynote speech, while

other speakers included

those from goverment,

the General Secretary of

Research and Technology,

the TCG, the Scientific Park

of Patras, the IEEE Greek

Section, professors from

**FUTO** students help to launch engineering title

Prof Winston delivered

Computer Engineers.

successful engineers from industry, and representatives from the IEEE Student Branch of Patras and other Greek student branches.

### A great success

The conference was a great success. It was attended by over 400 students, all of whom went away with printed proceedings of the conference and certificates of attendance signed by Prof Winston. Several concurrent events were organized during Prof Winston's visit, all of which were equally successful. These included meetings, technical and cultural visits, and various social events.

The conference was organized by a 17-member committee, and funded independently by donations managed by the Student Branch. The SB council would like to thank all the supporting companies and members of the organizing committee. Please visit our website for more information: www.ieeesb.upatras.gr

Michael S. Psallidas Patras University IEEE SB Chairman



L-R: F. Rodiri (SB Public Relations Manager), G. Tzortzakakis (SB Vice-Chairman), Prof Arthur Winston (President of IEEE), M. Psallidas (SB Chairman) and M. Lioliousis (SB Public Relations).

# and the Technological the University of Patras, Federal University of Technology, Owerri, Nigeria:

# Popular technical events at NAU

**Nnamdi Azikiwe University, Nigeria:** 

THE YEAR 2004 was very successful for the Student Branch and we continue to be active during 2005. New members joined and brought great benefits to the SB and also themselves.

Last year, we organized an SPAC and lectures that attracted many students to join the IEEE afterwards. We even participated in the Region 8 website contest and came 5th out of the whole region. In addition, we formed the WIE Affinity Group, a ComSoc SB Chapter and a Computer Society SB Chapter. In September, we participated in the Region 8 SBC in Passau, Germany.

As for the year 2005, we have already taken off by organizing technical

seminars and technical visits to companies. In particular, we are planning a technical visit to V-Mobile Nigeria, one of the country's main GSM operators. The branch is also organizing interesting and useful activies, most notably the planned Nigeria SBC/GOLD congress that will take place on 1-4 June 2005, the first of its kind in the Nigeria section.

We want to extend a warm welcome to all IEEE student members, as well as GOLD members and IEEE senior members, from all over the world to our national congress. Remember, we're 'networking the world'!

Mbakwe Somkene NAU IEEE SB Chair kcbaks@ieee.org THE IMPACT of last year's IEEE Region 8 SBC/GOLD Congress on the FUTO Student Branch has been tremendous. After this conference, we found that many students from different departments were expressing an interest in IEEE membership, and the number of local volunteers grew exponentially. These volunteers have been wearing tags on which is printed: 'IEEE-ASK ME'. This has further enhanced awareness of the IEEE in FUTO.

Three technical meetings were held over the last semester, each focusing on 'What's Hot' in the world of technology.

On 5 March, FUTO IEEE SB played a major role in the launching the University's

The FUTO team played a major role in launching the SEEES magazine.



magazine of the Society of Electrical & Electronics Engineering (SEEES) called *The Peacock*. It is our pride and joy to announce that FUTO IEEE SB members contributed about 85% of the articles in the magazine. IEEE members presented three technical papers at the magazine launch event.

We hope to use our professional skills to encourage people to join IEEE, because to us IEEE is essential for young up-coming engineers. It's clear to us that the IEEE wants to help others to achieve their dreams, and it trains you to solve real-life problems. At the end of the day, that's what engineering is all about.

Asangansi Uko FUTO IEEE SB Chair Udochukwu Akunna FUTO IEEE SB Vice-Chair Ucheaga Chizaram FUTO IEEE SB General Secretary

June 2005 region@news

# **Balga Applied University, Jordan:**

# **Learn from experienced industry professionals**

BALQA APPLIED University (BAU) Student Branch has begun organizing of a series of events to help students gain knowledge and grasp opportunities, acting as a window through which they can meet and learn from the experienced professionals in field of electrical, electronics and computer engineering.

One of the first activities was a free Flash course, held at the college in December 2004. The branch then also arranged a scientific trip to the Afia oil factory in order to

show real-world engineering applications in practice to engineering students.

In February 2005, our SB organized a conference, Officers Training Program (OTP). The students were informed on IEEE-related issues, IEEE entities and the opportunities



A group photo taken at the OTP seminar in February.

# Right: The Flash course in progress.

Below: One of the seminar workshops.





that IEEE can offer to student members. Topics included Serving IEEE, What does SAC do for you?, S-PACs, S-PAVes, IEEE contests and awards, GOLD, and Women in Engineering. Also two workshops about leadership and management were presented,

and some demanding training courses were organized for students

Another important event was the establishment of the Women in Engineering Affinity Group.

Finally, our committee members are working hard to publish the first English and Arabic Newsletter.

Khalid R Rayyan IEEE Student Branch Chair khalid\_rayyan@ieee.org

# American University in Dubai, UAE: Dubai enjoys IEEE Signup Day

AMERICAN UNIVERSITY in Dubai (AUD) organized an IEEE promotion activity and distributes fliers everywhere in Engineering Department and in the university cafeteria on 6 March 2005.

An IEEE desk was set up outside the cafeteria, where most students go for breaks, to distribute posters, fliers and information brochures including useful information about the activities, societies and services that IEEE offers. We even arranged a DJ to get the students attention and create a friendly atmos-

phere. Throughout the event, students came and asked about the IEEE and the benefits of being an IEEE member, and we were able to reply in person.

By the end of the event, we had dealt with enquiries from around 50 engineering students, all of whom were very interested in becoming part of our Student Branch. 13 signed up immediately!

Mohammed Ayoub mwa57@hotmail.com Mohammed Hassouna mohamedhassouna@ hotmail.com

# **Leuven University, Belgium:**

# Time to relax at social events



Just to prove that it's not all about attending conferences...

FOR THE year 2004-05, Leuven University IEEE Student Branch organized various activities for the local academic community, with a clear emphasis on graduate students. These many events ranged from entertaining, sociable gatherings to professional lectures by main industry players.

The purpose of the opening activity was to introduce the IEEE to new students. They day's events included a radio controlled car rally with a prize contest to attract as many students as possible. Students were enouraged to sign up by giving newly subscribed members the chance to win an additional prize.

Our second event was a seminar in which Melexis presented an overview of some current research topics such as Automotive MEMS and Automotive optical sensors.

Graduating students were given the possibility to get in touch with Melexis' human resource representatives.

Our SB also took several people on a voyage of discovery of fine wines as part of our wine-tasting course. This involved a lot of practical tasting, of course.

On 16 March 2005, a symposium on Evolutions in Power Engineering was held. People from industry talked about recent developments in the area of electrical machines. This major event proved to be a huge success where up to 100 attendees enjoyed five revealing talks.

In April, Leuven IEEE SB organized the IEEE Benelux Student Branches Gathering where the student branches of the section met each other in a pleasant environment.

Dirk Van Hertem Leuven University IEEE Student Branch

# **Sultan Qaboos University, Oman:**

# Recent conferences and gatherings at SQU

THE DEPARTMENT of Electrical and Computer Engineering organized ICCP'05, an International Conference on Communication, Computer and Power, on 14-16 February 2005. Members of the Student Branch were active participants in this successful event.

Four SB members also took part in the recent Gamer 2005 Challenge, a national contest for game designers in February 2005. The competitors were required to design and plan a mobile phone based game. Our team won the competition and received a prepaid trip to Shanghai, China, to implement the design internationally.



Taking refreshments between sessions at ICCCP '05.

The College of Engineering is also in the process of organizing The Second Engineering Students' Gathering which will be held in the autumn later this year. It provides a good opportunity for the engineering students from different universities and private colleges in Sultanate

of Oman to discuss, present and develop their skills in various engineering fields, as well as to exchange their academic and industrial experiences.

Mohammed Bait Suwailam Lecturer, Dept of Electrical and Computer Engineering msuwailem@squ.edu.om

# Ternopil Academy of National Economy, Ukraine: Big plans for Ukraine in 2005

The TANE group runs social, academic and professional events.



THE ORANGE Revolution has been momentous for our country, while the Ternopil Academy of National Economy (TANE), founded in 1998, continues to work for Ukrainian science. For 2005, we will extend our activities significantly. Here are some of our plans:

- IEEE Third International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications on 5-7 September in Sofia, Bulgaria (www.idaacs.ssft.net).
- Research activities for international projects—NATO, CRDF, INTAS—and bilaterial

projects with Belarus, Lytva and others.

- Helping set up the IEEE Chapter in West Ukraine, and an IEEE GOLD branch in the Institute of Computer Information Technologies.
- Attracting new members, organizing regular meetings, bringing teachers and students together, and enhancing social life.

Our members are interested in artificial intelligence, pattern recognition, neural networks, robotics, etc. Don't hesitate to get in touch!

Borys Kharchuk IEEE SB Chair borys.bhv@gmail.com

# **Apply now for travel grants from the Industrial Electronics Society**

THE INDUSTRIAL Electronics Society (IES) offers financial aid with travel for students who wish to attend IES Conferences. This year, the IES committee has made allocations for up to 24 grants of \$500 each.

- 9 grants for ISIE'2005 (IEEE International Symposium on Industrial Electronics) in Dubrovnik, Croatia, on 20-23 June.
- www.isie2005.org
   9 grants for IECON'2005 (Conference of the IEEE Industrial Electronics Society) in Raleigh, North Carolina, USA, on 6-10
- www.adac.ncsu.edu/IECON05

  4 grants for ICM'2005 (International Conference on Mechatronics) in Taipei,
- Taiwan, on 10-12 July. www.icm2005-hima2005.ccu.edu.tw
- 2 grants for INDIN'05 (International Conference on Industrial Informatics) in Perth, Australia, on 10-12 August.

www.indin2005.curtin.edu.au/docs/index.php

In order to participate in this program, the applicants must fulfil the following conditions:

• Be an active IEEE-IES Student Member.

- Reside outside the city in which the conference is held
- Have a paper accepted at the Conference and be the person who will present it.
- No more than one grant will be allocated for one paper, or the one person in the same year.

Students interested in this program should submit an application form, available at: gdansk.bradley.edu/iestudents/travel.html

Application timetable	Program deadline	Notification o Acceptance
ISIE'2005	1 May	15 May
IECON'2005	15 Sep	30 Sep
ICM'2005	20 May	30 May
INDIN'2005	20 Jun	30 Jun

Dr Mariusz Malinowski IEEE – IES Student Activities Committee malin@isep.pw.edu.pl

# **University of Zagreb, Croatia:**

# **Student membership Round Table**



Photo-call during a coffee break at the Zagreb Round Table.

TO CELEBRATE its 10 years of existence, the University of Zagreb IEEE Student Branch organized a Round Table on the Future of IEEE Student Membership, taking place on 19 March 2005.

The Round Table was conceived as a full-day event with all Region 8 Student Branches and some Region 8 and Croatian Section officers invited too. As expected, due to travel costs, mostly local student branches participated, but many sent their thoughts and some even

sent prepared materials. 24 participants took part, representing seven student branches in six countries.

# **SAC** developments

Zagreb Round Table was held just a week after the Student Activities Committee meeting in New Orleans, so R8 representatives at the SAC meeting returned with a fresh update on the IEEE Student membership developments. The R8 Student Activities Chair, Marko Delimar, reported

on changes in Student membership numbers for R8. Ricardo Varela, R8's Student representative, gave some insight to the decision to separate student membership into two grades: Student Member (StM) and Graduate Student Member (GSM). Michael Gloegl, R8 SB Coordinator, voiced some concerns related to this separation, which was the main theme of the event.

### **Student future**

Many questions about the future of IEEE student membership emerged from this separation. Will the dues for GSMs rise? Will conference organizers charge them higher fees? What will GSMs gain by being allowed to vote in IEEE elections? Will StMs lose some of their benefits?

The social aspect of the Round Table was not neglected, either. Some of our evenings continued long into the next morning!

Mario Keco

# Politehnica University of Bucharest, Romania: Electronic packaging research

IT HAS become a tradition for Politehnica University of Bucharest CPMT IEEE SB Chapter members to organize activities that promote electronic packaging. In this context, in March 2005, members of the SB Chapter together with our advisor, Prof Paul Svasta, are continuing to run a non-mandatory one-semester research programme for new students.

During the programme, the students become more familiar with electronic packaging issues and take part in a series of projects as a team. Last year, around 100 students took part in the program. For more details

about our activities, visit us at www.cetti.ro/sbc.

Student Branch members will participate in the PCB Design Contest for students at TIE 2005 (Interconnection Techniques in Electronics) on 5-7 May. Other members are preparing for the 11th SIITME 2005 (International Symposium for Design and Technology of Electronic Packages) on 22-25 September in Cluj Napoca, Romania. We invite you to join us at SIITME 2005 and to visit the very beautiful city (see www. siitme.ro). See you there!

Romina Macabinski, Vice Chair romina@cetti.ro



Members at a recent meeting of the branch in March.

June 2005 region@news 1.1

# **Yildiz Technical University, Turkey:**

# **Turkey Student Branches Congress**



150 IEEE student members came together from all over Turkey.

THE 2ND Turkey IEEE Student Branches Congress was organised by Yildiz Technical University IEEE Student Branch on 18-20 Februrary 2005 in Istanbul.

150 IEEE student members and lecturers from 30 universities attended the event, which was sponsored by Turkcell and Microchip. We thank IEEE Turkey Section, Region 8 Student Activities Committee and Yıldız Technical University for their financial support.

The congress was officially opened by the Rector of Yildiz Technical University, the counsellor of the YTU IEEE Student Branch, and

the Turkey Section Chairman. The candidate for IEEE President in the 2005 elections, Prof Levent Onural, was among the lecturers taking part.

During the congress, a number of IEEE information seminars had been arrange concerning electronics and information technologies, their future and industrial applications.

Student Branch cooperation sessions were also organized. Student branches found opportunity to increase their communication and friendship during the seminars, sessions and social activities.

The 3rd Turkey IEEE Student Branches Congress will be held in September 2005 at Bogazici University, Istanbul, with the participation of IEEE student members from 30 universities all around Turkey. The congress will provide the opportunity to share studies and discuss future projects, as at previous events.

Bogazici University welcomes all students from the IEEE student branches of Turkey Section. For further information please e-mail ieee@boun.edu.tr.

Osman Gumus Turkey SBC Organizing Committee

# **University of Jordan, Jordan:**

# **Event-packed agenda begins** with newsletter launch

WE'VE STARTED with a full agenda of ideas and plans for this year. Here is a sample of the activities that have taken place to date.

One major success for us was to deliver a presentation on the IEEE to the King Abdullah School of Information Technology. On a more modest note, we recently organized an IEEE Members' Chess Tournament within our Student Branch.

Another big achievement this year was to launch a Student Branch newsletter, Connection, which is a way of establishing a better link with the students and to keep them informed on interesting opportunities of IEEE membership. So far, we have published four issues and the latest issue ran to four full pages.

The University Bookshop sponsors the printing of *Connection*, and it also offers a prize for the monthly quiz that we run in each issue.

We organized joint seminars with our Section, focusing

on topics such as Mobile Access Security, The Rule of DSP and FPGAs in the Future Generations of Wireless Devices and Systems, and CE Marking—The Passport For Products to Common European Market.

We have also hosted a number of guest speakers for these seminars, including two from the USA and one from Slovenia. We contacted Amman Private University and delivered a presentation to introduce IEEE to the students there.

Student Branch chairs in Jordan were invited to attend a meeting of the section ExCom. It was a great chance for us to present our branch, to find out what the other branches are doing, and to explore opportunities for interacting with the section and with each other.

We promise that you'll keep hearing from us.

Lina Ejeilat University of Jordan IEEESB Chair Iina.ejeilat@gmail.com

### **University of Lyon, France:**

# **Grand Lyon branch founded**

University of Lyon IEEE Student Branch Executive Committee.



A NEW Student Branch was born in January 2005, here in Lyon, and now we would like to introduce ourselves through *Region 8 News* to all other student members in our region.

We are mostly PhD students who have found benefits in joining IEEE. It's like a first step in realizing the scientific activities we are planning. Our new members have different research interests in electronics and electrical engineering, such as medical image processing,

telecommunication and power electronics. We hope the Student Branch will help us to increase this diversity by meeting other IEEE Student Branches and members, and thus to share information and experience.

We also hope that current and future members will carry some of the enthusiasm that this new Student Branch is bursting with!

> Jérôme Velut, Boubakeur Belaroussi, Anne Desseux-Fournier Damien Risaletto

# King Fahd University of Petroleum and Minerals, Saudi Arabia:

# Successful KFUPM hits the ground running

SINCE SEPTEMBER 2004, King Fahd University of Petroleum and Minerals (KFUPM) IEEE Student Branch has started new activities with its new elected officers.

The branch has achieved surprising results that could not have been accomplished without the support of IEEE Saudi Arabia Section. The total number of KFUPM IEEE SB members has increased from 74 to 170 in just two months!

We publish a printed periodic magazine called *Crystal*, *The Magic of Technology*, which is edited completely by KFUPM branch officers. The branch is currently working on publishing its 3rd issue.

The branch has also set up a new website that offers the following features:

- An online application form for IEEE Student Membership. This online system helps students to apply for membership or renew existing memberships in such a way that they don't need to use credit cards.
- KFUPM IEEE SB emailer. This is a simple application used by the chairman or the counsellor when they want to send an email to all the branch members.

- Private members' area and profile.
- Student Branch e-voting system. This system is designed to make annual elections of officers easier and secure.

Last but not least, our Student Branch participated with 13 volunteers to serve in the registration committee during the GCC conference held in November 2004 in the Kingdom of Bahrain.

With this in mind, the KFUPM IEEE SB is ready to cooperate with the 1,300 Student Branches around the world.

Waseem Al-Khayer Chair, KFUPM IEEE SB www.ieee.org/kfupm



Branch officers during the GCC conference held in Bahrain last November.

# Hamburg hosts transportation workshop

THE INTERNATIONAL Workshop on Intelligent Transportation (WIT) was organized for the first time in 2004 as a forum for international experts to come together, present latest research results and discuss technical experiences and new ideas. Due to the positive feedback after WIT 2004, this year's 2nd International Workshop on Intelligent Transportation (WIT 2005) continued the tradition and was organized in Hamburg, Germany, beetween 15 and 16 March.

The workshop was chaired by Professor Hermann Rohling of Hamburg University of Technology and supported by the Information Technology Society (ITG) of the Association for Electrical, Electronic & Information Technologies (VDE), the IEEE Communications Society Germany Chapter and s.m.s Smart Microwave Sensors GmbH, Braunschweig, Germany.

### Main conference room

On the two conference days, about 100 participants from the automotive and aerospace industry, universities and international research institutions got involved into technical discussions and 36 conference talks. The international conference audience included participants from Europe, Asia and America.

The focus of the workshop was on two topics: sensor technologies/ signal processing and inter-vehicle communication. Of particular interest were synergy aspects of the different technologies and transportation systems.

The workshop program was divided into eight technical sessions:

- Automotive radar
- Car-2-car communication



- Vision/image processing
- ITS planning/architecture
- Applications
- Maritime and air traffic services

A broad spectrum of new technologies was covered, including novel concepts for radar/lidar sensors, system architectures for communication and sensing, applications such as lane departure warning and safety aspects of intervehicle communication.

Since different modes of transportation such as automotive, air and maritime traffic were discussed, interesting parallels were observed, such as between the maritime Automatic Identification System (AIS) and concepts proposed for future automotive systems.

In order to stimulate the information exchange between the experts in the different areas of research, the workshop was organized in a single-track format and all oral presentations were given in the main conference room.

Apart from the technical discussions during the regular conference sessions, lunch and coffee breaks provided many more opportunities for discussion.

The conference dinner was organized in the historical Speicherstadt in the harbor area of Hamburg. A particular highlight of WIT 2005 was the conference dinner in the historical Speicherstadt. A delicious buffet including hanseatic specialities was served in a renovated old warehouse near the conference hotel.

# Same place next year

Thanks to all speakers and their high quality presentations, WIT 2005 was a very successful international workshop. Therefore, it was decided to organize a 3rd International Workshop on Intelligent Transportation (WIT 2006) 14-15 March 2006, in Hamburg again.

Detailed information on this workshop can be found at the conference homepage (wit.tu-harburg.de). Additionally, the detailed conference programme of WIT 2005 is available at this website

Everyone from the worldwide family of experts in the areas of transportation, communication and sensors is cordially invited to attend this conference and to submit papers for presentation or proposals for demonstrations of new technologies. For conference proceedings and questions regarding WIT 2005 or WIT 2006, please contact Prof. Dr. Hermann Rohling at the Hamburg University of Technology:

rohling.wit@tu-harburg.de



# **PHOTO SHORTS**



### **Activities week**

UNIVERSITY OF Sharjah, United Arab Emirates, held a successful activities week that took place between 26 February and 2 March 2005. Essa Al Bastaki, Chairman of IEEE UAE Section, conducted one of many seminars designed to promote electrical and electronic engineering and computing.



### Where's my camel?

MARKO DELIMAR, VC for Student Activities, is left looking after a camel in the Dubai desert during our night safari while visiting the University of Sharjah. Marko is on the left!



### **IEEE** stats for all

THE ANNUAL Statistics of the IEEE are available online. All you have to do is go and get them. Volunteers and members can access the reports directly from this site:

www.ieee.org/organizations/ corporate/secrpt

Alternatively, go to the IEEE home page and click on the link labelled 'Volunteer Resources' or 'About the IEEE'. An IEEE Web Account is required to gain accesss. Members can obtain an IEEE Web Account by going to www. ieee. org/web/accounts.

# DAFZA receives IEEE Friend Award

IEEE REGION 8 Director Baldomir Zajc presents an IEEE Regional Activities Board award to the Dubai Airport Free Zone Authority (DAFZA) on 4 February 2005 at the Al-Qasr hotel. The award is accepted by Mrs Shahla Abdulrazzaz, Director of Sales and Marketing of DAFZA.

This is the *RAB Friend of IEEE* award, given in recognition of the assistance which DAFZA has provided to the UAE Section. The plaque carries the citation:

Dubai Airport Free Zone Authority (DAFZA)

United Arab Emirates
In appreciation of their efforts to
encourage IEEE activities and sponsor
IEEE events in United Arab Emirates.



June 2005 region@news

# Establishing the first global standard of measurement of mobile phone exposure

AS MOBILE phones become more popular around the world, questions persist as to whether their use poses any adverse health effects.

A portion of the radio frequency energy emitted by mobile phones is absorbed by the human body. The rate at which the energy is absorbed is called the specific absorption rate, or SAR, and limits for this are set by organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP), headquartered in Germany, and of course the IEEE, based in the United States.

# Setting a standard

Until recently, there has been no single, globally-accepted, standardized measurement for products that are required to adhere to SAR limits. Radio frequency emissions from similar products vary from one device and one manufacturer to another.

The SAR limit for mobile phones of 2 watts per kilo-



gramme averaged over any 10 grammes of contiguous tissue is the value used in most countries. In North America, the limit is 1.6 watts per kilogramme averaged over any one gramme of tissue in the shape of a cube. Both are considered safe by the World Health Organization.

The International Electrotechnical Commission has just published a new international standard that mobile phone manufacturers—or anyone making handheld wireless communication devices—can use to ensure that their products adhere to internationally-recognized SAR limits. It specifies the methods to use to measure SAR limits and harmonizes different practices and different methods used around the world. But this standard only sets measurement methods, not SAR limits.

# What is SAR?

SAR was first proposed by the National Council on Radiation Protection and Measurements in 1979. SAR can be determined analytically (computer modeling) or by measurement. Using robotcontrolled miniature probes to measure the electric field strength in an anthropomorphic phantom model of the human head is currently the preferred technique.

IEC Technical Officer Rémy Baillif says there has been a high demand from manufacturers for this standard. Manufacturers of mobile phones, specialized test laboratories, telecommunications regulators and health officials should constitute the largest user group of the new standard, but it is the enduser—the consumer—who is the ultimate beneficiary.

The World Health Organization (WHO) is deeply involved in the question of radio frequency fields and human health. As part of its charter to protect public health and in response to public concern over health effects of electromagnetic frequency exposure, the WHO established the International EMF Project in 1996 to assess the scientific evidence of possible health

effects of EMF in the frequency range from 0 to 300 GHz. The EMF Project encourages focused research to fill important gaps in knowledge and to facilitate the development of internationally acceptable standards limiting EMF exposure.

# **Standard agreement**

Ultimately, the intention is for the WHO to issue clear recommendations to its member countries so that they can enact safety legislation on this question. The IEC is a partner in the EMF Project and was encouraged by WHO to develop measurement standards for EMF emitting devices.

The new International Standard IEC 62209-1 was developed jointly by the IEC, the European Committee for Electrotechnical Standardization (CENELEC) and the IEEE. The three worked together informally through common membership in various technical committees.

This is the first of a multipart series of standards and it covers wireless devices, such as mobile phones, with a frequency range of 300 MHz to 3 GHz.

# I'm not in the mood today 2x2=3,5

# Preserving heritage: the history of electrical engineering



Left to right: Eiju Matsumoto, Takayuki Nagata, Roland Saam and Miwako Doi at London's Forum Hotel.

DURING 20-26 March, a team from Japan's Society for the Promotion of Science (NII) visited science and engineering museums in London, Munich and Paris as part of a five-year project.

The team is researching archiving techniques and systematic presentation methods with a view to building a database focusing on all post-war Japanese technology concerning imaging, illumination, information,

electronics, electricity and communication.

They would be interested in hearing from anyone in Region 8 with ideas on archiving or material for database relating to Japanese developments in electrical engineering. The data will be web-accessible in English and Japanese, complete with virtual exhibits.

For more information, contact Eiju Matsumoto at e.matsumoto@ieee.org.





Far left: Abdullah S. Jum'ah, CEO of Saudi Aramco, receives the IEEE Employer Professional Development Award from the IEEE's Nabil K. Al-Dabal.

Left: IEEE stand at the 2nd IEEE GCC Conference & Exhibition, Bahrain, November 2004

# What does an IEEE Industrial Relations Officer do?

THE IEEE Saudi Arabia Section established the position of Industrial Relations Officer (IRO) in June 2002. Our first goal was to understand our local industry's needs and their expectations of the section's activities.

We made a series of presentations to 10 or so of our major local industries at their facilities, highlighting the benefits of being an IEEE member. In turn, we took note of their comments and expectations, and incorporated them into our plan.

The overall objective was to increase the number of IEEE members by 50% for the first three years. Two volunteers were selected from industry to assist in IRO activities. The Industrial Relations Officer job is not a one-man show!

### Main achievements

Saudi Arabia section followed through with the following achievements:

 The IEEE Saudi Arabia Section Chair was selected as an industry member in the Committee at King Fahad University of Petroleum & Minerals (KFUPM) to review the curriculum at engineering schools and to suggest modifications to meet the needs of our local industries.

- Advertisements and technical materials were prepared for giving out at IEEE stands and local dinner meetings by section and chapters, local and regional sponsored and non-sponsored IEEE conferences. The stand materials included banners, brochures, sample IEEE magazines and proceedings, gifts with IEEE and sponsor logos, online registration, receipts for those who prefer paying cash for membership, and a list of potential members for follow-up.
- A young student was invited from the University to speak about his project during the first 10 minutes of the dinner meeting prior to the main speech. This has been received very well by all attendees
- A prize draw takes place during the dinner meetings, sponsored by local industry.

 Local chapters are given help in obtaining sponsorship for dinner events. To attract more attendees including non-members, no entrance charges were collected at some of these dinners.

- The 'Values of IEEE Membership' presentation has been delivered to other IEEE Sections in the region such as Qatar and Lebanon.
- Visits of Academia students to industry have been arranged.
- Section Chapters have been provided with speakers from industry to share contemporary hot topics with local professional community.

### **Higher attendance**

As a result, we have started to see over 130 people from academia and local professional community attending the chapter dinners. Over 500 attended the two annual IEEE Conferences: 11th IEEE Technical Exchange Meeting (TEM) at KFUPM, Dhahran, and IEEE GCC Conference & Exhibition at Bahrain. Business leaders and government ministers have opened these events.

Also, in recognition of local industry support to the local community, Saudi Aramco was nominated by Ibrahim Jaafar of IEEE Saudi Arabia Section for the IEEE Educational Activities Board Employer Professional Development Award and won it in 2003 for their outstanding contributions to employee continuing education and professional development.

During this year, our plan is to get a larger sector

of industry and academia involved and supporting the local IEEE events such as technical dinner meetings and conferences. We will also approach major industries officially to support their professionals

in sponsoring at least one technical international society membership such as IEEE for the benefit of both employer and employee.

> Rami Al-Mushcab IRO of IEEE Saudi Arabia Section

June photo quiz

THIS SPRING in the Paris Musée national

THIS SPRING, in the Paris Musée national de la Marine, there is an exhibit called *Jules Verne—Writing the Sea*.

Jules Verne's imagination was fired by the discoveries of contemporary explorers, scientists and engineers, and he placed them at the heart of his work. When he came to write *Twenty Thousand Leagues Under the Sea* in 1868, his mind was still filled with all the innovations he had witnessed at the Universal Exposition held on the Champs de Mars in 1867, one of the most significant expositions of the 19th century. Among those inventions were the items pictured here, a battery and... something else.





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**The question** — What is so special about the battery, and who made it? What is the second object?

Send in your answers before 1 July by email with the subject line *June Photo Quiz*. The winner receives a Skype Voice over IP 'Starter Kit', including software, headset and 30 mins free phone calls. We have copies of *IEEE Potentials* magazine for the runners-up.

We were so overwhelmed by all your entries to our March photo quiz that we're still reading them. We will announce the winners next issue, promise!



IEEE Saudi Arabia Section Chair and Engineering Management Chapter Chair presents an appreciation gift to the sponsoring company of the first Chapter dinner meeting.

June 2005 region⊗news

# Yugoslavian section celebrates journal and hands out awards

YUGOSLAVIA IEEE MTT-S (Microwave Theory and Techniques) Chapter was founded in 1989, and so a 15th anniversary celebration was held in Belgrade on 19 January.

Bratislav Milovanovic, president of the Yugoslav Society for Microwave Technique and Technologies was elected Chair IEEE MTT-S Chapter. We also celebrated 10 years of publishing our journal Microwave Review (www.mwr.medianis.net)

with a brief overview given by the editor, Vera Markovic of the University of Niš.

Chapter awards for 'special achievements and contribution to the field of microwaves' were given to Aleksandar Marincic, a member of Serbian Academy of Science and Art, and Aleksandar Nešic (IMTEL Institute, Belgrade). A 'chapter activities' award went to Branka Jokanovic (IMTEL Institute, Belgrade).

Two international conferences are planned at the Faculty of Electronic Engineering in Niš:

- ICEST 2005: XD International Scientific Conference on Information, Communication and Energy Systems and Technologies (29 Jun 1 Jul) www.icest.medianis.net
- TELSIKS 2005: 7th International Conference on Telecommunications in Modern Satellite, Broadcasting and Cable Services (28-30 Sep)



Awards ceremony: Branka Jokanovic, Aleksandar Marincic, Bratislav Milovanovic (Chapter Chairman), Aleksandar Nešic and Branko Kolundžija (Chapter Co-Chairman).

# Reminder calendar workshops, conferences & symposia in Region 8

# IUNE

### **ICUE 2005**

Industrial and Commercial Use of Energy Conference Waterfront, Cape Town, South Africa 25–27 May 2005 www.ctech.ac.za/conf

### **MIPRO 2005**

28th International Convention MIPRO Opatija, Croatia 30 May – 3 June 2005 petar.biljanovic@fer.hr www.mipro.hr

### **ICTIS 2005**

Information & Communication Technologies International Symposium Tetuan, Morocco 3–6 June 2005

# **ELMAR-2005**

47th Internatonal Symposium on Multimedia Systems and Applications Zadar, Croatia 8–10 June 2005 elmar@fer.hr www.vcl.fer.hr/elmar/2005

# **ISIE 2005**

IEEE International Symposium on Industrial Electronics Dubrovnik, Croatia 20–23 June 2005 www.isie2005.org

### **IEEE CBMS 2005**

18th IEEE Symposium on Computer-Based Medical Systems Trinity College Dublin, Ireland 23–24 June 2005 cbms2005@cs.tcd.ie www.cs.tcd.ie/research\_groups/ mlg/CBMS2005

# St. Petersburg PowerTech 2005

IEEE Power Engineering Society St. Petersburg, Russia 27–30 June 2005 www.sei.irk.ru

### 6th NNESMED/ 2nd CIMED

Costa da Caparica, Lisbon, Portugal 29 June – 1 July 2005 www.uninova.pt/cimed2005

# **REV2005**

2nd International Symposium, Remote Engineering and Virtual Instrumentation Brasov, Romania 30 June – 2 July 2005 www.online-lab.net/rev

### ШЦ

# **IPCC 2005**

IEEE Professional Communication Society Making Connections Limerick, Ireland 10–13 July 2005 ieeepcs.org/limerick

### **PGBIOMED05**

Postgraduate Conference on Biomedical Engineering and Medical Physics University of Reading, UK 8–20 July 2005 ewh.ieee.org/sb/ukriembs/ pgbiomed05

# **AUGUS**

# PDE-Based Image Processing and Related Inverse Problems

Oslo, Norway 8–12 August 2005 www.cma.uio.no/ conferences/2005/ imageprocessing\_workshop.html

# **SEPTEMBER**

### **IDAACS 05**

IEEE Third International Workshop on Intelligent Data Acquisition and Advanced Computing Systems Sofia, Bulgaria 5–7 September 2005 idaacs@tanet.edu.te.ua www.idaacs.ssft.net

### **UPEC 2005**

40th International Univ Power Engineering Conference University College Cork, Ireland 7–9 September 2005 www.upec2005.org

# ISDA 05

Fifth International Conference on Intelligent System Design and Applications Wroclaw, Poland 8–10 September 2005 www.isda2005.pwr.wroc.pl

# **ISPA 2005**

IEEE 4th International Symposium on Image and Signal Processing and Analysis Zagreb, Croatia 15–17 September 2005 www.isispa.org

# **Euro PVMMPI 2005**

12th European PVMMPI Users' Group Meeting Sorrento, Italy 18–21 September 2005 www.pvmmpi05.unina2.it

### ICL2005

8th International Conference on Interactive Computer aided Learning Villach, Austria 28–30 September 2005 www.icl-conference.org

# NOVEMBER

# **Second ACIDCA-ACM 2005**

International Conference on Machine Intelligence Tozeur, Tunisia 5–7 November 2005 www.acidca-icmi2005.org

# **DECEMBER**

# **ICICT 2005**

ITI Third International Conference Information and Communication Technology – Enabling Technologies for the New Knowledge Society Cairo, Egypt 5–6 December 2005 www.icict.gov.eg

# **Note to Organizers**

The Editor receives hundreds of notices about conferences. Only IEEE co-sponsored conference/workshop in Region 8 are eligible for free publicity here. Send details as a plain text message to r8news@ieee.org, putting R8 News CALENDAR in your subject line and using the format used here.