www.ieee.org/go/r8news

region8news

Vol 9 No 4 December 2006

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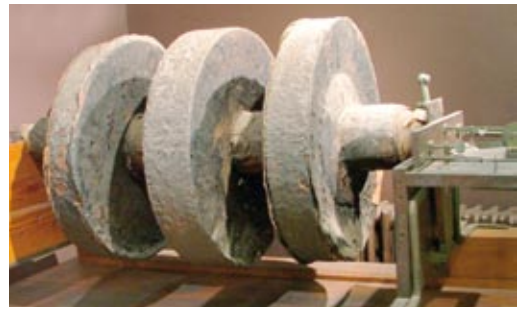
Milestone unveiled for Callan

REVEREND NICHOLAS Callan (1799-1864) has been officially acknowledged for his remarkable contributions to the field of engineering with the dedication of an IEEE Historic Milestone in his honour.

The plaque unveiling ceremony took place on 5 September at the National University of Ireland, Maynooth, 25km west of Dublin. The event was hosted by Frank Devitt and John Hughes from NUI Maynooth, with IEEE president Michael Lightner (second left in the photo above), education and science minister Mary Hanafin and Royal Irish Academian Jim Selvin in attendance.

Callan had been professor of Natural Philosophy at Saint Patrick's College Maynooth and contributed significantly to the understanding of electrical induction in the 19th century.

He developed the first induction coil in 1836, then went on to build the first successful mechanical current breaker, which he called a 'repeater'. He was the first to establish the link between rate-of-change of current and electromagnetic induction, and discovered the principle of the self-exciting dynamo. Callan also built the most powerful batteries and electromagnets of his time, including a giant battery of 577 cells, and patented a method for protecting iron from rust, an early form of galvanization.



Callan's giant coil (1837) consists of three secondary coils connected in series on an iron core. Each coil contains about 10 miles of very fine wire insulated with a mixture of beeswax and gutta-percha. In 1837 this apparatus was able to produce sparks some 15 inches long.

In the year 2000, Callan was one of several scientists and engineers to be celebrated in a series of Irish postage stamps on the theme of 'discovery', alongside the likes of Galileo, Einstein, Marie Curie and Thomas Edison.

Callan died at Maynooth on 10 January 1864. Many of his induction coils, batteries and magnets are on permanent display in the National Science Museum at Maynooth (*www.nuim.ie/museum*).

Financial sponsorship of the Milestone was generously donated by Intel Corporation.

Region 8 wins grants from IEEE Foundation

EACH YEAR, the IEEE Foundation raises and distributes millions of dollars for philanthropic programs that further the scientific and educational purposes of the IEEE.

The IEEE Foundation fulfills its mission in two ways. First, it awards grants to new and innovative projects that seek to improve the worldwide technological literacy of society from childhood through adulthood.

Secondly, it serves as the fund administrator for over 100 restricted funds that support a variety of educational, historical preservation, and peer recognition program of IEEE Units.

During the course of 2006, the IEEE Foundation proudly awarded grants to the following programs of or benefiting members from IEEE Region 8:

Student Study Tour to Finland, Sweden and Denmark – US$1,000
IEEE Student Branch Eindhoven
This grant will partially support a three-week study tour for 24 IEEE student members

continued on page 2

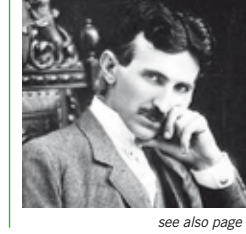
Directors celebrate Tesla 150

IN HONOUR of the sesquicentennial of the birth of Nikola Tesla (1856-1943), the IEEE Board of Directors passed a special citation celebrating the work of the electrical pioneer. A special plaque was cast, and presented to the Tesla Museum in Belgrade, Serbia.

On the 150th anniversary of his birth, the IEEE is pleased to recognise the seminal work of Nikola Tesla in the field of electrical engineering. Among his many accomplishments, those that stand out are his innovative contributions to the applications of polyphase current to electric power systems, his pioneering work with electromagnetic waves, and his experiments with very high voltages. The Tesla Museum in Belgrade is to be commended for its successful efforts to preserve artifacts and documents related to Tesla and to make them accessible to scholars throughout the world.

Special Tesla ceremonies and dedications were held in Zagreb, Croatia (where Tesla was born) and Belgrade.

www.tesla-museum.org



see also page 12

Region 8's History Advisory Council shifts into gear

THE NEW Region 8 History Advisory Council (HAC) has the goal of strengthening any history of engineering, computing activities in our region. There are many diverse activities already happening but little is known about them.

Did you know, for example, that IEEE Russia NW section held a successful conference last year on the 110th anniversary of radio invention? Or that Region 8 has two representatives on the IEEE History Committee (Hans Schmitt and Michael Psalides)? Or indeed that most of our technical conferences have no 'historical record' content?

The HAC purpose is to encourage IEEE R8 members' history projects and to spread knowledge about our profession's achievements, archive historical records; and provide funding for projects of a high standard. We are setting up a website *www.ieee.org/go/r8history* to reflect our activities, and we invite participation from all members.

For example, you can learn about the IEEE United Kingdom & Republic of Ireland Section's initiative on Oral Histories by reading transcripts of interviews conducted by Peter Hill and Charles Turner with a range of notable UK engineers such as Cyril Hilsum, Ramsay Shearman, Kenneth Slater and Ralph Benjamin.

Through the R8 HAC, the Oral Histories' stated objective – *to preserve, research, and promote the history of information and electrical technologies* – will be extended through Region 8.

How? By making the technique more widely known; by ensuring a professional result with quality necessary for historical archive; and by setting up a central website for R8 History activities and communicating the result to all educational establishments in our region.

This is not the only objective of the HAC. We also plan to organise a 2008 History Conference in Strasbourg, get involved with the IEEE Life Member scheme, and actively work in coordination with national and other engineering societies.

So watch this space and our website! You can contact us with your suggestions at *r8history@ieee.org*.

IEEE Fellow nomination changes

IEEE FELLOW grade membership is bestowed by the Board of Directors upon IEEE Senior Members who have built up an extraordinary record of accomplishment in any IEEE field of interest. The accomplishments honoured shall have contributed significantly to the advancement of engineering, science and technology, bringing the realisation of significant value to society.

The IEEE Fellow nomination process has changed since 2003 in an effort to generate more Fellow nominations from industry. Here's a reminder of those changes that came into effect last year (Fellow class of 2005).

The IEEE Bylaws were amended to clarify the eligibility of Application engineers and Practitioners, and to establish the realisation of the significant value to society standard for evaluating nominations.

Fellow candidates are now classified in one of the following categories:

- Application Engineer / Practitioner
- Research Engineer / Scientist
- Technical Leader
- Educator

Another important step in modernising the Fellow nomination process is that the nomination forms and instructions are now available on the IEEE Web site. These nomination forms can be submitted electronically. See the IEEE Web site at *www.ieee.org/fellow*.

Although electronic submittal of Fellow nominations is to be highly recommended, and is in fact the preferred method of submittal, the forms and instructions are also available as hard copy. To request these, please email *fellow@ieee.org*.

The Class of 2007 Fellow nomination cycle ends on 1 March 2007.

All questions on the Fellow nomination process or indeed any general questions about the IEEE Fellow scheme can be directed to the IEEE Fellow staff by email at *fellows@ieee.org*.

IEEE Foundation grants

continued from page 1

through Finland, Sweden and Denmark. During the tour, the students will visit many technology corporations and cultural sites enhancing both their technical knowledge and cultural awareness.

ICL2006 IEEE Student Track – US$4,000
IEEE Education Society
This project provided a track for students from around the globe to share ideas on how education in the computer technology and engineering fields benefits society at the Interactive Computer Learning Conference. The student track attendees had the opportunity to interact with 300 professionals from over 50 countries and allow for further exchange of information between students and professionals on an international level. The conference was held on 27–29 September in Villach, Austria.

Tesla – Neverending Story – US$9,500
IEEE Serbia and Montenegro Section
The IEEE Belgrade Student Branch, along with a consortium of partners, organised an essay contest and conference for undergraduate and graduate students to celebrate the 150th birthday of Nikola Tesla. The authors of the best 40 essays based on a Tesla theme were chosen by a group of judges and invited to the Tesla – Neverending Story conference in Belgrade on 8–16 July 2006 where they shared their ideas covering all fields of electrical engineering with other future engineers.

Mainstreaming Engineers in Africa and the Middle East – US$20,000
IEEE Boston Section
This grant funded a program to help develop underserved IEEE sections by providing them with the technology to receive Distinguished Lecturer Program presentations from all over the world in real-time and to allow them to create their own distance learning presentations to share. The program focused on promoting these improvements for scientists and engineers in Africa and the Middle East.

You and the Future – A Working Retirement: Fulfilling Quality Lives for an Aging Population – US$20,000
IEEE Sweden Section
This grant supported a workshop to discuss improving the quality of life for the elderly and finding engineering solutions to address the difficulties faced by the elderly when they are still active, but feel neglected by society. The workshop was held 13–14 October 2006 in Sweden and will welcome speakers and panels from around the world.

THE IEEE Foundation is excited about the activities it has funded within IEEE Region 8. As the President of the IEEE Foundation, I encourage the members and units of Region 8 to consider submitting grant proposals for new and innovative projects that help people of all ages to understand how technology is created and impacts society. The types of programs we expect to support will improve primary and secondary maths and science learning, increase active interest in engineering and science, preserve the history of IEEE associated technologies, or tap the technological expertise of IEEE members. To apply for a grant, visit our website at *www.ieeefoundation.org* and click on *Grants – Apply Report*.

Note that the amount of money the IEEE Foundation has available to award grants is directly dependent upon the charitable contributions it receives. Thus, if you believe in the work of the IEEE Foundation, please consider making a contribution to the IEEE Foundation through our website at *www.ieeefoundation.org* or via your IEEE member renewal.

Richard Gowen
IEEE Foundation President

Membership development – help and advice from the chair

A NUMBER of volunteers have been asking us for a concise guide that introduces them to the membership development processes and tools that are available from IEEE.

Now at last we have one! The *MD Manual* is an essential overview of MD Community and can be accessed online at: *www.ieeecommunities.org/ieee.md.net*

New Senior Member Initiative

All the instructions you need for this scheme can be found at: *www.ieee.org/nsmi*

IEEE Region 8 Membership Statistics

According to membership statistics, by 30 September 2006 our Region had 56,287 members. Compared to September 2005, that's an increase of 2,945 members (a rise of 5.52%). This means for the first time we can expect to have more than 60,000 members in Region 8 by the end of the year!

Member-Get-A-Member programme is upgraded

If every member of IEEE recruited just one new member this year, we would double our size by 2007! But let's be realistic – we think it's perfectly possible to increase our membership by around 5–10%. Remember, without Membership Development, we can't build the IEEE of tomorrow.

Membership and Section Development Workshop

This was held on 9–11 June in Tallinn, Estonia, and attended by 24 participants from Estonia, Latvia, Lithuania and Russia NW. After signing the petition, Estonia became the 50th Section in Region 8.

Membership Development Workshop

This event was held on 8–10 September in Zagreb, Croatia. Attended by MD officers from 10 Sections, it was a significant success. A Section Development Meeting was held on Malta at the beginning of October.

Volunteer Training Workshop

Another very successful event, this was held in St Petersburg, Russia, on 5–8 October. It was attended by volunteers from all the three Russian Sections, Estonia, Lithuania, Belarus and Ukraine. The next Volunteer Training Workshop will be organised in Capetown, South Africa, in November.

To get more members is everyone's business!

Aleksandar Szabo, IEEE Region 8 MD Chair

Give the gift that *matters.*
Give the gift of knowledge.

Contribute to the following IEEE funds through your dues renewal:

- **IEEE Foundation General Fund**
- **IEEE History Center Fund**
- **IEEE Life Members Fund**
- **IEEE-USA Fund**
- **IEEE General Fund**
- **IEEE Canadian Foundation**
- **IEEE Region 8 Fund (Europe, Middle East, Africa)**
- **IEEE Region 9 Fund (Latin America)**

www.ieeefoundation.org

IEEE FOUNDATION

IEEE

DID YOU KNOW?

Professional activities enhance career skills

IN IEEE parlance, 'professional activities' are those that involve non-technical skills at work. They can include any matters of interest to IEEE members regarding career advancement and day-to-day skills in the workplace.

The Region 8 Professional Activities Sub-Committee takes care of all topics related to professional activities in the Region. As well as ensuring that professional activities are promoted adequately at Region level, the sub-committee encourages Section-level interest in this important aspect of IEEE members' lives. The activities led by the sub-committe includes soft skills training and studies of psychological and sociological issues within the business world, as well as economics-related topics.

Note too that Division VI (Engineering and Human Society) comprises a number of societies with non-technical remits, such as the Education Society, Engineering Management Society, Product Safety Engineering Society, Professional Communication Society, Reliability Society, and the Society on Social Implications of Technology.

These groups offer content relevant to members' professional interests. The Region 8 Professional Activities Sub-Committee is currently investigating how these societies and other related chapters might be integrated further into the professional activities programme of IEEE.

IRSC gets closer to industry

REGION 8'S Industrial Relations Sub-Committee (IRSC) exists to strengthen relationship between IEEE and local industries. The committee members met for the first in Vilnius in April, followed by another in Paris in September, in conjunction with the annual Region 8 Industrial Relations Officers (IROs) meeting.

IRSC has modified the IRO guide to include:

- Guidance to establish an industry leaders' advisory group
- Guidance to carry out analyses of IEEE industry requirements
- National societies' collaboration agreements
- Awards to industry
- Job site info
- Template for logging information about local industry contacts

The IRSC website (*www.ieee.org/r8irc*) has been updated to include more information for the general public as well as for R8 IROs. Also, two group mailing lists have been established to make communication between IRSC and IRO members easier: *R8IRO@yahoogroups.com* and *R8IRSC@yahoogroups.com*.

Jozef Modelski (left), Vice-Chair of Technical Activities, congratulates R8 Director-Elect (and previous R8 IRSC Chair) Jean-Gabriel Remy

Several programmes have been assigned to 'champions' for implementation:

- Establish Distinguished Industry lecturers programme *(Nihal Sinnadurai*
- Form a centralised data bank of industrial contacts for all R8 IROs *(Jean-Michel Le Roux)*
- Provide guidance to members of Student Branches Industry Relations programme *(Ferhan Ozkan)*
- Expand R8 IRSC members to include members from Industrial Applications Society (IAS) Inter-Society Cooperation Committee and Standards Sub-Committee *(Rami Al-Mushcab)*
- Develop criteria for corporate accreditation Awards *(Nihal Sinnadurai)*

Rami Al-Mushcab
R8 IRSC Chair

20 issues – thanks to you all

DEAR COLLEAGUES
This issue celebrates my fifth year as Editor of *IEEE Region 8 News* – that's 20 issues! In the year 2000 I retired from 40 years' working in the computer business, so organising and publishing the newsletter is now my main personal volunteer activity throughout the year.

News articles are gathered from many volunteer members who are active in our 50+ Sections, in Membership Development, Conferences, and in History of Engineering.

Regular contributors include Tayfun Akgul (cartoon drawings), Levent Sevgi (Scientific Literacy Quiz), and our Region 8 Committee.

Assistant editor Başak Yüksel contributes her knowledge of regional students' topics, producing a Student News section which makes up half of every issue.

You, our readers and contributors, send us more than 100 articles and emails with words, photos and web- references which we edit down to the issue you look at now.

Thank you to everyone for making this publication possible.

Elections in Region 8

At its autumn meeting at Belgrade, Serbia, the IEEE Region 8 Committee proposed two candidates for Director-Elect 2008: Jozef Modelski (Poland Section) and Jaafar Al-Ibrahim (Saudia Arabia Section). You can vote for your choice in November 2007.

Also the committee elected George Paunovic to be Vice Chair Technical Activities, and Marko Delimar as Vice Chair Membership Activities for 2007/8.

Big numbers

Our Region should pass 60,000 members by the time you read this. Congratulations to all for making our institute the top attraction for engineering professionals in all our specialties.

Talk to us!

I would like to hear from readers with suggestions for future issues. Share your views, opinions, knowledge and achievements with us by writing an article for publication. Read the guidelines at *www.ieee.org/go/r8news* – click *Tips for contributors*.

Roland Saam, Editor

Swansea Science City head wins recognition

PROF JAAFAR Elmirghani, Head of the Institute of Advanced Telecommunications (IAT) at Swansea University, has won an outstanding contribution award in recognition of his achievements in securing large-scale research.

Elmirghani's research for the Engineering and Physical Sciences Research Council (EPSRC), the Department for Trade and Industry (DTI) and the EU exceeded £2.5m over the past year. The EPSRC funded TINA (The Intelligent Airport) which promises to imrpove airport and flight experience using intelligent wired-wireless networked systems.

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

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Extra copies If you would like extra copies of *Region 8 News* for distribution at your IEEE events, please email a request to the editor before the deadlines below, specifying quantity and delivery address. Please put *R8 News Extra Copies* in your email subject line.

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

Deadlines for upcoming issues

March 2007 issue ..... *deadline: 1 January 2007*
June 2007 issue..... *deadline: 1 April 2007*
September 2007 issue..... *deadline: 1 July 2007*
December 2007 issue..... *deadline: 1 October 2007*

Workshop studies new technology standards

INGO RÜSCH, the past R8 Standards Coordinator, delivered a presentation concerning standardisation for the Morocco Section on 10 June 2006 in Tangier.

This took place on the occasion of the First Workshop on New Technologies of Information and Communication at the University of Abdelmalek Essaadi. Some 100 attendees took part in the one-day workshop. Questions at the end of the plenary presentation underlined the importance of standardisation as a market opener for new technologies for the benefit of manufactures, users and the society at large.

Ingo Rüsch leads a session on global standardisation

Once more it was stated that the IEEE Standards Association (IEEE-SA) is one of the leading multinational standards developing organisation (SDO) and their standards are world wide used. In addition IEEE-SA is cooperating with all international SDOs, like IEC, ISO, JTC1 and ITU.

It also offers different market-driven processes for developing standards and specifications and is at the edge of using electronic tools for standards development.

The presentation concluded with the appeal to participate actively in the standardisation work to get results which reflect also Region 8 interests.

Mohamed Essaaidi

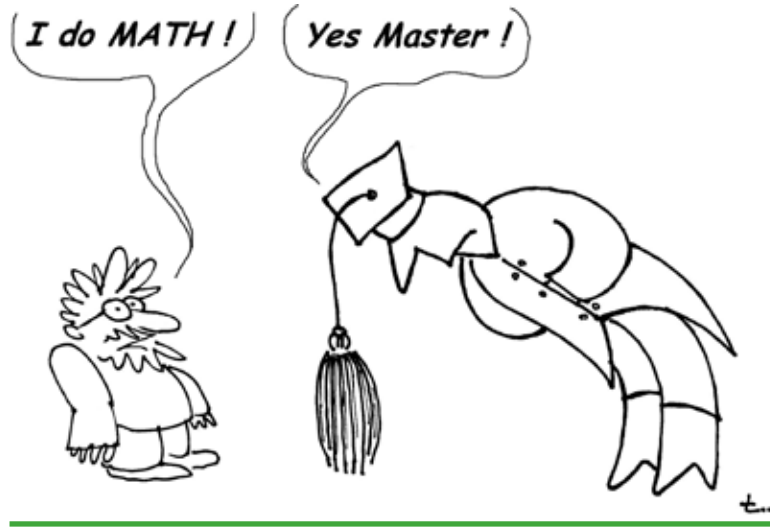
Trans-Europe events look at industry

THE RECENT Region 8 Trans-European Industry Applications Chapters´ Joint Workshop was a four-stop touring event taking place in Madrid *(see page 6)*, Helsinki, St Petersburg and Moscow. Each event was led by the distinguished IAS lecturer, Dr K S Rajashekara, who spoke on hybrid electric and fuel cell vehicle architectures.

Other speakers included Prof Jozef Modelski (R-8 Vice Chair for Technical Activities), Nadezhda Dvurechenskaya (Vice Chair of the Russia Siberia Section), H Landis Floyd II (IAS President) and Dr Peter Magyar (IAS Chapters R8 Area Chair).

Each of the four host Chapters organised their workshops to suit local preferences. The Madrid event, for example, was followed by a detailed discussion of the topics raised. Uniquely, the Helsinki seminar was designed to tie in with a Chapter-creation meeting: this newly created chapter looks very promising.

Attendees at all the events also took the opportunity to tour local industrial and academic institutions. In Helsinki, attendees visited the Power Electronics Laboratory of the University of Technology, and in St Petersburg, the IEEE delegation went to see the assembly of turbo-generators in the company Electrosila.



carbon © Tayfun Akgül

SoRuCom measures the legacy of Soviet computing

PETROZAVODSK STATE University hosted an IFIP International Conference entitled Perspectives on Soviet and Russian Computing (SoRuCom) on 3–7 July.

The first-ever academic event of its kind, the conference drew over 170 participants from eight countries (Russia, Ukraine, Belorussia, USA, France, Canada, Cuba and Mexico), representing academic institutions, leading universities and communities in the sphere of information and telecommunication technologies.

Plenary papers covered the issues of how Soviet computing emerged, developed and evolved; the contemporary problems in this field; and the approaches to teaching the information and telecommunication sciences at universities. Representatives from IBM, Microsoft, and CISCO shared their vision of the future development and cooperation with universities.

Prof John Impagliazzo chaired a round table on the different approaches to professional training in the East and West

The conference attendees arrived at the conclusion that Soviet computing had achieved intellectual and technological success compared to that of leading industrial nations (many of the systems designed at that time are still in use today) and resolved to introduce a regular course on the history of computing into academic curricula.

For more information, go to *http://sorucom.karelia.ru*.

in brief

Conference report: Madrid

THE SEVENTH World Conference of Thermophotovoltaic Generation of Electricity (TPV 7) was held in El Escorial, Madrid (Spain) on 25–27 September.

The event was a top international forum where researchers from countries from different fields (emitters, filters, semiconductors materials, cell technologies, modelling, systems and thermoelectric) had the opportunity for dialogue, information exchange and discussing the latest developments.

The conference counted on 45 attendees and 38 scheduled oral presentations, divided into seven technical sessions and three invited talks.

Conference report: PRIME, Otranto

MORE THAN 150 PhD students gathered at the second PhD Research in Microelectronics and Electronics (PRIME) conference in Otranto, Italy, in June to share their research experiences in the field of Microelectronics and Electronics.

The event, co-organised by the Microelectronics Group at the University of Lecce and the Integrated Microsystems Laboratory of the University of Pavia, included 127 oral presentations and a company fair attended by thirteen leading multinational employers in the sector.

PRIME is a flagship graduate student conference of the IEEE Circuits and Systems Society, Region 8. This year, it was also supported by the IEEE SSCS, Italian Chapter, and the IEEE IES.

PRIME 2007 will take place in Bordeaux, France, in June 2007.

www.ieeeprime.org

Enjoying tapas in Spain (left to right): Dr Rajashekara (Raja) and his wife, Ken Slaven from ADEX, Dr Fraile-Ardanuy and his wife, and Dr Martín Sánchez.

IAS Madrid meets with great success

RECENTLY THE Spanish Industry Applications (IAS) and Control Systems (CSS) joint chapter hosted a technical workshop. It began with a presentation by IAS President H Landis Floyd II, and a talk by Dr Kaushik Rajashekara on hybrid electric and fuel cells, hybrid vehicle architectures, and SOFCS for on-board power generation.

From the industrial participation perspective, Ken Slaven, General Manager for ADEX, an industrial process control software company based in Madrid, spoke about how his company was currently launching a new technology that could change the way companies manage their industrial processes.

Finally, Dr Juan Manuel Martin-Sánchez give a presentation on adaptive predictive expert control.

The Spanish IAS Chapter was founded in 2001 and is an active chapter, having hosted several conferences, seminars and workshops. Its current president is Dr Juan Manuel Martín-Sánchez, the Vice-President is Pedro Balsa, the Treasurer is Dr Jesús Fraile-Ardanuy, and the Secretary is Dr José Rodellar.

Bejczy honoured at mini symposium

AT THE meeting of the Senate of Budapest Tech during the opening of the academic year, Dr Antal K Bejczy was awarded the title *Civitate Honoris Causa*.

A mini symposium was organised by IEEE Hungary Section, Budapest Tech and Hungarian Academy of Engineers, at which those who received the honour delivered inaugural lectures in Budapest Tech's new building.

Dr Bejczy's lecture was entitled *New Technologies in Space Research*, giving a professional overview of the adaptation of robot technology in space research. Within this wide topic, the opportunities for robot adaptation concerning space shuttles at Earth-near orbits and space stations were presented. The lecture reported on new sensor systems, and about the relevant elements of control software.

A second lecture by Dr Pál Michelberger on *Industry, Science and Education* looked at the connection between basic and applied researches and the interaction of science and practice since the industrial revolution.

Péter Nagy
nagy.peter@hte.hu

Czech Section sponsors events

IEEE CZECHOSLOVAKIA Section currently enjoys a membership of 481, including five Fellows, 33 Senior Members and 82 Student Members. This year, the Section has technically sponsored three conferences and financially supported another three student conferences so far this year. A GOLD meeting was arranged in May.

The Section continues to collaborate actively with the Radioengineering Society (RS) to publish *Radioengineering* journal (*www.radioeng.cz*), and also with the Czech Centre at the Institution of Engineering and Technology (IET). A new EMB Chapter was approved in August, and the MTT/AP/ED joint chapter was extended in July.

Activities for this autumn include a Best Diploma Thesis award (MTT/AP/ED/EMC Chapter), the Vršov 2006 Student Workshop at the Technical University of Brno, and a General Assembly of the Section and Chapters.

For further information, visit *www.ieee.cz*.

AFRICON 2007

www.africon2007.co.za

26–28 September 2007
Windhoek, Namibia

Organised by IEEE South Africa Section in partnership with the Polytechnic of Namibia

africon
2007

Update from Ukraine Section

BETWEEN JANUARY and September this year, IEEE Ukraine Section has held 36 technical meetings and been involved in seven international conferences.

The Section also continues to collaborate actively with the Ukrainian Union of Power Engineering Specialists and the Ukrainian Union of Engineers.

Stockholm workshop to consider the price of living longer

THE TRADITIONAL industrial world faces a drastic aging of her population, and politicians are asking: "Who will pay the pensions?" This will be the topic for a Life Cycle Scenario Workshop entitled You and the Future, organised by IEEE Sweden Section, due to be held on 20–21 April in Stockholm.

Some countries such as Germany, the UK and Denmark wat to raise the official retirement age just to keep the public economy in order. But there are also social consequences of living longer: the acceptance of older people playing an active part in society, issues of healthcare and so on. Forced early retirement is a waste of life-long investment. Just like artists and politicians, engineers and scientists can be professionally active well into their eighties.

From a society point of view, it makes sense to take advantage of the qualifications and experiences of older people, who themselves need their longer lifespans to be meaningful and productive. This is especially true for many hi-tech companies and agencies in Europe already finding it hard to recruit qualified personnel, not least engineers.

This hampers growth and threatens their welfare. If nothing is done the employment and production will move elsewhere unless more people keep involved in a productive life.

For more details, visit *www.rart.com/you-and-the-future*.

A rich year for Siberia

THIS YEAR has been rich in events for the IEEE Russia Siberia Section. The most significant of these was the visit to the Section by Region 8 Nominations and Appointments Committee members on 3–10 August. It was a great pleasure to receive Region 8 Director Prof Baldomir Zajc, Director-Elect Prof Jean-Gabriel Remy, Past Director Prof Anthony Davies and other N&A Committee members Prof Marian Kazmierkowski and Gordon Dodds to Novosibirsk. Local meetings with IEEE members at Novosibirsk State Technical University (NSTU), two research Institutes of the Russian Academy of Sciences and Tomsk Polytechnic University were organised during this visit. We would like to thank the Region 8 leaders for the opportunity to discuss many important topics and we hope to see them in Siberia again.

Members of the N&A Committee visiting Novosibirsk

As a result of elections in March, the following young and energetic persons were appointed as Section officers: Prof Andrey Fionov (Chair), Nadezhda Dvurechenskaya (Vice-Chair) and Associate Prof Alexander Gridchin (Secretary/Treasurer). The main aim of new team is expansion of student activities, industry relations, professional and technical activities, and external relations and representation.

Two new Chapters were established in 2006. The first EMB-S Chapter in Russia was established on 21 July in Novosibirsk, chaired by Prof Vladimir Makukha, IEEE Senior Member and Head of the Electron Devices Dept, NSTU. After that, the Novosibirsk Joint IA/IE/PEL Chapter was founded on 9 August, chaired by Prof Sergey Kharitonov, Head of the Industrial Electronics Dept, NSTU, and general director of Power Electronics of Siberia Corp. Both chapters have held elections, developed plans for the near future and started to work actively.

Back in May, we appointed an Industry Relations Committee. In June, Nadezhda Dvurechenskaya represented the Section at the 1st IEEE R8 Trans-European Industry Applications Chapters' Joint Workshop in Helsinki, St Petersburg and Moscow.

Close ties with the IAS Inter-Society Cooperation Committee have been established as well as a number of meetings with industry representatives were held.

IEEE Russia Siberia Section currently has 255 active IEEE members, seven Chapters, a GOLD Affinity Group, four Student Branches and a WIE Student Affinity Group.

Saudi Arabia focuses on standards advancement

REPRESENTATIVES FROM the IEEE Saudi Arabia (East) section held a brainstorming session on 1 September with IEEE Region 8 Standards Coordinator Dr Yang Yang, Region 8 Standards Vice Coordinator Prof Nihal Sinnadurai, and R8 IRSC Chairman Rami Al-Mushcab. The aim was to further advance IEEE standards awareness in the GCC region and discuss establishing a standards session at the 4th IEEE GCC Conference in 2007.

Proposals were drafted on various topics that could be included at the IEEE GCC conference. The topics cover several tracks starting with a basic understanding of IEEE standards landscape and development process for the novice, and moving into more intriguing challenges on maximising the use and benefits of IEEE standards while utilising industry participation. Suggestions were made to consider establishing an IEEE standards regional committee and encourage each section to have an IEEE standards officer to further enable activities and coordination in this regard.

IEEE Saudi Arabia (East) Section has already established an IEEE Standards Officer position to focus attention on standards promotion and coordination, currently held by Michael Elsayed. The Section is starting to see benefits in this area and considers the next GCC conference as a major vehicle to promote the work of IEEE.

Participants at the session conducted over dinner

Test your scientific numeric literacy

by Levent Sevgi of Dogus University, Istanbul (lsevgi@dogus.edu.tr)

A group of students is required to predict the received power of a transmitter at a given frequency and a distance d. The transmit power P_t, the transmit antenna gain G_t, the signal wavelength λ, and the distance d are going to be measured and the received power is going to be calculated from

$$P_r = \frac{P_t G_t \lambda^2}{(4\pi d)^2} \; [W]$$

After a series of conducted measurements, the transmit power P_t is found to be *120 kW* with 1% accuracy. The wavelength is found to be $\lambda = 1.5 \pm 0.02$ *cm*. The transmit antenna gain is given to be $G_t = 13$ *dB* with a relative measurement error of *–20 dB*. Finally, the measurement results for the distance in kilometres, after 15 trials, are {7.54, 7.12, 7.09, 7.37, 7.86, 7.43, 7.03, 6.97, 8.04, 7.96, 7.61, 7.52, 7.80, 7.16, 7.77}.

a) What is the average distance d_{ave} and its standard deviation Δd (i.e., error bounds)?
b) What do you say that the distance d will be if 95% confidence level is required?
c) What would you expect the range error Δd approaches with the same 95% confidence level if the number of range measurements tends to infinity?
d) What is the received power, $P_r \pm \Delta P_r$?
e) What may be the lowest level of the received power under 99.7% confidence level?

Send your answers to Levent Sevgi *lsevgi@dogus.edu.tr*

Answers to last issue's literacy quiz

The answers to the scientific numeric literacy quiz from *Region 8 News* September 2006 are given with a full explanation (and a reminder of the questions) at our website: *www.ieee.org/go/r8news*.

Answers to last issue's photo quiz

CONGRATULATIONS TO Tommi Saarinen from Ouku, Finland, our winner of the photo quiz in *Region 8 News* September 2006. An IEEE T-shirt is on the way! The answers were...

1. The electrical components are:
– four wires terminated on insulations attached to the crossing support
– jump wires connecting the wires over the crossing support
– lamp (on the left) with connecting wires
– branch cable connected to the wires

2. It's a three-phase system with three phases and neutral
3. The device on the left is a lamp which operates on single phase, thus it needs to be connected to only one phase and neutral

DEAR FRIENDS, as this is my last column, I will say a few words on a personal note.

My term as Region 8 Student Activities Chair is finally over and I want to tell you that it has truly been a pleasure to work with you these past two years. I have enjoyed every second of it and I will use this opportunity to thank all volunteers who were in any way associated with student activities. Your work is tremendous and we have done extremely well in these two years.

As all of you know, students from all over the Region recently met in Paris for IEEE Region 8 Student Branch and GOLD Congress.

This event brought together more than 320 volunteers from all over the world. It was an amazing experience and you can read more about it in this issue. From my personal point of view, this was the best IEEE event I ever attended; I have, also, heard similar comments from some of the future Presidents of the IEEE.

I wish to express my gratitude to all of the participants and especially to the local organising team, who have done an amazing job.

At this time, we have approximately 17,000 student members in the region, more than ever before. Our student activities keep growing at an exponential rate.

We have formed over 50 new Student Branches in the last two years. I have been fortunate enough to visit some of them and I was impressed by their activities. Many of them are organising and hosting wonderful international events.

We need to share this knowledge, so please send us your input and we will publish it in the Region 8 Student Activities web site (www.ieee.org/r8sac) and *Region 8 News*.

Keep in mind that you belong to an exclusive community and enjoy the benefits of its network. Stay up-to-date with the changing world of technology; advance your career and your profession. Be aware that you are the future of your profession and the future of the IEEE. So long, and thanks for all the fish!

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

SBC 2006 participants

The Organising Committee

One of the sessions in full swing

Intense days in Paris at SBC 2006

THE IEEE Region 8 Student Branch and GOLD Congress (SBC) 2006 took place in Paris, France, between 31 August and 4 September at the Pierre and Marie Curie University (where the Curies had their laboratories).

More than 320 attendees from about 40 different countries were registered, mostly IEEE student members but also WIE (Women In Engineering) and GOLD (Graduates Of the Last Decade) members. Region 8 representatives and guests from all 10 IEEE Regions joined us as well. We were very happy to welcome four Region 8 Directors (past, present and future) and four IEEE President-Elect candidates (including both IEEE President-Elect candidates for 2007).

The four days of the event were very intense. After arrival and registration, France Section offered a cocktail as a welcome gift. The programme that followed included more than 50 speakers, with plenary sessions, panel discussions and 11 parallel workshops. The number, quality and originality of these workshops showed once more the enthusiasm and dedication of the student members, who organised and moderated them.

SBC 2006 also hosted the IEEE Student Awards and Contests Ceremony. A total of seven awards were presented, including the very first nomination for the Darrel Chong Exemplary Student Activity Award (University of Twente Student Branch, R8 Robotics Contest).

The final highlight of this SBC edition was the Elect the President game show, in which Lewis Terman and John Vig (IEEE President-Elect candidates for 2007) faced the Region 8 students.

SBC has always been a very attractive event, not only for student members. For the third time in a row, we were joined by GOLD volunteers. Furthermore, the Region 8 Industry Relations Officers (IRO) had their meeting in conjunction with the Congress. Even though some of these sessions were given in parallel, GOLD and IRO members joined the WIE and student members during the social events.

Visiting Paris during the SBC was a must. We had buses and guides taking us around the vibrant, romantic and historical French capital. The Multicultural Evening, a celebration of the cultural richness in Region 8, was the social highlight of the Congress. Members from all represented countries brought their traditional food, music, clothing and drinks, and presented a stand. The evening was full of French cheese, Saudi Arabian handicraft, Turkish songs, Egyptian mummy-dressed attendees, Belgian chocolates, Spanish Flamenco, etc.

You can find more information, including the detailed programme, presented slides and lots of pictures at *www.ieee-r8sac.org/sbc2006*.

Mark Tawileh, Thomas Watteyne and Amine Yazidi, Local Organising Committee

IEEEXtreme Programming Contest

IT'S COMING! IEEEXtreme, the full day global programming competition designed just for students. Take the challenge and participate in the first ever IEEEXtreme Programming Competition. This is a global challenge – you will be competing with students around the world.

Are you ready? If so, get together two of your fellow student members and sign up. As a team you will work to solve a set of programming problems, competing for some really cool prizes, and if you are good enough, you will be crowned the first IEEE-Extremist.

For more information, rules and to sign up, visit *www.ieee.og/ieeextreme*.

Brno University of Technology, Czech Republic:

Czech and Slovak PhD Workshop

CZECH AND Slovak PhD students came together for IEEE Workshop Vršov on 19–21 September, organised by the Student Branch of Brno University of Technology.

About 40 presentations covered almost all parts of electrical engineering. The aim of this workshop was to meet with colleagues from different universities and to share research results with them.

The purpose of the meeting is also social, because every year there are many new PhD students in each department, so this is an opportunity to help them to settle into the PhD community.

Beyond technical talks, there was time for an afternoon trip around Železné hory (Iron mountains) and the evenings were filled with all types of technical and non-technical conversations.

This was the fourth such workshop since 2003 and hopefully it's going to become a tradition. We expect the next event to be at least as popular with PhD and research students as this year's.

Zbynik Fedra, Chair
xfedra01@stud.feec.vutbr.cz

United Arab Emirates University, UAE:

Election day for WIE

AN IEEE Election Day was held on 21 September at UAE University. The main objective of this day was to form a new committee for IEEE Women In Engineering (WIE) Affinity Group (AG) in UAE University.

The most important guest was Fatima Al Dhahri, the upcoming Chair of WIE in UAE. This event was organised under supervision of the counsellor of WIE Student AG at UAE University. 17 students, including 12 IEEE members, attended along with three tutors from the Electrical Engineering Department.

Sara Ahmed Al Muaini
IEEE UAE University WIE Student AG Secretary

Turkey Section:

Science Parks summit

THE 3RD Science Parks Summit (3-4 November) was organised by the Student Branches of Bogazici University METU, and supported by the Istanbul Chamber of Commerce in Istanbul.

In this summit, the knowledge-sharing platform between science parks and related entities were widened into an extensive level with high participation from industry. It was a platform to discuss the current status of science parks and problems of new-born science parks. The second day of the summit focused on helping entrepreneurs implement their creative business ideas.

Ferhan Ozkan

University of York, UK:

York students wake up to Farnborough Airshow

AFTER A domant year, IEEE University of York Student Branch made its comeback last February. One of the biggest events organised so far was a technical trip in July to the Farnborough International Airshow, which is one of the most internationally attended aerospace events in the world.

It provides a venue for the world's civil and military aerospace suppliers and their customers to meet up. For more information, visit *www.farnborough.com*.

For this event, 25 members of Student Branch were provided with entrance tickets and car park stickers. The SB also covered a big amount of the travel expenses. As well as being able to see different types of aircraft at close quarters – and even sit in some – there were many opportunities for making new contacts and job hunting.

We would like to take this opportunity to thank our university/department for help with funding for this trip.

We believe that none of this could be done without the team work, the feeling of trust to one another and the IEEE spirit. In this occasion, we would like to thank you all for being with us in IEEE!

Emine Gokce Aydal
aydal@cs.york.ac.uk

Eindhoven University, The Netherlands:

Eindhoven breaks silence

AFTER A couple of silent years, the IEEE Eindhoven University Student Branch made some drastic changes and encouraged membership growth, once again ensuring its future.

The turnaround was brought about by a new committee that decided to focus its attention on Masters students, a group for whom student activities were thin on the ground at the time.

Another major change was to enter into cooperation with the largest study association of the department – Thor – ensuring that no competition in activities could occur. Finally, the Branch decided to stress its international aspects. By helping foreign students at the University and local students who plan to study abroad, the Branch actually became the centre of international activities in the Department.

One of the new activities addressing the Master students was a workshop on LaTeX. The event attracted 37 attendees, and was preceded by a dinner and followed by a social drink. Another great social activity was the sailing weekend in April: almost 50 student members from all over the IEEE Benelux Section joined up in the north of the Netherlands for some typically Dutch sailing.

Racing through the study tour's field trip to ABB

Also popular was the three-week study trip, NEXT ('Northern Europe eXplored with IEEE and Thor') in July, during which 26 lucky students visited seven companies, two universities and six museums located in Finland, Sweden and Denmark.

In addition to these three successful activities, lots of other parties and dinners filled the yearly schedule. Together, this has resulted in an explosive growth of student members, from 39 last October to 114 currently and still rising.

Paul Booij
IEEE Eindhoven Student Branch Chair
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Ajman University of Science & Technology, UAE:

Focus on community service programmes

IEEE AJMAN University of Science & Technology (AUST) Student Branch initiated two community service programmes (SMART and CAUSE) in February 2006. The students develop projects under the supervision of faculty members for the competition.

SMART (Student Mentors for Awareness Raising Tasks) is one of the key programmes where SB members compete in developing projects, based on simple scientific principles, to demonstrate and encourage high school students to join the field of engineering. CAUSE (Community Activities by Undergraduate Students of Engineering) involves students and faculty members team ing up to develop projects that can be donated to children with special needs.

The IEEE AUST SB celebrated its first anniversary on 19 September. More than 100 student members together with new students attended the meeting.

Being an IEEE-WIE member, Tazeen Sharif received a full grant to present her undergraduate research work at the 3rd IEEE GCC Conference held in Bahrain in March. Sharif was the only female engineering student to participate in the conference. IEEE-WIE members have been active in other events such as WETEX 2006, 1st IEEE UAE Students Day, 3rd WIE Anniversary Meeting and Student Branch Congress 2006. The IEEE AUST WIE Student AG is also working to draw more female high school students into engineering.

Tazeen Sharif presenting her work in Bahrain

did you know?

Study online with Berkeley!

EVERY SEMESTER since autumn 2001, the University of California (UC) Berkeley has been offering live and on-demand webcasts of selected courses to the public, free of charge.

The courses on offer include Astronomy, Biology, Chemistry, Operating Systems, Computer Programs, Digital Signal Processing, Digital Integrated Circuits, Soft X-rays and Extreme Ultraviolet Radiation, XML, Buddhist Psychology, and more. Watching or participating over the Internet is totally free.

In addition to a web browser such as Netscape or Explorer, you will need the free RealPlayer plug-in, and a broadband Internet connection via DSL or a cable modem is advised for optimal viewing. You can still connect via a 56k modem but your image quality may be poor.

If you wish to view a live webcast, simply go to the webcast schedule for the specific course and click the large 'Real' icon at the appropriate day and time. Usually all the materials you need for a lecture are posted to the site one day before the lecture itself. Lectures are electronically archived and made available online afterwards, so don't worry if you miss a live webcast.

In the spring of 2006, Berkeley also began a Podcast pilot project. Podcasting automatically delivers MP3 audio recordings of classroom lectures to computers and portable MP3 players. Currently 26 courses are participating in the Podcast trial.

For further information, visit the website at *http://webcast.berkeley.edu.*

Alexandria University, Egypt:

Study groups on web design and graphics

Alexandrian students attend a study group

A STUDY group experience can be summed up in two words: share and guidance. Allowing our members to share the guidance of their fellow students, the Branch launched a couple of study groups oriented to cover web design basics as well as graphics using Photoshop.

Our Student Branch has also adopted a new strategy for these sessions, holding them in such a way that the participants perform a task and submit it before passing to the next session.

As for the web design study group, our intention was to encourage volunteers to take on the job of designing and developing Branch's web site. This latter is considered one of the most significant channels through which the Branch serves its members. In a similar way, gifted members in the graphics study group were given the chance to join the team responsible for designing posters, name tags and certificates. After some excellent work, the number of participants rose to 130 members for the web design group and 126 members for the graphics group.

Many other Branch activities were held over the summer, including an electronics course, a Matlab course, a series of 'come-to-know' seminars, a trip to Bahgat factories and an Egyptian Engineering Day visit.

Enas Radwan
eng_enas_86@yahoo.com

Al-Balqa' Applied University, Amman, Jordan:

WIE helps young students to identify future aims

IEEE AL-BALQA' Applied University (BAU) Student Branch began this academic year with a successful event. SB had two booths at the Engineer Mall on the university campus. One included brochures, IEEE advantages paper, *Spectrum* Magazine, Region 8 and the Institute newsletters, application forms and some gifts for visitors.

The other event was run by the WIE affinity group, who arranged a conference entitled 'How to Plan Your Future', held on 23 September. 70 students, several teachers, and the head and the secretary of WIE AG of Jordan participated. The conference targetted younger students aged between 16 and 18.

The event programme focused on lectures with the following subjects: 'How to Identify Your Aims', 'Self Confidence' and 'Time Management', and there was a short 15-minute play. The conference was really a great experience for more than 20 WIE members who attended. The school has since asked for more future cooperation with our WIE Student AG. After the event, almost 10 students decided to join IEEE BAU WIE Student AG.

Both activities brought us significant benefits to inform other students about our Branch. Our strong start to this year's activities saw 30 new members and volunteers joining up.

Mohammed Awny, Chair
Bushra Zakaria Al-Habashneh, WIE AG

Participants at the WIE AG conference

IEEE BAU SB and WIE AG volunteers at the Engineering Mall

University of Cyprus:

Branch is revitalised

THE IEEE University of Cyprus Student Branch was reactivated in 2005. Although it is still a small Branch, the board intends to increase the number of volunteers and members through the organisation of a combination of educational and entertaining events.

During the previous semester, the board organised a successful open discussion with the Cyprus Science Technical Chamber and the Electrical and Computer Engineering students regarding their work rights.

The branch has already applied to become a registered NGO in the Cyprus Republic, as well as to become a Club of the Students Union of the University of Cyprus.

Michael Markou
Student Branch Chair

Ankara University, Turkey:

Turkey SB Conference

IEEE TURKEY Student Branch Congress 2006 was held in Ankara University during 25-27 August, just before the IEEE R8 Student Branch Congress in Paris.

During this event, about 200 IEEE student members from nearly 40 different student branches all over Turkey had the opportunity to come together and discuss the last status of on-going activities and projects face to face and make necessary arrangements for possible joint activities.

It also paved the way for joint Student Branch activities in Ankara, and these began straight after the congress was over. We believe that joint activities and projects create much more synergy than the sum of individual activities, so we ask all Student Branches to take part in joint activities in their local areas. You can make sure that you, as IEEE Student Branches, have the potential to be a partner of any joint activity!

Yasemin Baser
Bilkent University SB Chair
yasemin@ieee.org

Egyptian Student Branches:

Egyptian day of Engineering

IT'S YOUR turn! This was the motto of this year's Egyptian Engineering Day (EED) , an event where engineering professionals meet new associates in the field, share ideas, collaborate on projects and learn something new. EED 2006 was held for the 5th time with the support of Dr Tarek Kamel, Minister of Communication & Information Technology and Dr Hany Mahfouz Helal, Minister of Higher Education and Scientific Research, in addition to industry sponsors.

The event began with the Made In Egypt (MIE) competition finals, followed by a number of seminars and a soft-skills track on writing CVs. An awards ceremony took place at the end of the event. EED was organised by the IEEE Egypt GOLD AG. For more information, visit *www.ieee-egyptgold.org*.

Nahel Muhammad Amirah

Murad Omar, Mohammad Omari, Tala Nimri, Diana Siam

University of Jordan:

Bird's eye on activities

A NEW academic year is here and so too is a newly elected Executive Committee, continuing the previous committee's work while also bringing new ideas, more creativity, fun and more privileges for our members. Our plans vary from scientific seminars to social activities, from field trips to on-campus workshops, from S-PAC to student contests. We plan to cooperate with other SBs in Jordan Section and elsewhere in Region 8 to organise joint events.

Our Student Branch participated in the world finals of the IEEE Computer Society International Design Competition (CSIDC) 2006 in Washington DC, winning an Honourable Mention for the AviTrack project. AviTrack is a system for tracking and recognition of night migrating birds.

It was designed in collaboration with the Jordanian Royal Society for the Conservation of Nature to assist in their bird behavioural studies and migration tracking. This is of great significance since birds act as bio-indicators for environmental changes, and thus assist in many areas of biological and environmental research.

Murad Omar, Chair
Murad.omar@ieee.org
Samir Rawashdeh,
Vice Chair sar@ieee.org

University of Trakya, Edirne, Turkey:

New Turkish Branch enjoys bright start

The IEEE University of Trakya Student Branch has become the newest member of the IEEE family from Turkey: our SB was established in March 2006 with the encouragement of our Branch Counsellor Cenk Atlig.

We are also grateful to the IEEE Turkey Section Chair, Dr Ozlem Aydin Civi, for his help.

Membership has risen with the participation of students from our Computer Engineering Department. We set up press and publication, public relations and web design groups for the arrangement of social and technical activities. The main intention of our branch is to establish close relationships between students and industry. To this effect, we have participated in many of the IEEE activities and workshops in Turkey and also plan a number of activities for 2007.

We have already organised a few seminars and workshops, inviting speakers from the software industry.

Please visit our website: *http://ieee.trakya.edu.tr*

Edip Serdar Guner, Co-Chair

University of Trakya SB Executive Committee and SB Counsellor

Alexandria Institute of Technology, Egypt:

SB established at AIT

IEEE ALEXANDRIA Institute of Technology (AIT) Student Branch in Alexandria, Egypt, has finally been established, having grown from just two members in 2003 to our current membership of well over 60.

We have run eight seminars to date, covering various topics including MEMS, microcontroller and human development, along with seven workshops on microcontrollers, microprocessors, MATLAB, networking and so on. We also organised five scientific trips and participated as volunteers in activities organised by other Branches including those at Alexandria University and AAST.

Our aim is to keep expanding the branch, enhancing volunteer experience of our members, helping them to develop their leadership and personal skills, increasing the industry relevance among the students and helping them to understand the links between the courses they're studying and the technologies that have been developed in the industry so far. We are about to establish a WIE section too.

Special thanks go to Alexandria University officers for all their help.

Karim Mansour, Mona Ibrahim, Mohamed El Sobky

AAST, Alexandria, Egypt:

AAST helps with job hunting

WE'RE BACK with our second annual IEEE AAST Student Professional Awareness Venture (SPAV): Leading Your Career, Leading Your Society 2006, held on 1–7 September 2006 at the Bibliotheca Alexandrina and AAST Miami Campus, with the support of the Alexandria Governorate.

The main aim of this annual event is introduce senior students and fresh graduates

to ways of tackling careerand job hunting challenges. The concept behind it is that a better career will surely lead to a more developed society, which will in return provide more opportunities for career advancement and job opportunities. More than 200 participants enjoyed an integrated package of sessions, panels, discussions and workshops throughout the week.

Ahmed Rabie, Sara El Kady, Hazem Hegazy, Mohamed Diab
IEEE AAST SB

Middle East Technical University, Turkey:

METU plans a career launch day

INTERNATIONAL CAMPUS Development Days will take place at Middle East Technical University (METU) once again in 2007. On 1–2 March next year, there will be a strong career wind blowing through METU Cultural and Convention Centre.

Everyone will find all answers to their questions thinking about their future in this interactive and versatile career event.

During the two days, there will be panel discussions, seminars, competitions, job interviews and case studies. IEEE METU Student Branch organises this international event for all students in every department and course level.

Students from any university or company are invited to next year's event. For information, please visit *www.kariyer.ieee.metu.edu.tr.*

Cagdas Cirpan, Chair
cagdas@ieee.metu.edu.tr

The Austro-Hungian monarchy during Tesla's lifetime

Tesla's time and the application of his achievements

IN 2006 we celebrate several outstanding personalities – Mozart, Freud, Brecht – and last but not least Nikola Tesla. On the 10 July 1856 Nikola Tesla was born, the "Man who invented the 20th Century" as the Austrian newspaper *Der Standard* entitled an article in 1992.

Mozart was born 100 years earlier than Tesla: two geniuses who were so different and yet very similar in their ingenuity. I even dare to compare Tesla and Mozart as two outstanding personalities whose achievements, of course, were totally different.

Mozart, for instance, wrote more than 600 compositions while Tesla's patented inventions count more than 200, some even count 700. Both had the ability to develop and design their ideas in their heads so completely that no corrections were necessary to be made at the later stage of realisation.

Mozart's handwritten handwritten sheets of music of his compositions show almost no corrections. It was the same with Tesla who said about himself that he had developed all his inventions and experiments in his head ready for realisation. Tesla once wrote: "The images I saw were to me perfectly real and tangible".

As one of five children, Nikola Tesla was born in Smiljan in the province of Lika, which was in the frontier lands between the KK Austro-Hungarian Monarchy, one of the strong powers in Europe, and the Osman Empire. Tesla was born after the Crimean War and died during the most disastrous World War II.

No wonder he became a pacifist, as so many others.

After an active but fitful education, he ended up working for Continental Edison in Paris before leaving Europe in June 1884 for Edison Machine Works in the US. He became an American citizen in 1891 at the age of 35. His inventions and discoveries were pioneering in many areas, and while he was involved in many quarrels over patents, these were generally solved in his favour.

Many of these patents are forgotten: today, Teslas's name is remembered only for the Tesla transformer to generate high voltages at high frequency and by the measuring unit of the magnetic field.

But no doubt, his contributions changed the world and still are not out of date. They will help to keep on developing civilisation and the well-being of humanity.

Kurt R Richter, LF IEEE

The full, unabridged version of this article can be read online at our website: www.ieee.org/go/r8news

Conference calendar

Workshops, conferences & symposia in Region 8

DECEMBER

ICENCO 2006
2nd International Computer Engineering Conference: New Technologies for the Information Society
Cairo, Egypt
26–28 December 2006
www.icenco2006.eng.cu.edu.eg

JAN 2007

ESPW 2007
10th European Systems Packaging Workshop
Como, Italy
29–31 January 2007
www.packagingworkshop.polito.it

MARCH 2007

ICTIS 07
Information and Communications Technologies International Symposium
Fez, Morocco
25–27 March 2007
www.ictis07.org

SETIT 2007
4th International Conference on Sciences of Electronic, Technology of Information and Telecommunicaitons
Tunisia
25–29 March 2007
www.setit.rnu.tn

APRIL 2007

ICDE 2007
23rd International Conference on Data Engineering
Istanbul, Turkey
16–20 April 2007
www.icde2007.org

MAY 2007

IST-Africa 2007
Information Society Technologies conference
Maputo, Mozambique
9–11 May 2007
www.IST-Africa.org/Conference2007

AICCSA 2007
ACS/IEEE International Conference on Computer Systems and Applications
Amman, Jordan
13–16 May 2007
www.philadelphia.edu.jo/aiccsa2007

WILGA 2007
20th Joint Symposium on Photonics and Electronics for Accelerators and High Energy Physics Experiments
Warsaw, Poland
21–27 May 2007

EFTF & IEEE-FCS Joint Meeting
Joint Meeting of the European Frequency and Time Forum & IEEE International Frequency Control Symposium
Geneva, Switzerland
29 May – 1 June 2007
welcome@timenav07.org

JUNE 2007

ISIE 2007
IEEE International Symposium on Industrial Electronics
Vigo, Spain
4–7 June 2007
www.dte.uvigo.es/isie2007

IEEE ICC 2007
IEEE International Communications Conference
Glasgow, Scotland
24–28 June 2007
www.icc007.org

JULY 2007

INDIN 2007
5th IEEE International Conference on Industrial Informatics
Vienna, Austria
23–26 July 2007
www.indin2007.org

SEP 2007

IEEE Region 8 Eurocon 2007
International Conference on Computer as a Tool
Warsaw, Poland
9–12 September 2007
http://eurocon2007.isep.pw.edu.pl

AFRICON 2007
Forum for Electrical, Electronic & IT research with related Mechanical and Civil activities in Africa
Windhoek, Namibia
26–28 September 2007
www.africon2007.co.za

OCT 2007

eChallenges e-2007
The Netherlands
9–12 September 2007
www.eChallenges.org

IEEE IROS 2007
International Conference on Intelligent Robots and Systems
San Diego, Calif, USA
29 OCt – 2 Nov 2007
www.iros2007.org

Note to Organisers
Only IEEE co-sponsored conferences and workshops 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. Remember to state the event's full title, location, date and URL.