In Geneva on 26 September, at a ceremony at CERN (the European Organisation for Nuclear Research), Cleon Anderson, President of the Institute of Electrical and Electronics Engineers (IEEE) formally dedicated a Milestone plaque in recognition of the invention of electronic particle detectors. The plaque was unveiled by Anderson and Georges Charpak, the Nobel-prize winning inventor of wire chamber technology at CERN in 1968.

With the attribution of this IEEE Milestone, CERN finds itself in good company. There are currently over 60 Milestones around the world, awarded to such momentous achievements as the landing of the first transatlantic cable, code breaking Bletchley Park during World War II, and the development of the Japanese Bullet train, the Tokaido Shinkansen.

Particle physics research was revolutionised in 1968 when Georges Charpak published a paper describing the multi-wire proportional chamber, a forerunner to many of the particle detectors in use at CERN today. This invention paved the way for new discoveries in particle physics, as underlined by the Swiss secretary of state for Education and Research, Charles Kleiber. “I am delighted that the IEEE has decided to award a key Milestone to CERN for the invention of the multi-wire proportional particle detector by Professor Charpak and his collaborators in 1968,” he

IEEE Milestone is dedicated to electronics at CERN

In good company: (left to right) Prof Georges Charpak (Nobel Prize winner), Dr Cleon Anderson (IEEE President), and Prof Carlo Rubbia (Nobel Prize winner).

IEEE Milestone is dedicated to electronics at CERN

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IEEE Milestone is dedicated to electronics at CERN

(continued from page 1) said, “These developments have led to crucial progress in our understanding of the constituents of nature.”

Charpak’s invention also made it possible to increase the rate of data collection by a factor of a thousand. The significance of this was underlined by Walter LeCroy, founder of the company that bears his name, who said that Charpak’s invention had “transformed the world of the electronics developer”. “The advent of electronic particle detectors,” he continued, “brought the need to store, transmit and analyse data faster than ever before.” Many of the developers working for LeCroy are former particle physicists.

In 1992, Charpak, who had been working at CERN since 1959, received the Nobel Prize in physics for his invention. He has also actively contributed to the use of this new type of detector in various applications in medicine and biology. The value of fundamental research institutes such as CERN in fostering innovation of this kind was a recurring theme of the ceremony.

“CERN’s reputation is based on fundamental research,” said the Laboratory’s director general, Robert Aymar, “but the organisation is also an important source of new technologies. In our work we need instruments based more and more on electronics, so that a tight collaboration worldwide in this field is beneficial to science. In turn the developments in our science feed back into the equipment in industry and in the end they appear in your home.”

Charpak himself also stressed the importance of intellectual freedom, saying of his time at the Laboratory: “CERN was a fantastic place because of the freedom I had, which permitted me to do a lot of things that were unexpected.”

Unity and Baltic growth strengthen R8

Engineering day

Egypt Section celebrates this year its 50th Anniversary of IEEE activity. This very respectable achievement was announced at the Paris meeting but the main celebration took place in Cairo on 7 August. I congratulate and thank them for their contribution to IEEE development.

On 8 August, I participated in Egyptian Engineering Day. This was organised mainly by the GOLD committee and has been held for the last four years in a row. This event is a big opportunity to meet new associates and to attract youngsters to our field. For freshly graduated engineers, the event introduces them to the engineering market. It is a national gathering celebrating the engineering profession.

You should have seen the enthusiasm of the young people and the exhibition of more than 120 complex student projects; I enjoyed the performance very much. This is the way how GOLD activity could be developing.

On 8 October, the IEEE East Africa Student Chapter held its sixth annual Engineering Students’ Exhibition at the Sarit Centre, ‘Making Technology Work for You’. Congratulations to all.

Baldomir Zajc
IEEE Region 8 Director Professor, University of Ljubljana, Slovenia

IEEE-SPIE Conference on Photonics Applications – IV

30 August – 2 September 2005, Warsaw, Poland

THE CONFERENCE on Photonics Applications (PA) in Industry and Research was a part of the SPIE Warsaw Congress and was co-organized by the IEEE Poland Section. It was the fourth in the series with proceedings issued by the SPIE.

The PA conference gathered around 100 papers. A few sessions on advanced photonics and electronics systems for the high energy physics experiments (HEP) and astroparticle physics. These sessions were driven by large, international research programs: CARE – Coordinated Accelerator Research in Europe, established by the EU inside the FP6, and Pi-of-the-sky (observations of GRB phenomena around the Globe).

Ryszard S Romanik
Chair, IEEE-SPIE Conference on Photonics Applications in Industry and Research
Warsaw University of Technology
IEEE Poland Section Board

(continued from page 1)
R8 celebrates Sections Congress 2005 in Tampa

THE LONG weekend started on 12 October when Section chairpersons from all over Region 8 travelled to Tampa, Florida, USA to attend the Region 8 Committee meeting, followed by the IEEE Sections Congress 2005.

This is a gathering of Section leadership – a four-day event – involving hundreds of delegates from all 10 world Regions. Christian Borgert, R8 Secretary, was our coordinator. In addition to the social aspect of such a get-together, the 2005 Congress had a number of serious goals:

• To provide an opportunity for delegates to gain information and training skills
• To network and build relationships with other volunteers within the IEEE
• To serve as a forum for Section representatives and other local leaders, enabling them to voice (on behalf of the collective membership) ideas, issues and recommendations that impact on the development and growth of IEEE throughout the world, reinforcing its vitality and relevance to those it serves.

For more information on Sections Conference 2005, see www.ieee.org/organizations/8ab/sc/2005.

Hamburg event focuses on mobile comms

THE 10TH International OFDM-Workshop took place in Hamburg, Germany, from 31 August to 1 September 2005.

This is an annual conference on Orthogonal Frequency Division Multiplexing transmission technique. It investigates new results and future techniques for mobile communications.

More than 150 participants from 25 different countries attended. All aspects of multi-carrier transmission techniques were covered, including hardware prototypes, multiple input/multiple output (MIMO) systems and proposals for cellular OFDM system architectures.

In the evening, a city tour of Hamburg was followed by dinner at the historical Coffee Exchange. For more details, go to ofdm.tu-harburg.de.

Join us next year 30-31 Aug 2006! Contact Hermann Rohling or Nico Toender n.toender@tu-harburg.de.

Diagnostics power in force in Vienna

THE FIFTH IEEE Symposium on Diagnostics for Electric Machines, Power Electronics and Drives (SDEMPED 2005) was held in Vienna, Austria, from 7–9 September. The official venue was the Parkhotel Schönbrunn.

The technical program included 60 papers from 24 different countries. This year’s plenary session, ‘Automotive Applications and Electric Machine Modeling’, reflected today’s challenge to monitoring and fault diagnostic techniques, since high reliability and the ability to work even during transient operating states are the key indicators of automotive applications.

Christian Kral christian.kral@arsenal.ac.at

Above: Reception at Vienna City Hall. Left: Discussions during the break session.

Memories from Tampa

ON 14-17 October 2005, IEEE Sections Congress took place in Tampa, Florida, USA. Having set off from a cold autumnal Turkey, I was pleased to find Tampa was enjoying plenty of hot weather.

Two days before the main event, I attended the Region 8 Membership Activities Committee Meeting, where we discussed membership development, the nurturing of new sections, women in engineering, IEEE life members, and also Region 8 News.

I went to the Student Activities Committee Meeting to say “Hi!” to old friends and, of course, make new ones. I was also able to have a quick chat with our Laura, IEEE Student Services Manager.

R8 Committee

The next day, we continued with the formal Region 8 Committee Meeting. This was a platform for discussing further issues, including membership, student activities, and strategic planning. The meeting was attended by the Region 8 section representatives, in some cases comprising two or three people from each section. Everyone grasped the opportunity to meet and mix, and it was an amazing harmony of cultures. The event bode well for future cooperation, networking, sharing knowledge, information update and friendship.

On Friday evening, at the Section Congress opening ceremony, it was amazing to see almost 900 IEEE attendees from all over the world in one place.

Basak Yuksel
Some ways to get your voice heard in 2006

DEAR READERS, may I take this opportunity to wish you happiness of the season. You’ll read this in December, while the year 2005 quickly ends. A lot of good memories. My personal involvement on two IEEE committees ends—PSPB Publications Services and Products Board and IEEE History Committee. The good news is that Region 8 will still be represented! Tayfun Akgul from Turkey (who draws our cartoons) has been elected to serve a three year term as “member-at-large” on the PSPB. While on IEEE History committee, Hans Schmidt and Pilar Molina-Gaudo will attend from our Region.

I’d like to remind you how important your opinions are in the IEEE. But you have to speak up! Every member can write to the officers of IEEE and to the editors of any IEEE publication and give an opinion.

For example, you may like to write to the editors of IEEE Spectrum magazine (which you should all receive) to tell them whether or not you enjoy reading their features; to say if you receive the magazine on-time/ or late; and to suggest articles. I know as a fact that they also would like to find some regular correspondents in Region 8, but they do not know how! Email Spectrum’s editor s.haslter@ieee.org with your suggestions.

In the same way, all the staff and volunteers working for IEEE need and welcome your opinions. So please contact them.

In this issue I hope that you will find something of interest. Our Region has some of the best opportunities for member development and for activities... Baldomir Zajc’s report tells it from the top, and our many Region, Section and Student volunteers write in these pages their many views.

I welcome ideas for our Photo Quiz, and contributions for some mini tutorials. And, of course, your letters to the editor are always welcome.

Happy New Year!
Roland Saam, Editor

Standards development

THE RESULTS of a 2004 survey of IEEE and IRO/IRC members in Region 8 show that while 75% of respondents use standards in their work, fewer than 10% are involved in standards development.

Thankfully, our Standards Development Online website has all information you need. Go to: standards.ieee.org/resources/development. Here you’ll find out about the standards process, how to join IEEE-Standards Association, training material, a standards companion, standards and operation manuals, and FAQs. You can buy IEEE standards electronically.


The IEEE Standards Association offers 3 products: IEEE standard, IEEE corporate standard, and Isto specification (the Double Logo Agreement with IEC and its cooperation with ISO and ITU). But there is still a great need for R8 members, especially in industry, to participate more actively in IEEE standards activities. Ingo Ruesch

R8 Standards Coordinator

member-services@ieee.org

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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. Please submit articles by email to r8news@ieee.org in plain text or Word format. Send photos separately as JPG files. If your files are very large, ask the editor how to submit them by FTP.

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

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GOLD News email
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Submitting articles We welcome articles from any member of the IEEE. Submit your articles to the editor as plain text files, or by email to R8News@ieee.org. Please put R8 News in your email subject line.

Graphics, photos and images should be high resolution (300dpi). They may be uploaded to the Region 8 website using the file transfer protocol ftp://ewh.ieee.org/r8

Deadlines for upcoming issues
March 2006 issue..............1 January 2006
June 2006 issue..................1 April 2006
September 2006 issue...........1 July 2006
December 2006 issue...........1 October 2006
**GOLD forms more AGs**

I AM very happy to report that six new GOLD affinity groups have been formed since our last R8 meeting in Paris (congratulations to Croatia, Czechoslovakia, Finland, Jordan, Saudi Arabia-East and Siberia). R8 has now a total of 15 GOLD AGs, although this is still a small number in comparison to our large region with its 48 sections.

Many GOLD activities were organised during 2005. These included technical and professional lectures, conferences, the GOLD congress, and social events held jointly with the Sections, Chapters and Student Branches.

I want to establish an R8 GOLD Team, whose members will help Section chairs and GOLD members in their neighbourhood to get started with GOLD activities.

Many thanks for your help and best regards,

Rolf Remshardt
R8 GOLD Coordinator
r.remshardt@ieee.org

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**The secrets behind WILGA Symposium success**

IN POLAND the IEEE together with SPIE organises the national research community of photonics, web technologies and electronics for high energy physics. The WILGA Symposium is held twice each year gathering young researchers, MSc and PhD students, as well as their tutors. Many of them are IEEE student or GOLD members, or SPIE members.

This year, the 16th WILGA Symposium, lasted a whole week from 30 May – 5 June 2005, and gathered 260 presentations and over 300 participants. The symposium publishes its work (each year more than 100 papers) in the Proceedings of SPIE, The International Society for Optical Engineering.

I have often been asked how we go about organising such an event from scratch. Here’s how we do it.

**Presentation rules**

Presentations must be brief, only English is accepted, and you can only present your own research, although the work has to be preliminarily accepted by the student’s tutor. There are no parallel sessions. All papers are reviewed and about half are published in the Proceedings.

Work in the newest branches of the science and technology are preferred. Topical sessions are devoted to the most current research directions.

**Cost of attending**

WILGA benefits from sponsorship by professional associations such as IEEE and SPIE, international institutions such as CERN (Geneva) and DESY (Hamburg), and by leading Polish institutions. This helps attract participants from all over Poland and abroad. Importantly, WILGA is cheap and convenient to attend. There is no conference fee, and food and accommodation are inexpensive.

Sessions last from early in the morning until late at night. An ‘after supper’ night session lasts until 10pm, followed by a barbecue.

WILGA Symposiums are the voluntary work of the organisers and participants. The core of the work is done by the PERG/ELHEP ISE WUT Laboratory members and IEEE student branch members.

WILGA is organised entirely by electronic media: there are no paper invitations. Sessions last from early in the morning until late at night. An ‘after supper’ night session lasts until 10pm, followed by a barbecue.

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**WILGA organisation**

WILGA has no permanent structure. The Program Committee is created exclusively during the Symposium, only from current WILGA senior researchers and tutors.

Part of the learning process is the eagerness to get acquainted with other young researchers, and the willingness to participate in a real scientific symposium.

The next IEEE-SPIE WILGA Symposium 2006 will be held from 29 May – 4 June 2006, the week after the International Microwave Conference MIKON. Please join us!

Ryszard S. Romanik
WILGA Symposium Chair
Warsaw University of Technology

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**December 2005**
R8 student activities update

ANOTHER YEAR comes to an end and it is with great pride that I share with you some great news. Indeed, everyone involved with student activities in Region 8 has a lot to be proud of. In 2005 alone, we saw the launch of over 25 new student branches, branch chapters and affinity groups, while our membership numbers went right through the roof, hitting the all-time high.

If you have been following the articles in the student pages of Region 8 News, you may also have noticed that the amount of activity in our student branches has grown. Of course, to report on every interesting student event would take at least 20 more pages in every issue.

We expect this trend to continue next year. The highlight for student activities in 2006 will certainly be the IEEE Region 8 Student Branch Congress: four days full of networking, workshops, information exchange, partying and fun from 31 August to 3 September in Paris. For more information about the event and activities, and also on how to represent your student branch at this incredible event, please see www.ieee.org/r8sac.

For those of you who graduated this year, please keep in touch with your student branch and join your local GOLD group. Don’t forget, you can claim a 50% discount from your first year of membership. If you plan to continue your studies further, you can remain a graduate student member.

Please also note that if you have not yet renewed your membership, there is still time to do so. Remem-ber to tell your friends about your experiences with the IEEE and encourage them to join.

Have a great year! Till next issue... Marko Delimir R8 Student Activities Chair m.delimir@ieee.org

Can’t wait to meet again in Paris: (L to R) Marko, Basak, Aleksandar, Pilar and Damir at SBC2004 in Passau.

Rapid growth and IEEE day make 2004/2005 the best year ever

IEEE ENUGU Management and Technology (IMT) Student Branch was registered in the year 2002 as the first of its kind at a Nigerian polytechnic, and was awarded the ‘most active Student Branch’ by the Nigeria Section.

The 2004/2005 academic year witnessed incredible growth and active participation in IEEE activities both at the Student Branch and Student Section level. We set up Standing Committees to help in building a strong and dynamic student branch: Publicity Committee, Membership Committee, Planning Committee and the WIE Affinity group. We organised career counselling seminars, technical paper presentations and a GSM Repairs and Maintenance Workshop. An IEEE information centre was set up to provide students with access to what is happening in the Student Branch, the Nigeria Section and around the world.

The first IEEE day took place on 30 June 2005 during the Society of Electrical and Electronics Engineers (SSEEES) Week. The main theme of the event was ‘The Advancement of Nigeria Technology’. The students were motivated and had a chance to meet professionals in the industry, experiencing a high level of networking previously unheard of at the Institute. This in turn led to a surge in membership as students woke up to the benefits in joining IEEE.

Aloha, Chukwudi E. IEEE IMT SB Chair sbimet@ieee.org
University of Belgrade, Serbia:
Belgrade’s MiniDrive team wins International Future Energy Challenge at Chicago finals

THE INTERNATIONAL Future Energy Challenge (IFEC) is a bi-annual competition of electrical engineering faculties, organised by the IEEE. The topic of the 2005 competition was to design a single-phase adjustable speed motor drive, with superior characteristics concerning the efficiency, speed regulation and cost of the drive compared to those currently available on the market. The resulting product should replace drives in home appliances (e.g. washing machines or refrigerators), pumps, HVAC systems and similar applications.

The Laboratory for Digital Control of Electrical Drives (LDCED) at the Faculty of Electrical Engineering in Belgrade sent a project proposal to the organiser. Once this was accepted, the MiniDrive Team of the University of Belgrade was founded.

All the engineering work on the project was performed by undergraduate students from the Electronics, Automation and Control and Power Engineering departments of the Faculty. After the third progress report we sent in May 2005, we received a notification stating that we were one of three teams to have made it all the way to the August finals, to be held in Chicago, USA.

We embarked on a strong media campaign which drew attention to our project from some very large companies and organisations including the Ministry of Mining and Energy, the Ministry of Science, the American Embassy in Belgrade, ABB, Siemens, Sever and Centrala. We also owe grateful thanks to the Ministry for Diaspora, our consulate in Chicago, and the Serbian community in Chicago who provided us with accommodation during our stay there.

The Serbian television channel in Chicago, TV4S, followed us throughout the finals. As well as our great engineering success, we were the only team with TV coverage.

The MiniDrive team consisted of 10 persons, being the largest delegation at the finals in Chicago, even though our opponents were from American universities. We made a very strong impression on the judges and the opposing teams because of the excellent organisation and great enthusiasm we showed during the three-day finals.

As far as Chicago is concerned, it is an amazing city. None of us had ever been to the USA before, so the experience we gained through this project apart from great engineering practice is really indescribable.

All the hard work paid off: the MiniDrive team won first place overall. Additionally, we were awarded prizes for Outstanding Presentation and Outstanding Technical Report.

For all those who want to get more information about the project, team organisation or future plans, please visit www.md.etf.bg.ac.yu.

Blagoje Ušćumić
Nikola Milivojević

Wrocław University of Technology, Poland:
Polish scientists visit workshop in Dresden

ON 6-9 July 2005, a group of students and young scientists from WUT, the Institute of Technology in Wrocław, visited Dresden, the charming capital city of Saxony, Germany. The main reason for this excursion was 2005 International Students and Young Scientists Workshop ‘Photonics and Microsystems’.

The Workshop is a fine example of a scientific event (indeed, an official IEEE conference) being organised by people from different countries: the Electronics Packaging Laboratory (Dresden University of Technology), Students Scientific Association ’Optoelectronics and Microsystems’ (Wrocław University of Technology), and IEEE WroUT Student Branch.

Attendees at the Photonics and Microsystems workshop.

After the ceremonial opening, participants listened to invited guests who spoke on current issues of photonics, optoelectronics and microsystems.

During the Workshop, 25 presentations were delivered in five sessions in various fields of photonics: Optoelectronic Interconnects and Packaging, Optical Metrology and Reliability in Electronic Packaging, Fibre Optics and Fibre Components.

For some students, this was the first time to present their research on an international level, to interchange experience and to establish co-operation with other scientific centres. All presentations were of a high scientific level. That’s why one can hope that participation in the Workshop will enable dynamic development and promotion of young scientists.

After the technical sessions, professors and students dined together in the centre of Dresden. At the end of the Workshop, everybody took part in a lab tour and barbecue at the Faculty’s pond.

A great atmosphere and beautiful views of Dresden made the event special for everyone. More details can be found on the Workshop Website: www.avt.et.tu-dresden.de/photonicsworkshop2005.

Agnieszka Borkowska
Vice-chair, WroUT IEEE SB
agniejszka.borkowska@pwr.wroc.pl
Industry giants sponsor conference

IEEE STUDENT Branches Congress’05 – Bogazici University has been held for the third time in Turkey, leaving an amazing and memorable impression on participants from all over the country. The conference was sponsored by three huge companies: IBM, Microsoft and Koc.

150 students from 27 different universities took advantage of the opportunity to get to know each other, develop and enjoy themselves over five days. The content of the congress was enriched by the performance of Dr Kurt Richter with his ‘Leadership Workshop’, assisted by IEEE.

The event attracted 150 students from across Turkey.

IEEE Bogazici University SB

The event attracted 150 students from across Turkey.

Student awareness venture targets careers

THE IEEE Arab Academy for Science & Technology (AAST) Student Branch kicked off the new academic year with a Student Professional Awareness Venture (SPAV) entitled ‘Leading Your Career, Leading Your Society’. This event, held on 10–18 September 2005, provided young graduates and senior students with the information and guidance they need to be effective contributors to their society through educational institutions, government agencies and corporations.

A prerequisite to meet this end is, of course, professional awareness, which was the major theme of the conference. We were fortunate to have the support of the R8 Student Activities Committee, Kurt Ritcher (Leadership Workshop Coordinator and Trainer), and Nikola Milivojevic who presented a set of excellent, interactive workshops during the SPAV.

The nine-day event was divided into 3 phases:
- Awareness of opportunities after graduation & technology trends
- Development of professional awareness skills
- Job fair and exhibition

We invited company representatives to the job fair at the end, specifically to talk to our students about the work and training opportunities available to them.

We are grateful to Prof Dr Yosry El-Gamal, Vice President for Education-AAST, for his invaluable support before, during and after the event. Our special thanks also go to Dr Mohamed El-Faham, Director of the CSSP-Bibliotheca Alexandrina, and to everyone in the co-operative team at Alexandria Library.

The success of this event would not have been possible without the sponsorship provided by the IEEE R8 SAC, the Club D’affaires Franco-Egyptien and Scopeworld.

This SPAV is planned to be held at least once annually. We hope soon to see an even more regional/international SPAV with several branches cooperating together.

Obafemi Awolowo University, Nigeria:

Campaign promotes computing in schools

AN IEEE/NATIONAL Youth Service Corps member in Nigeria, Adegbeje Ambrose Adebayo, has embarked upon a series of talks and workshops in post-primary schools in Ilorin, Kwara State of Nigeria, as part of his community development service. The aim is to encourage the teaching of science-related subjects and the deployment of Information and Communication Technology (ICT) in the educational curriculum.

One such workshop, ‘ICT: A Veritable Tool in Education’, was held on 6 July 2005.

Several career talks were also conducted at a number of schools to encourage science students to consider a career in engineering. A team of the Nigerian Society of Engineers (NSE), Kwara State Chapter, followed suit by highlighting the importance of a good science background.

This is a welcome development, but more should be done to encourage women enrolment in engineering at university level.

Adegbeje Ambrose Adebayo
Ex-Chair OAUSB, Nigeria
amb@ieee.org

Robotics competition update

THE IEEE Region 8 Student Robotics Competition (R8 SRC) has been postponed. The main reason was that not enough teams were participating. We still think a robotics competition in Region 8 should take place, however, and we will soon be advertising our new plans. These include:
- lectures on robotics
- GOLD workshops
- a city trip to the Netherlands
- social events
- the Robotics Competition itself!

The preliminary date for the new event is 12–15 May 2006.

Any IEEE student member from Region 8 or otherwise that is interested can take part, but we are mainly focusing on Region 8 students and GOLD members.

For more information, please go to: www.ieee.utwente.nl/robotics

Stefan Henzen
R8 SRC Organising Team Chair

Adebayo, has embarked upon a series of talks and workshops in post-primary schools.

Arab Academy for Science & Technology, Alexandria, Egypt:

Student awareness venture targets careers

THE IEEE Arab Academy for Science & Technology (AAST) Student Branch kicked off the new academic year with a Student Professional Awareness Venture (SPAV) entitled ‘Leading Your Career, Leading Your Society’. This event, held on 10–18 September 2005, provided young graduates and senior students with the information and guidance they need to be effective contributors to their society through educational institutions, government agencies and corporations.

A prerequisite to meet this end is, of course, professional awareness, which was the major theme of the conference. We were fortunate to have the support of the R8 Student Activities Committee, Kurt Ritcher (Leadership Workshop Coordinator and Trainer), and Nikola Milivojevic who presented a set of excellent, interactive workshops during the SPAV.

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The nine-day event was divided into 3 phases:
- Awareness of opportunities after graduation & technology trends
- Development of professional awareness skills
- Job fair and exhibition

We invited company representatives to the job fair at the end, specifically to talk to our students about the work and training opportunities available to them.

We are grateful to Prof Dr Yosry El-Gamal, Vice President for Education-AAST, for his invaluable support before, during and after the event. Our special thanks also go to Dr Mohamed El-Faham, Director of the CSSP-Bibliotheca Alexandrina, and to everyone in the co-operative team at Alexandria Library.

The success of this event would not have been possible without the sponsorship provided by the IEEE R8 SAC, the Club D’aaffaires Franco-Egyptien and Scopeworld.

This SPAV is planned to be held at least once annually. We hope soon to see an even more regional/international SPAV with several branches cooperating together.

Amr N Atta, Mahmoud Kassem, Saleem Hattab, Tarek Fawzi
AAST IEEE Student Branch
www.ieee-aast.org

Several career talks were also conducted at a number of schools to encourage science students to consider a career in engineering. A team of the Nigerian Society of Engineers (NSE), Kwara State Chapter, followed suit by highlighting the importance of a good science background.

This is a welcome development, but more should be done to encourage women enrolment in engineering at university level.

Adegbeje Ambrose Adebayo
Ex-Chair OAUSB, Nigeria
amb@ieee.org

Robotics competition update

THE IEEE Region 8 Student Robotics Competition (R8 SRC) has been postponed. The main reason was that not enough teams were participating. We still think a robotics competition in Region 8 should take place, however, and we will soon be advertising our new plans. These include:
- lectures on robotics
- GOLD workshops
- a city trip to the Netherlands
- social events
- the Robotics Competition itself!

The preliminary date for the new event is 12–15 May 2006.

Any IEEE student member from Region 8 or otherwise that is interested can take part, but we are mainly focusing on Region 8 students and GOLD members.

For more information, please go to: www.ieee.utwente.nl/robotics

Stefan Henzen
R8 SRC Organising Team Chair
Lasers & Electro Optics Society, Benelux:
Latest LEOS chapter seeks out the PhD students in Benelux

THE STUDENT Chapter from the IEEE Lasers & Electro Optics Society (LEOS) Benelux was founded in October 2004 as the fourth LEOS Student Chapter globally. The chapter has board members from several universities throughout the three Be-Ne-Lux countries: Belgium, The Netherlands and Luxembourg.

The members of the board are all pursuing PhD at their university in the field of LEOS. The LEOS has its field of interest in lasers, optical devices, optical fibres, and associated lightwave technology and their applications in systems and subsystems in which quantum electronic devices are key elements (www.i-leos.org). The board is still looking for members from the other universities in the Benelux working in the field of LEOS.

Setting up the branch

Before the establishment of the Student Chapter, all the LEOS activities related to students had been organised by the IEEE LEOS Benelux Chapter Board, especially by its two student members.

Since this was not an ideal situation in terms of visibility and manpower, the two student members of that time, Marc Sciamanna and Douwe Geuzebroek, initiated a call for participation for a separate Student Chapter that could organise all the student activities in the field of LEOS in Benelux. This call was granted in October 2004 and the board was established one month later.

Chapter goals

The aim of the IEEE LEOS Benelux Student Chapter is to achieve a better acquaintance, both formally and informally, of the PhD students working in the field of LEOS within Benelux. The following activities are being organised by the Student Chapter:

• Annual LEOS Benelux Workshop
• Company Visits
• Informal get-togethers
• Assisting Organisation of Annual LEOS Benelux Symposium
• Website
• More to come...

LEOS workshop

One such activity that we have already completed is the Annual LEOS Benelux Workshop. This is a one-day event with a specific topic in the field of LEOS. One or two invited speakers and five to eight contributed speakers.

ON 27–28 September, the Student Branch of Padova was the guest of our colleagues from the Student Branch of Leuven, Belgium.

On the first day, we visited IMEC (Interuniversity Microelectronics Centre). We had an exciting tour through the nanotechnology, microelectronics and wireless R&D centre, the most important of its kind in Europe.

We also took the opportunity to exchange important tips about organising branch activities and management. In Leuven, there are a lot of ‘collateral’ activities, such as the Women In Engineering (WIE) film night and cocktail party.

That night, we went with the Leuven chairman to visit the Oude Markt square in the city centre, enjoying the student Belgian spirit: meeting other people, talking with them, and of course drinking Belgian beer.

The day after, we took a cultural tour of the city and, after lunch, a technical tour of the InBev brewery. We saw the three main phases occurring in the beer production: the cooking, the fermentation and the bottling.

The SB Padova would like to thank the SB Leuven staff for their hospitality, their kindness and for letting Padova SB members learn about and join in the student Belgian spirit a little. It was a really great experience that we recommend to other branches.

Hashemite University, Jordan:
Open-source fans head for Linux event

THE IEEE Hashemite University Student Branch, with the Jordanian Linux Users Group (JOLUG), staged a Linux event to free and open source-minded students on 11 August.

The conference drew around 30 students, Linux and Unix were provided for everyone prior to the annual LEOS Benelux Symposium. As the symposium welcomes a lot of PhD students from all universities in the Benelux area, all working in the field of the LEOS, the Student Board is organising an informal get-together prior to the main event. More information can be found at: www.leosbenelux.org/symposium.

The current board of the LEOS Benelux Student Chapter has many plans to meet the goals of the chapter. Hopefully, with the help of all our volunteers, we can make the Chapter an active one, organising all kinds of interesting events. The first year shows a good start.

Open-source fans head for Linux event

Above: IEEE Padova SB students get together with Leuven SB students.
Right: Visiting the Interuniversity Microelectronics Centre.

Padova University, Italy:

Padova Student Branch visits Leuven colleagues in Belgium

In 2005, the workshop was held on 20 May at the University of Technology in Eindhoven with the topic: ‘Lasing and amplification in solid state materials’.

In 2005, the workshop was held on 20 May at the University of Technology in Eindhoven with the topic: ‘Lasing and amplification in solid state materials’. The Student Chapter Board introduced a new concept of inviting two speakers, a “senior” and a “junior”, from outside the organisation. The ‘junior’ slot is a useful opportunity to let people speak who have only recently become active in the field. Typically, the ‘junior’ invited speaker is a LEOS PhD student residing in Benelux, while the ‘senior’ invited speaker is an already distinguished lecturer.

More information, including the workshop papers and presentations, can be found at www.leosbenelux.org/workshop.

Future plans

One of our planned future activities is an informal activity prior to the annual LEOS Benelux Symposium. As the symposium welcomes a lot of PhD students from all universities in the Benelux area, all working in the field of the LEOS, the Student Board is organising an informal get-together prior to the main event. More information can be found at: www.leosbenelux.org/symposium.

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For more information about IEEE LEOS Student Branch Chapter, please visit our website: www.leosbenelux.org/student.

Douwe Geuzebroek
Chairman
Student Branch membership soars during 2005

THE IEEE Alexandria University Student Branch has witnessed an exponential increase in the number of active subscriptions this year, reaching a total of 384 student members, of which 245 members are new.

This represents an incredible 176% increase in student membership over the 2004 figure, which was an already impressive 139. The statistics reveal the general understanding among students that IEEE is the best provider of technical and social activities.

Acting upon feedback from existing members, we organised an electronics course fair at which IEEE members who attended the previous year’s electronics course exhibited their circuits and demonstrated their experience with the IEEE. Another promotional tool was a series of small activities, such as single-topic seminars, that we conducted throughout the year, all of which were well-attended.

Summer activities

During the summer, we were involved in a whole series of events, including:

- Technical IT career seminar, held in and given by New Horizons – Computer Teaching Centre, Alexandria.
- An annual electronics course with over 200 participants. The main aim of the course was to increase the students’ practical electronics skills especially in microcontrollers, and develop non-technical skills such as teamwork, leadership and communication skills.
- Seven study groups took place over the summer: AVR, Microcontrollers, Robotics, Graphics, Computer Maintenance, Web Design, C Programming and Microwave.
- Advanced Electronics Course on higher electronic applications, including RF, DTMF, I2C and other technologies.
- A Trip to Bahgat’s IT Factories on 13 July.
- Robotics Workshop, jointly organised by the IEEE Alexandria Student Branch and IEEE AAST Student Branch.
- A trip to the Egyptian Engineering Day 2005, organised by IEEE Alexandria Student Branch and including 150 students’ participation.
- A Visual Basic and Matlab Course that was held in the collage laboratories from the 24 July to 1 September.

In summary, the IEEE Alexandria Student Branch has come to the end of its startup phase, and is now concentrating on maintaining continuity and conserving its role in student life.

The next step is to build further on this success, fulfilling the needs of student members through new achievements, and through even greater creativity.

Ahmed E Harfoush
alexsb@ieee.org

Scientific literacy quiz

WHAT IS the difference between saying “the risk is high” and “the risk is 85%” (guess vs prediction)?

Speaking with numbers signifies computations/calculations. Making calculations/computations means (mathematical or not) using specific models. Using models implies many assumptions, approximations, general rules (relations), etc.

It is no surprise that understanding the meanings of numbers necessitates scientific literacy in society.

Any conversation, TV or radio news, or public announcement today can have scientific or technological content. Progress in science, followed by fast changes in technology, have revolutionised life styles in modern society, from communication to marketing, education to medicine. But without scientific literacy, it is difficult to distinguish a scientific explanation from an absurd statement.

Critical skills

Here are some useful critical response skills:

- Have all the information before reaching a decision.
- Clearly indicate all assumptions of your statements and claims.
- The results shall logically be obtained from the evidence you present.
- Use the right object subject when you make a comparison.
- Do not use indefinite or uncertain phrases like “science tells us ...”.
- Remember there is always a control group against the test group.
- Do not forget the intersection when using groups like “young people”, “white people”.
- Keep in mind the difference between error and uncertainty.
- Declare the accuracy, resolution and precision of your data.
- Do not present your results and explanations as if there were no others.
- Give and analyze data that does not fit into the others.
- Do not depend on the data lingering at the edge or boundary of your measurement or record.

Levent Sevgi
lsevgi@dogus.edu.tr
Dogus University, Istanbul

Answer these questions...

- What is wrong with presenting 189 patients out of 550 total as 34.36%?
- Measuring one Volt with 0.2% accuracy requires a 4-digit digital voltmeter capable of displaying 3 decimal places. Is this true? Why?
- Can you say which country reserves more R&D money in 2005 if I say “Turkey increases its R&D budget 50% in 2005 while the increase is 5% in Germany”? Why?

Win a Skype Internet VoIP Starter Kit! Email your answers to r8news@ieee.org with the subject ‘Literacy Quiz Dec’.
September photo quiz answers

What was that odd object we found in the Popov museum? Robert Rieger (left) sent us the best entry, given below.

a) The object on the left shows the transmitter. The metal rod shown is connected to a charged capacitor inside the wooden box. A discharge spark is initiated by approaching the metal bar with the grounded sphere. The high frequency current waves thus produced are radiated off the rod.

b) The signal is captured by the coherer, shown in the right hand object. A drop in the resistance across the electrodes of the coherer indicates that a signal has been received.

c) The coherer, based on a device developed by the French scientist Edouard Branly, consists of a glass tube with metal electrodes on either end. The tube contains metal fillings, which initially form a high resistance between the electrodes. If a radio pulse strikes the coherer, the fillings cling together (‘cohere’), which causes its resistance to drop.

Robert wins a Skype Starter kit. He writes: “I received the PhD degree at the University College London, UK, in 2004. At present I am working as a design engineer with Astrane Microsystems Switzerland AG. Early next year I plan to relocate to Asia to further pursue my research interests in biomedical electronics.”

Singh lectures at the ‘Old Cinema’

AUTHOR AND broadcaster Simon Singh gave a lecture on the theory of the Big Bang. Simon is a PhD in Particle Physics (Cambridge and CERN) who trained as a mathematician at Imperial College, and now broadcasts popular series on TV and radio. Check out www.simonsingh.net and listen to an MP3 of his talk.

More than 200 persons attended the annual lecture of the IEEE United Kingdom and Republic of Ireland Section. The event was held in the historic Old Cinema theatre which belongs to University of Westminster, Regent Street London campus.

All our meetings are free and open to the public. We publicised the meeting in cooperation with CIMA, The Chartered Institute of Management Accountants, as the first of several joint meetings, to explore general technical and management topics. CIMA is the professional organisation for business accountants and managers (www.cimaglobal.com). Joint meetings with topics of mutual interest on engineering project management, business development, and social implications of technology are planned for 2006.

Contact s.mcloone@ieee.org and visit our website www.ieee.org.uk.


Here’s a typical monthly bill in the US for a consumer/user’s average telecomms services: telephone (local/long distance/international) $55, cell phone $40, cable $40, and Internet dial-up $20. These monthly service fees add up to $155. Sometimes there are costs for equipment (up to $1,000). With added features, more typical bills are $200–$300 per month.

Spending on telecomms therefore accounts for 5–10% of the US median after-tax income (in 2004, $37,000 per year). Some of the most populated countries of the world, and poor regions of the US, have very low incomes and very low purchasing power per capita, and cannot afford telecomms.

In developed countries we seem to believe that the whole world has access to the Internet, cable TV, telephone and mobile phones. This is not the case. An article, ‘Resources: A World Divided by a Common Internet’ (IEEE Spectrum Feb 2004), explains the realities with the ITU Digital Access Index. For example, in Nigeria a year of internet access costs more than three-and-a-half times the average Nigerian’s annual income (in 2002, $290).

I believe that unless there is a change in the worldwide regulatory environment, oligopolies will increase. More people will be under-served, and our new technologies will not reach the poor. A new type of price fixing will prevail due to the lack of real competition as more mergers and acquisitions occur.

Can the real cost of telecomms be measured? What do we lose by government policies failing to support affordable telecomms services? How much of our technology has changed from a ‘want’ to a need? Let me know.

George J. Lissandrello
Life Senior Member
GeorgeLiss@aol.com

Counting the real cost of telecommunications

Recent years have given rise to buzz-words connected with telecommunications, such as ‘universal access’, ‘global information infrastructure (GII)’, and ‘the information super highway’.

This new world of communications technology was meant to reduce costs to the user; to encourage wide selection of service providers; to cut down monopolies; and to promote services to distant parts of the world. The expected benefits included reducing the information glut and gaining greater efficiency in our work.

But what happened? Telecomms costs have increased as a percentage of income. Oligopolies have replaced monopolies. Some countries now have fewer services due to ‘cream-skimming’.

Take the US as an example. It was the motivator for de-regulation. It has great influence through the World Trade Organization by the US Federal Communications Commission (the US version of Ministry of Communications). But today the US has fewer viable telecommunications service providers than after the initial deregulation and break up of the AT&T monopoly.

The ITU calculated a BIT MAP ranking for each country, showing better than the best, and contributing to its overall position that considered the total number of Internet access, and the availability of bandwidth. On the map, the DAI is represented by what it costs to access the Internet exists outside the country’s borders: ‘global information infrastructure (GII)’, and ‘the information super highway’.

Perhaps the most interesting measure was that considered the total monthly cost of Internet access, cable TV, telephone, and the factors—affordability. He based his calculations by the number of inhabitants. The ITU ranked countries a quality measure, placing it 165 among nations. The United States ranked 11, with Hungary, Italy, and New Zealand at 21. Japan was 15. Surprisingly, Sweden came out on top.

For an individual line plus services: telephone (local/long distance) $55, cell phone $40, cable $40, and Internet dial-up $20. These monthly service fees add up to $155. Sometimes there are costs for equipment (up to $1,000). With added features, the typical bill is $200–$300 per month.

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Life Senior Member
GeorgeLiss@aol.com

OPINION is a new occasional column in R8N where we invite readers to voice their concerns on issues that matter to IEEE members. Opinions expressed are those of the author and not necessarily of the IEEE or the editor of R8N.
Region report round-up

New Lithuania Section
An IEEE Section for Lithuania has been founded and was represented at the R8 Committee meeting in Tampa, Florida. Steps are now under way to try to form new Sections in Latvia and Estonia.

Iran Section restored
After two years of detailed negotiation, the Iran Section has been successfully re-instated. There are still restrictions on what IEEE is allowed to support in Iran, but the IEEE President-Elect and the R8 Director recently made highly appreciated visit.

Greece Section
The annual meeting of the Greek IEEE Section took place at the National Technical University of Athens (NTUA) in April, and was addressed by the newly elected Greece Section Chair, N. Hatziangyriou. The event included a lecture by John Ioannides of the University of Athens on ‘Next Generation Digital Libraries’.

EMBS student paper
Rudolf Sidler of the University of Bern, Switzerland, came second in the Engineering in Medicine & Biology (EMBS) student paper competition with his submission on ‘Computer-assisted Ankle Joint Arthroplasty Using Bioengineered Autografts’. The EMBS representatives in Region 8 are: Ahmed Morsy (amorsy@ieee.org), Christopher James (c.j.james@ieee.org), Laura Ruo (laura@esi.us.es) and Christian Roux (c.roux@ieee.org).

50 years in Israel
The Israel Section celebrated its 50th anniversary with the dedication of an IEEE Milestone Honouring the Lempel-Ziv Algorithm. Work is under way towards a second Milestone for WEIZAC – the first digital computer built and operated in the Middle East (in 1956).

IDAACS 2005

Reminder calendar: Workshops, conferences & symposia in Region 8

DECEMBER
ICTC 2005

EUC2005
2005 IFIP International Conference on Embedded and Ubiquitous Computing Nagasaki, Japan 6–9 December 2005 euc05.euc-conference.org


FEBRUARY
Biomechatronics Pisa, Italy 20–22 February 2006 www.biorob2006.org

MARCH
4th Karlsruhe Workshop on Software Radios Karlsruhe, Germany 22–23 March 2006 www.int.uni-karlsruhe.de

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.

AMC’06
9th International Workshop, Advanced Motion Control Istanbul, Turkey 27–29 March 2006 fens.sabanciuniv.edu/amc06

APRIL
EDERS-2006
Digital Signal Processing Education and Research Symposium Munich, Germany 4 April 2006 j.soraghan@eee.strath.ac.uk

AINA 2006

IMCL2006

MAY
MELECON 2006

ISCAS 2006

WILGA2006
18th Joint Symposium on Photonics and Web Engineering, Electronics for Astronomy and High Energy Physics Experiments Warsaw University of Technology Resort, Poland 29 May – 4 June 2006 wilga.ise.pw.edu.pl photonics@ise.pw.edu.pl

JUNE
ICC 2006

PMAPS2006


REV2006

ISCE 2006
10th IEEE International Symposium on Consumer Electronics St Petersburg, Russia 29 June – 1 July 2006 www.isce2006.ru

AUGUST
EPE-PEMC 2006
12th International Power Electronics and Motion Control Conference Portoroz, Slovenia 30 August – 1 September 2006 www.ro.feri.uni-mb.si/ epe-pemc2006

SEPTEMBER
UPEC 2006
41st International Universities Power Engineering Conference Northumbria University, Newcastle-upon-Tyne, UK 6–8 September 2006 www.upec2006.or