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From left to right: Dr Richard Gowen, Clifford Cocks, Peter Hill (co-ordinator), the mayor of Cheltenham Anne Regan and Martin Horwood MP.

Milestone honours the inventors of public key cryptography

ON 4-5 October 2010, the IEEE United Kingdom and Republic of Ireland Section celebrated the IEEE Milestone award for the invention of public key cryptography (PKC).

The work was done 35 years ago inside the top-secret offices of the Government Communications Headquarters (GCHQ) in Cheltenham, UK, where a ceremony and reception was held. The following day, a second ceremony was held at the nearby civic centre, followed by a luncheon for members and a technical symposium.

In 1975, James Ellis at GCHQ had proved that a symmetric secret-key system was unnecessary, leading Clifford Cocks and Malcolm Williamson to show how such 'public-key cryptography' could be achieved. Up to then, it was believed that secure communication was impossi-

ble without exchanging a secret key, with key distribution being a major impediment.

These discoveries and their essential principles were kept secret until 1997.

The importance of PKC and the further work in the USA, which led to the development of the RSA algorithm patented in 1983, is possibly the most important develop-

ment in secure communications for several centuries. It is the mechanism for private communication over public electronic networks, which forms the basis for security products now in use over the Internet.

To find out more, please visit the R8News website, and look up IEEE Global History Network.

Discovery in 1890 of the Branly Effect is commemorated in Paris

ON 23 September 2010, a Milestone celebration was held at Institut Catholique de Paris, France, where Edouard Branly spent his career.

Branly was one of several French scientists who contributed to early developments of electricity and radio communications. His workshop has been transformed into a museum.

The citation on the Milestone reads: "In this building,

Edouard Branly discovered radioconduction, now called the Branly Effect. On 24 November 1890, he observed that an electromagnetic wave changes the ability of metal filings to conduct electricity.

"Branly used his discovery to make a very sensitive detector called a coherer, improved versions of which became the first practical wireless signal receivers."

[continued on page 2]



Unveiling the plaque (from left to right): Jean-Gabriel Rémy, Region 8 Director Józef Modelski, France Section chair Daniel Pasquet, and France Section vice-chair Amara Amara.

Celebrating the remarkable Star of Laufenburg

ON 19 August 2010, the Swiss-based high-voltage electricity supply link known as the 'Star of Laufenburg' was honored by an IEEE Milestone.

The Star was built in 1958 to connect the electrical power grids of Switzerland, Germany and France. Today, the electricity substation is the central node in the southern part of the

European Interconnected Power Grid.

The Milestone plaque was unveiled by IEEE president-elect Moshe Kam.

The celebration of the Milestone took place under sunny skies at the Laufenburg site, near Basel on the Swiss border with Germany. Klaus-Peter Brand, chair of the Swiss chapter of the IEEE Power & Energy Society, and

Han van Loon, chair of the IEEE Switzerland Section, expressed the feelings of pride that this event marked for engineers.

Moshe Kam remarked that the substation continues to pose interesting and deep engineering challenges.

The node is so central that it requires good protection both for the physical plant and for its highly so-

phisticated computing infrastructure.

Pierre-Alain Graf, CEO of Swissgrid, the company formed in 2006 to own the site, recapped the history of Star of Laufenburg. As the economies of France, Germany and Europe grew in the postwar years, so did consumption of electricity and the demand for inter-

[continued on page 2]

Discovery in 1890 of the Branly Effect is commemorated in Paris

[continued from page 1]

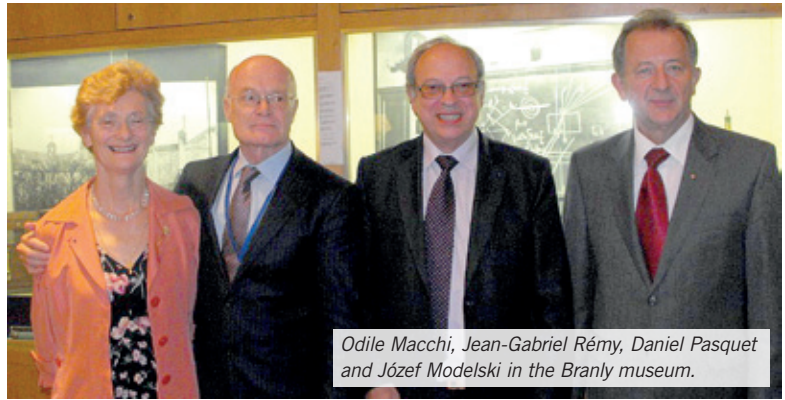
Region 8 Director Józef Modelski read a letter of congratulations from Pedro Ray, the IEEE President. Branly's great grandson, Philippe Abeilin, represented the Branly family.

Odile Macchi, member of the French Académie des Sciences, gave a talk on Branly's life, emphasizing

his multiple fields of interest and the lessons he taught us for today's science.

The meeting was honored by the presence of Jean Lebel, one of the founders of IEEE France Section in 1961.

The milestone dedication gave thanks to Amara Amara, Jean-Gabriel Rémy and the late Jean-Claude Boudenot.



Odile Macchi, Jean-Gabriel Rémy, Daniel Pasquet and Józef Modelski in the Branly museum.

Keep abreast of current technology developments with IEEE news site

IEEE XPLORE currently includes nearly 3 million articles, and 200,000 articles are added annually. How can anyone know what is worth reading among those articles?

IEEE Technology News (ITN) will help. It will bring to IEEE members and the global community the top 1000 of the most interesting, timely, and newsworthy articles.

ITN will give subscribers condensed versions of about 20 newly-posted articles each week, with links to the full articles in IEEE Xplore. They are written in plain language, so that nonspecialists, including students, news media reporters, industry and government executives and others, will be able to understand them. They are also viewable on mobile devices.

IEEE Technology News is advertiser-supported, so it's free. Anyone may subscribe at www.ieeeTechNews.org.

Surveys show that "remaining technically current" is the number 1 reason for joining IEEE. IEEE Technology News offers a channel for not only keeping abreast of one's own discipline but also for gaining

an understanding of related technologies.

ITN content is derived from IEEE's more than 500 conference proceedings and 500 journal issues published annually. To guarantee quality, the articles go through a four-stage process: items are selected by volunteer editors, the condensed versions are written by professional technical writers, those versions are edited by a technical editor, and a final review is performed by the ITN editor-in-chief prior to publication.

John Vig, 2009 IEEE President, conceived the idea and took the lead in developing ITN with the assistance of fellow volunteers Gus Gaynor and Anil Roy (from India). They brought together IEEE Publications, Technical Activities, Spectrum, and other staff and volunteers to brainstorm, develop a proposal and plan for the launch of ITN.

Beta testing has started and ITN will be launched early in 2011. Please visit and subscribe at www.ieeeTechNews.org on your computer or mobile device. Comments may be sent to TechNews@ieee.org.



IEEE Technology News will help bring the latest and best articles from IEEE Xplore (right) to the public eye.

Celebrating Star of Laufenburg

[continued from page 1]

Today, the Star of Laufenburg connects 530 million consumers in 30 countries and boasts 28,000MW of coupling capacity.

Following the presentations, guests were invited to tour the Swissgrid control center.

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Giselle Weiss



Interview with IEEE president-elect Moshe Kam on the Star of Laufenburg Milestone

What does this day mean to you?

It's an important day for IEEE because of the fact that what happened here was first of all a huge technical feat in terms of volumes. Nothing like that was tried before. It also shows how engineering can make a significant political difference: it is not easy to go to war when your electrical grid is interconnected with that of the other side!

How important is Star of Laufenburg to the engineering community?

When it was established, Star of Laufenburg represented a bold leap in technology. So it is known for that. But it is also probably the prime test bed in Europe for checking and

demonstrating new ideas, not only in power engineering but also in control, computing, sensing, pattern recognition, and signal processing. It is a wonderful laboratory.

What's next for power engineering?

Star of Laufenburg is based on old technology. In the future, sources of energy will be much more heterogeneous, and we will need a smart way of dealing with. For example, we will need systems that allow wind at one end of a continent to produce energy that arrives in time at the other end of the continent with as little loss as possible. That will require entirely new thinking about how to manage the power grid.

2013 marks the 50th anniversary of Region 8
 On 8 January 1963, IEEE Region 8 was formed geographically comprising Europe, the Middle East and North Africa.
 Before this date, only seven...

R8 history matters

IN THE September issue of *Region 8 News*, Kurt Richter's article '2013 marks the 50th anniversary of Region 8' asks members to contribute information to the "Jubilee Book".

Here's a reminder of two aspects of the history of Region 8:

- History of the development of the IEEE organisation within the Region, such as Section histories, important IEEE events, etc.

- Technology History: important scientific and engineering events, objects and inventions in the field of interest of IEEE. A few are commemorated by IEEE History Milestone Plaques.

The Region 8 Committee has supported the ceremonies for dedication of Milestones. It has encouraged conference-tracks on Technology History and recently conferences with the title HISTELCON have been held in the Region with co-sponsorship by Region 8.

A part of the history of IEEE is recorded in meeting-minutes, but these are not always complete, and the personal recollections of IEEE volunteers (past directors, secretaries, etc) are an important additional source of historical data.

Some of this data is on the IEEE R8 website, and additions are welcome. Sections are encouraged to complete accounts of their history and make this available on their websites.

Any members who believe they have interesting information to share concerning their history are encouraged to contact their section chairman and mention 'Jubilee Book'.

Tony Davies
tonydavies@ieee.org

Joint IAS/PELS/IES German Chapter visits SMA Technology to learn more about power

ON 17–18 June 2010, well over 60 participants gathered for this year's second meeting at SMA Solar Technology AG in Kassel, Germany in co-operation with the Fraunhofer Institute for Wind Energy and Energy System Technology (IWES) and the Knowledge and Data Engineering Group (KDEE) of the University of Kassel.

The theme was photovoltaic (PV) technology – now at the edge moving from a niche technology to a major player in electrical power generation, making it comparable

to the situation of wind power 10 years ago.

After a brief welcome by Chapter chairman Ingo Hahn, SMA's senior vice president for technology and development, Bernd Engel, gave an overview of the history of the company, a market and technology leader of PV inverters.

Flexible needs

Matthias Victor and Regine Mallwitz, spoke about technical requirements such as flexibility, support of several parallel strings within one inverter and a maximum

efficiency especially under partial load.

Battery supported PV systems were then discussed by Martin Rothert. On a sunny summer's day, between 10% and 20% of the electrical power in German grids is now delivered by PV plants, most of them connected to a low voltage domestic grid.

Challenges are to stabilize the voltage within the LV grids, which were built as pure power sinks, but are now sometimes operated as a power source. Solar power battery systems support local

energy consumption during the evening hours.

The first day closed with a factory tour and a reception hosted by Roland Grebe, Chief Technology Officer of SMA.

Wind energy

The second day of the meeting was located at the Fraunhofer Institute for Wind Energy and Energy System Technology (IWES) in Kassel. Jürgen Schmidt delivered the greeting and Dr Strauss presented an overview of the test requirements for the wind turbines.

Peter Zacharias introduced the Competence Center for Decentralized Electrical Energy Technology, KDEE of the University of Kassel. The main task here is to transfer know-how from university to regional industry.

The technical session closed with a presentation by Thomas Degener, who explained how net services from the plants as well as variable transformers are needed to adjust the voltage corridor to the direction of the power flow.

Chapter chairman Ingo Hahn later announced that the Chapter had won Region 8's Chapter of the Year award.

For further information please visit our website: ewh.ieee.org/r8/germany/ias-pels

Andreas Wagener
 Joint IAS/PELS/IES Chapter



Chapter participants at SMA's premises in June.

THE 7TH annual Industrial and Commercial Use of Energy (ICUE) Conference, co-sponsored by the Power and Energy Society (PES) Chapter, IEEE South Africa Section was held at the Vineyard Hotel, Cape Town on 11–12 August 2010.

The programme reviewed today's energy priorities with energy efficiency and demand side management high on the list.

The scope for renewable energy sources is endless. Solar and wind generators are standing in the wings to

Discussing commercial use of energy at ICUE in Cape Town, South Africa

feed their outputs into the national grid. Such options are environmentally friendly, but careful costing and planning has to be carried out to utilise such options most economically.

The ICUE team was particularly pleased that the president of IEEE's Power

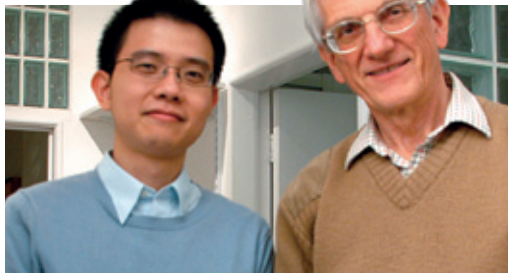
and Energy Society (PES), Alan Rotz, gave the keynote on Sustainable Energy in the USA.

Matt Loeb, IEEE's staff executive for IEEE Corporate Strategy, delivered the opening talk on behalf of the IEEE President 2010, Pedro Ray.

The conference was attended by 150 delegates from various countries, and was preceded by an Industrial and Mining Optimisation seminar. Workshops concentrated on energy management in commerce and at universities.

Delegates left the conference with fresh ideas and initiatives to manage energy use in their respective organisations and industries.

Nico Beute
 Chair, ICUE General Conference
NicoBeute@ieee.org



Your editors: Zhijia Huang and Roland Saam

Milestones: a sense of pride in the profession

THE SUMMER and autumn months were full of activities for many IEEE sections.

Several Milestones celebrated technical achievements which had not previously been given public recognition.

IEEE chooses to celebrate an engineering accomplishment in order to explain its value to the general public its value and to honour the people behind it.

When you read the reports you can feel the pride in our profession, understanding and acknowledging something carried out for the benefit of everyone.

Please visit IEEE Global History Network at www.ieeeahn.org which is dedicated to the history of our innovation.

Elsewhere in this issue

we print reports from many IEEE Region 8 'organisational units' – the Student Branches, Affinity Groups, Sections and so on. They are interesting because they show our future engineering leaders in action. IEEE member activities give us opportunities to shoulder increased responsibilities as volunteers.

There is a direct link between these activities in a changing professional environment. Career growth is about leadership skills and the ability to communicate – so-called 'soft' skills as well as technical.

Have you an interesting invention, development, initiative? We hope that you will contribute to future issues of News.

**Roland Saam and
Zhijia Huang**

Region 8 in retrospect: 2010

Region 8 Director 2009–10:
Josef Modelski

Director-elect for 2011–12:
Marko Delimar

Region 8 Members (as of
end of Sep): 68,828
including 16,391 students
Sections: 56
Chapters: 452

R8 Committee meetings:
Riga (7–9 May 2010)
Prague (9–10 Oct 2010)

New Initiatives:
IEEE e-Membership
IEEE Day (8–9 Oct)

Regional Conferences:
Melecon (25–28 Apr 2010),
Valleta, Malta

Sibircon (11–15 Jul 2010)
Irkutsk Listvianka, Russia

Histelcon 3–5 Nov 2010)
Madrid, Spain

*Energycon (18–21 Dec
2010) Manama, Bahrain*

Anniversaries & Milestones:
*Switzerland Section 50th
Anniversary, Basel
Star of Laufenburg
Milestone, Laufenburg,
Switzerland
Branly Milestone, Paris,
France
Public-Key Cryptography
Milestone, GCHQ,
Cheltenham, UK*

Student activities:
*Students & GOLD Congress
(4–8 Aug 2010) Leuven,
Belgium*

Jacob Baal-Schem

region8news

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

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Submitting articles We welcome news, articles and letters from any member of the IEEE. Please send these to the editor as plain text by email to r8news@ieee.org, remembering to 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 2011 issue..... deadline: 1 January 2011
June 2011 issue..... deadline: 1 April 2011
September 2011 issue..... deadline: 1 July 2011
December 2011 issue..... deadline: 1 October 2011



Some 50 attendees were attracted to the summer school in July.

A SUMMER School on Cellular Technologies and Solutions (www.athenasch.gr) was held during 19–25 July 2010 at the Department of Telecommunication Systems and Networks (www.tesyd.teimes.gr/en), Technological Education Institute of Mesologgi, Nafpaktos, Greece.

Athens Summer School focuses on cellular technologies in Nafpaktos

The event was supported by the IEEE Joint VTS & AESS Greece Chapter and Greece GOLD Affinity Group, and it attracted 50 non-IEEE

members and 10 speakers.

The Chapter was represented by Dimitrios Efstathiou (vice-chair) and Athanasios Iossifides (IEEE liaison),

who spoke on the subjects: BTS-GPS Synchronization, WCDMA for UMTS and HSPA Evolution.

A talk on Chapter ac-

tivities and the IEEE organization was given by Dr Efstathiou, who received a lot of questions on the IEEE community. Pencils and notebooks with the Chapter logo were given to the attendees.

Visit us online at <http://ewh.ieee.org/r8/greece/avc>.

Macedonia hosts power electronics conference attended by 400 engineers from 51 countries

THE 14TH International EPE-PEMC Conference was held in Ohrid, Republic of Macedonia, on 6–8 September 2010 (epe-pemc2010.com).

The event was organized by the Faculty of Electrical Engineering and Information Technologies (FEEIT) of Ss Cyril and Methodius University, under Auspices of Ministry of Education and Science, Republic of Macedonia, with cooperation of the EPE-PEMC Council in Budapest, Hungary, and EPE Association in Brussels, Belgium.

The general Chair was Slobodan Mircevski from FEEIT, and the general co-chair was Dushan Boroyevich, currently president-elect of the IEEE Power

Electronics Society. The Conference was opened by the President of the Republic of Macedonia, His Excellency Gjorge Ivanov.

Over 400 specialists, engineers and scientists from 51 countries all over the world participated in EPE-PEMC 2010. 154 papers were presented in 3 plenary, 17 lecture and 15 special sessions, and 195 in dialogue (poster) sessions.

The Conference was complemented by a technical exhibition featuring 20 industrial and academic stands.

During the gala dinner, EPE-PEMC Council Awards were given to Thomas A Lipo from the USA and Frede Blaabjerg from Denmark.

The next 15th International EPE-PEMC Conference will be held on 4–6 September 2012 in Novi Sad, Republic of Serbia (for more details, go online to: epe-pemc2012.com).

The Power Electronics and Motion Control (PEMC) conference series go back to 1970, held biannually since 1996. After joining the European Power Electronics and Drive (EPE) Association in 2000, it was renamed EPE-PEMC to stress the strength of mutual co-operation. For more about the history of EPE-PEMC, see our website at <http://epe-pemc.get.bme.hu>.

Goce L Arsov
Section Chair



Iran Section bids farewell to Caro Lucas

AFTER BATTLING with cancer for a year, Caro Lucas, a distinguished professor of the University of Tehran, passed away on 8 July 2010.

He made significant contributions to IEEE and revived the IEEE Iran Section in 1990.

He was known as the father of computational intelligence in this country with contributions to biological computing and business intelligence, and was recognized by the Iranian Science and Culture Hall of Fame with their highest honour.



The President of the Republic of Macedonia, His Excellency Gjorge Ivanov, declares the Conference Open.



Istvan Nagy, chair of the EPE-PEMC Council, hands the EPE-PEMC Council Award to Tomas A Lipo.



South Africa Section celebrates IEEE Day in Pretoria with talk on electronic publishing

AN INAUGURAL IEEE Day event was held in Pretoria by South Africa Section on 7 October 2010, to celebrate the achievements of IEEE members.

The day was dedicated to giving information on IEEE membership to Denel Dynamics employees. Denel Dynamics manufactures tactical missiles, precision-guided weapons and unmanned aerial vehicles.

IEEE South Africa Section Educational Activities

chair, Excellent Sithole, highlighted the key benefits of IEEE membership. Attendees were then given a chance to ask questions, which proved to be a lively and wholesome discussion.

The second part of the day was handled by the invited speaker, Chris Yelland, managing director of EE Publishers and an IEEE member. EE Publishers produces print and electronic media, including EngineerIT, PositionIT, Energy and Vector.

In his talk entitled 'Technical publishing and the impact of the new media', Chris mentioned that EE publishers acts as voice for IEEE South Africa section by communicating news and displaying articles about IEEE South Africa at both student and section/chapter levels.

South Africa is one of the countries that now qualify for IEEE e-Membership (starting in September 2010).

A live demonstration was also given on the use of Flash

in electronic magazines as utilized by EE publishers.

The day ended with an exciting photo shoot by the Denel Dynamics Youth Forum. All were dressed in IEEE Day T-shirts sponsored by Chris de Kock, manager of the Engineering department. Photos were submitted to the IEEE Day contest website, sharing the success of the day with the international IEEE family.

Excellent Sithole
excellent@ieee.org

PEDSTC hears 82 papers on power electronics

THE FIRST conference on Power Electronics and Drive Systems and Technologies (PEDSTC) was held at Tarbiat Modares University on February 17–18 2010.

82 out of 186 submitted papers were accepted and presented at the event.

The conference goal was to provide an opportunity for interested researchers and the industry sector to convene and exchange ideas in power electronics and drive systems.

The conference heard two keynote speakers: Prof Vaez-Zadeh talked about vector control and DTC methods and new opportunities in AC motors; and Prof Lipo, IEEE Life Fellow, spoke on the subject linear inverter current regulations.

The papers presented at this conference are indexed in the IEEE Xplore database.

New workshops

Iran Section also organised two new workshops in the autumn.

The first of these was on 4th Generation Mobile Networks (IMT – Advanced), presented by Mohammad Razavi-Zadeh on 9 October.

The second workshop was on the topic of Satellite Systems for Various Applications, presented by Mohammad Hakkak the following day on 10 October.

THE 2010 IEEE Computer Society Annual Symposium on VLSI (ISVLSI'10) was successfully held on 4–7 July in Kefalonia, Greece.

IEEE ISVLSI is one of the most famous and important conferences organized both in USA and Europe, focusing on embedded systems design, circuits and systems, along with more specialized topics such as cryptographic hardware, memory design, signal processing, and nano

Embedded systems design takes centre stage as Greece hosts 2010 edition of ISVLSI symposium

computing. The technical program included 75 papers, spread over 18 sessions in three interesting days. At the same time, manuscripts were displayed at the poster session showing work from young scientists for the PhD forum.

The program also inclu-

ded six invited talks from worldwide experts from both academia and industry. We also organised a Research Project Workshop, where the results of projects were discussed and presented.

Nicolas Sklavos
nsklavos@ieee.org
<http://isvlsi2010.org>



Ex-student delivers keynote at Cape Town STEP event

THE IEEE South Africa Section's GOLD Affinity Group (Southern Region) and the University of Cape Town IEEE Student Branch were proud to host an IEEE GOLD Student Transition & Elevation Partnership (STEP) event.

This attracted audiences from the University and professionals from in and around Cape Town.

It was held on 7 October also in celebration of IEEE Day. Student Branch counsellor Dr Khan welcomed everyone, and Student Branch chair Joyce Mwangama spoke about the importance of synergy between the Student Branch and the GOLD affinity group.

The keynote lecture was given by Michal, a graduate from the University. In two years since graduation, he has successfully formed a social media analytics company Fuseware. He told us about his transition from being a student to becoming a professional.

The main part of the evening was for the graduating students to socialize with invited guests from engineering companies in Cape Town and representatives from the South African Institute of Electrical Engineers (SAIEE).

Joyce Mwangama
Student Branch Chair
University of Cape Town
joyce.mwangama@ieee.org



Brett Kilpatrick from GIBS spoke on the value of an MBA qualification for young engineers.



Members of the organizing committee.

GOLD Affinity Group and Student Branches in South Africa launch ComSoc Chapter

THE IEEE South Africa Section's GOLD Affinity Group for Northern Region and Universities of Pretoria and Witwatersrand Student Branches hosted a STEP event and launched the Communication Society Chapter. 70 local GOLD and student members attended.

Keoikantse Marungwana, chairman of the GOLD AG, opened the event with a welcome speech.

Sunil Maharaj of the Joint Signal Processing and Communications Society Chapter of IEEE South Africa Section gave an overview of Chapter activities in the Section. The inaugural Chapter chair, Thinus Prinsloo, proudly declared the ComSoc Chapter of the Student Branch formally launched.

The second part focused on career development, with keynote speakers from the University of Pretoria's Gordon Institute of Business Science, and the Graduate School of Technology Management.

Siebert Benade, outlined the merits of Technology Management, Engineering Management, and Project Management qualifications for young engineers.

Brett Kilpatrick from GIBS captivated the audience with his presentation on the value of achieving an MBA qualification for young engineers.

The audience thoroughly engaged the speakers, attempting to decide between the two offerings.

Keoikantse Marungwana

AFRICON 2011

www.africon2011.co.za

13–25 September 2011 • Victoria Falls, Zambia

IEEE AFRICON presents a forum for electrical, electronic and IT research with related mechanical and civil engineering activities in Africa.

Reflections

BY THE time you read this, the year 2010 will be gone!

We have seen a lot of activities going on in the student arena. On Region 8 level these included a very successful Student Paper Contest held with MELECON 2010 in Valetta, Malta; the big and biennial Region 8 Student Branch and GOLD Congress conducted in Leuven, Belgium (see extra report) as well as various activities, contests and competitions all around the 56 Sections in Region 8.

The number of Student Branches increased in 2010. Right now the count is well above 300. We expect to hit 350 in early 2011. The overall Student and Graduate Student membership is 20,000+ which is more than one-quarter of the total IEEE Region 8 membership!

Furthermore, this year marked the first celebration of IEEE Day, with Student Branches around the region



organising all kinds of activities, from pizza parties to STEP dinners, from engineering competitions to hand sanitizing!

SB Volunteer training

THE IEEE Center for Leadership Excellence was created to serve as the central repository for leadership training programs within IEEE.

It provides materials to enable volunteers to perform their jobs efficiently, spending less time trying to find their way around and more

time organising useful activities. During the first phases of implementation, we are developing Quick Start Training programs which are expected to provide the information needed for the first 30 days in office.

We'll soon be releasing the modules

Outlook

THE REGION 8 Committee Meeting elected Elias Nassar as the new 2011 vice-chair for Student Activities. His goals are to make sure student members' concerns are addressed and that their ideas and projects get realized for the purpose of advancing

their technical and professional skills.

Last but not least

DO GOOD and tell others about it! Make sure you let your Section, your Section Student officers as well as us at Region 8 Student Activities know about your activities.

We would be happy to receive any feedback on your IEEE experience. Let us know what you like or dislike, what made you join IEEE and which areas you want to see improvement.

Do you want to compete? Check out all the awards, contests and prize winning contests available at IEEE. Visit www.r8sac.org or shoot us an email to r8sac@ieee.org.

Thanks for being a member of the IEEE family!

All the best for 2011 from your 2010 Student Activities Team,

Eva, Amélie, Pablo, Jorge, Muhammad and George

The Student Branch Cook Book, part 2: what is a Student Branch Chapter?

A STUDENT Branch Chapter is a technical sub-unit of a Student Branch, but it actually has two parents: the Student Branch itself together with one or more technical societies.

A Student Branch Chapter functions as a committee of the SB and must have at least six members that hold

membership in the respective societies.

What do you need to establish a Student Branch Chapter?

A petition to establish a Student Branch Chapter, in the required form (see IEEE website), must be approved by the Student Branch of-

ficers and Student Branch counselor.

What are the Student Branch Chapter requirements for membership, meetings and activity?

A Student Branch Chapter is required to maintain a membership of not fewer than six

students, and hold not less than two technical meetings per year. It must maintain a level of activity acceptable to the Society president, the regional director, and the region Student Activities committee chair.

How does the Student Branch Chapter operate?

Chapter members elect officers to form an executive committee which then follows the rules and guidelines of the Society and the Student Branch.

What about reporting, rebates and benefits of Student Branch Chapters?

Activity reporting is done like a regular Chapter and can be included in the Section's report.

With respect to rebates, there is no direct fund for the Chapter but the Section receives more rebate for

every student member who is also a member of a Society (so you can always encourage your section to help you more).

Benefits of Student Branch Chapters:

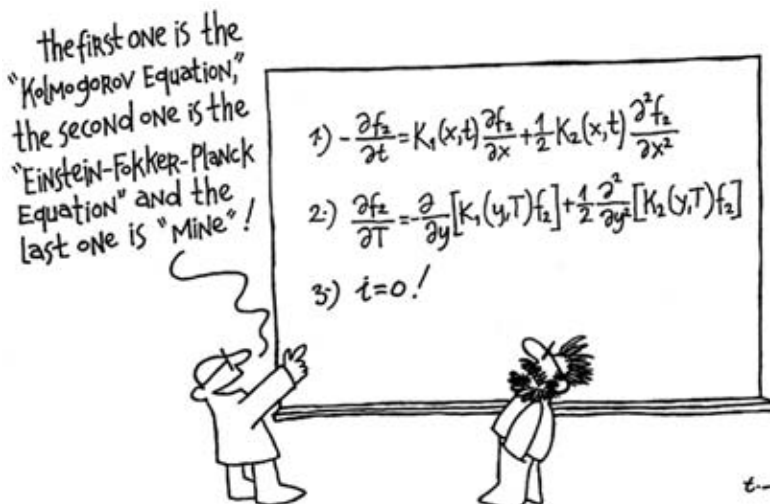
■ As members of the Society, access to the particular activities of that society (such as fellowships, prizes, contests, etc).

■ Direct line to Graduate Student Members in your branch: you can look for them in the database and contact them, they are usually very interested in chapter meetings and particular benefits (again, contests, fellowships, etc).

■ Increased access to Society sponsorship packages.

■ Support from the Section: you provide a 'free chapter' to them, which results in more rebates for the Section itself.

Region8 SAC Team





Student Branch Vienna, Austria

Workshop looks at modern embedded systems with ARM

AN EMBEDDED systems workshop for students was organized by the Vienna Student Branch in June in co-operation with the Austrian company Bluetechnix.

The participants were given the opportunity to experiment with modern embedded hardware commonly found in high-end consumer devices such as smart phones.

About 20 students took part with an ARM Cortex A8 processor development board including a TFT display outfitted with a touch screen.

The participants gained good insight into the amazing world of embedded systems, which was also reflected in their positive feedback.

Dominik Ertl



University of Ibadan, Nigeria

Symposium on Nigerian electronic payments

THE UNIVERSITY of Ibadan Student Branch held its annual Students' Professional Awareness Conference (SPAC) on 18 August with an attendance of 200 students. The theme of the discussion was 'The Electronic Payment Industry in Nigeria'.

The panelists for the main discussion selected were professionals from the leading companies in the E-payment industry in Nigeria. They were Ayo Akintoye (NCR), Olayombo Ogunsanya (ATM-Consortium), Femi Adesina (Coporeti Support Services) and Kayode Akingbolade (NCR). The moderator was Debo Onifade, CEO of E-peak Systems.

The discussion focused on the industry in general, products and services, technical and business inno-

ventions in the companies, career prospects for graduating students, expectations from technology job seekers, as well as the future of the electronic payment industry in Nigeria. There were also presentations by the Head of the Electrical Electronics Department, A Olatunbosun, on students' academic focus and Abisola Awojobi on women excelling in a male-dominated field by the WIE Affinity Group.

As a prelude to the main discussion, Pelumi Egunjobi, a student of the Electrical Electronics Department, gave a presentation on 'Pricrime', an application software developed by him, for managing and keeping records in a prison system.

Opanuga Toluwalase & Nwankwo Mary-Theresa

Report: IEEE Region 8 Student Branch and GOLD Congress 2010

WITH ALMOST 300 attendees, this year's R8 Student Branch and GOLD Congress was a very successful SBC!

From 4–8 August, 268 young engineering students and young professionals from all over the region gathered together in the small city of Leuven in Belgium for what would become the 7th edition of the biannually held SBC. Here, they had many opportunities to network, to learn more about the IEEE and to discuss present and future engineering challenges.

Strong participation

We were pleased that many people in the IEEE organisation participated actively in the sessions, including past president John Vig, president-elect Moshe Kam, both R8 director-elect candidates and the entire Region 8 Opcom, which highlighted the importance of this student event within IEEE.

From a total of 334 registrations there were 238 students and 30 GOLD representatives from 46 coun-

tries. With 32 participants, the Turkish delegation was the largest by far, even outnumbering the local organizing members.

The prize for the distance farthest travelled went to the Region 10 Student representative who came all the way from Australia.

The congress started with a guided tour through the historic city of Leuven in the afternoon, taking all participants to the city hall in the evening for the opening reception. Plenary sessions started early in the morning followed by workshops about new branch activities, networking and soft skills for tomorrow's leaders – over 40 different topics in total! The congress had a lot of useful experiences to offer.

Highlights in the program were the 'Elect the President' debate, the highly explosive and inspiring session of 'mad scientist' John Cohn. Thursday's gala dinner in the heart of the city and Friday's guided tour on the Leuven High-Tech campus ending with a live band supported

barbecue in the green surroundings of the engineering campus.

The most highly expected activity by far was Saturday's multi-cultural evening, where all participants could meet, drink and eat each others' culture after having experienced a part of the Belgian culture during the brewery visit.

Late morning

For some participants, a 'multi-cultural hangover' was one of the side effects of this evening activity, which resulted by far in the largest drop of breakfast attendees one could ever expect the morning of the last congress day.

After the closing sessions and the visit to Brussels, all congress participants returned to their home countries, student branches and affinity groups, with a bag full of stories and experiences, counting the days until the next SBC...

Jef Beerten

SB Leuven chair

Valentijn De Smedt

SBC2010 chair

Participants at SBC2010



The Student Branch Congress organising team at Leuven included a very colourful bear who popped up everywhere during the event.



National School of Engineers of Sfax, Tunisia

First Software Freedom Day hails Open Source

IN ORDER to promote the free and Open Source software in the National School of Engineers of Sfax, the Student Branch organized the first Software Freedom Day (SFD'2010) on 18 September with the collaboration of Ubuntu Tunisian Team.

More than 100 students took advantage of the event. The program contained seven sessions, introduced by Chokri Ben Amar, director of Studies. The IEEE Benefits were introduced by Habib Kammoun, chair of ENIS SB. Mohamed Turki spoke about 'Free Software: Industrial and Academic Challenge'.

'Ubuntu OS' was presented by Wajih Letaief from Ubuntu Tunisia team; 'Google Applications' by Mahdi Hamdani; 'Open Source as a State of Mind' by Hatem Zidi; and finally 'Economic Model of Free Software' by Zied Alaya from Ubuntu Tunisia team.

After lunch, an Install party and a Quiz competition on free software were organized by Ubuntu Tunisia team. Many awards were granted to the winners.

For more photos, see the website: www.ieee-enis.org.

**Randa Hammami and
Habib Kammoun**
sb.enis@ieee.org



Texas A&M University at Qatar

TAMU makes preparations for regional SB Congress

IEEE STUDENT Branch in Texas A&M University at Qatar will host the Second IEEE Middle East Student Branch Congress in Doha from 15-18 March 2011.

Carnegie Mellon University in Qatar and Qatar University Student Branch, the Second IEEE Middle East Student Branch Congress will provide participants with learning, career enhancement, plus exhibition opportunities in the engineering sciences, research, and many other technology areas. The Congress will also feature



many distinguished speakers, technical presentations, tutorials, workshops, seminars, etc. The congress will introduce the slogan of Qatar Foundation: "Unlock Human Potentials" through multidisciplinary workshops.

Sinan Sabeeh'11
Student Branch chair
sinan.sabih@qatar.tamu.edu

Princess Sumaya University for Technology, Jordan

Social responsibility mix with tech talks in PSUT's extensive calendar

IEEE PSUT had several great events in the past few months, starting with a technical session about 3G+ implementation in Jordan and the future with 4G.

Mada Telecom, one of the leading ISP in Jordan included topics about WiMax technology: Modulation techniques, physical layer, and Policies. Next, a Red-Hat network administration training course was given by Mousa Nassar, a certified Redhat partner.

The training was sponsored by Savvytek, where the participants got the opportunity to learn how to use the Linux based OS in network administration.

Self-confidence

The Branch WIE Affinity Group had a self-confidence workshop for members at PSUT. It was women-only event, where they discussed how to become more self-confident in the society and have a bigger impact in per-

sonal and professional life.

Two members from IEEE PSUT represented IEEE in Leadership Summer School, along with another two members from IEEE METU SB. The participants had an extensive 10 days' training in leadership, management, and soft skills.

Student Branch award

At the Region 8 Student Branch Congress 2010, PSUT SB won the exemplary Student Branch award and also the Darrel Chong Bronze award for the hosting the Middle East Student Branch Congress.

In August, we had the blessings of the holy month Ramadan, during which we tried to show our responsibility towards the community as much as we can by cooperating with King Hussein Cancer Foundation to gather donations for cancer patients. We collected more than US\$100,000.

We also had another char-

ity campaign, where clothes and gifts are donated for people with financial difficulties. We had a great BBQ Iftar together with members from other Student Branches.

It was one of the best gatherings we had during the year. Besides, IEEE is always socially responsible: the donations made it possible to have an orphan Iftar with help from other volunteers.

Linux Fest

Finally, we would not let IEEE Day pass by without doing something special. We joined forces with Jordan Open Source association and had Linux Fest!

This was a full-day event with sessions from experts about Open Source and Hack groups to discuss technical knowledge.

We are also preparing for the elections and participating in the Global Entrepreneurship Week.

**IEEE PSUT SB Executive
Committee**



Otto-von-Guericke Magdeburg, Germany University alumni gather for Magdeburg assembly

ON 25 October, the annual alumni meeting was organized by the local IEEE Student Branch Otto-von-Guericke Magdeburg.

24 former graduates of electrical engineering, now working as engineers in the industry, were invited back to the University to share their experience. Students from the Branch took the opportunity to participate.

Marcel Benecke, chairman of the Student Branch gave the introduction and spoke about activities and events organized by the branch.

The alumni then talked about their current work and fields of research. Recent research of the Institute from the photovoltaic laboratory was also shown to the alumni, where Musikowski presented research results of the PV panels.

Finally, the alumni had the chance to experience driving the electric vehicle of the Fraunhofer IFF. Dr Winkler from IFF answered questions concerning electro mobility and the car itself.

**Lars Middelstädt and
Marcel Benecke**

UNED, A Coruña, Spain

Distance education centre organizes SB meeting

30 ENGINEERING students from several Spanish universities met on 21–24 July at the UNED Associated Center in A Coruña to celebrate Annual Meeting of the IEEE Student Branch (CNR 2010).

This was the first time that a UNED (Spanish University for Distance Education) had hosted such event.

The IEEE Student Branch at the UNED worked months on the preparation of planned

activities. The organizing team was lead by German Carro, Vice Chair, and Ramón Carrasco, General Coordinator and Director of the College Karbo.

Participants, in addition to the morning sessions in the Associated Center UNED, enjoyed the various activities in the city Science Museums, the Regional Military Museum and visits to the Tower of Hercules or boating along the Coruña's river.

For more information, go to www.ieee-uned.org.

German Carro Fernandez
UNED SB vice-chair



One IEEE

A regular column that investigates
the role of IEEE and its members

Playing our part in the technology lifecycle



THE RECENT promotion of the new IEEE tagline 'Advancing Technology for Humanity' made me think about the roles of IEEE and the way each contributes. Consider the technology life cycle: it starts with an idea, and then moves through the stages of research, technology development, product development, use and application, and finally deployment into an environment.

Benefit to humanity is only realised after we have deployed the results of research into some infrastructure. We also have to recognize the specific geography and the social and political environment into which new technologies are deployed.

The wide range of activities of IEEE and its members can be mapped to the technology lifecycle model. For example, IEEE Technical Activities plays its role in supporting research and development of technology. Its technical societies support a diverse range of activities from very narrow research focus through to broad applications and professional activities.

On the other hand IEEE Member & Geographic Activities (MGA) tends towards the use, application and deployment of technol-

ogy. In my view it is vital that IEEE services and products cover the full breadth of the technology lifecycle, supporting industry and our members at every stage.

The role of IEEE is to help people accomplish their own goals; by helping members develop as professional people through the two major subdivisions of IEEE – the regional with its focus and professional development, networking and so on, and the technical with the principal emphasis on the discipline and technology. The basis of IEEE is community – technical and local.

Nowadays, the average engineer will have seven employers during a career. She/he may not be in the same place or working in the

same technology. IEEE is the global common thread which gives us the professional home

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by Roger D Pollard
2010 IEEE Vice-President,
Technical Activities

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in both technical space and geography. We all need to make this work for our benefit and make our diversity an asset. Whenever we change our speciality and/or location, we need flexibility to look at what we have and to make the connections.

'Advancing Technology for Humanity' also reminds us of our social responsibility as engineers and technologists. It can mean that we refrain from acting in any way that may do

harm. Or it can mean that we are responsible to act in positive ways for the benefit of society.

Apply it to the manner in which IEEE conducts its own operations or to the objects of its mission. IEEE can focus on certain deliverables that help its members be more socially responsible within their own communities. Examples might be: to develop databases of member activities that facilitate networking; to share best practices of members through con-

"The role of IEEE is to help people accomplish their own goals"

ferences and publications; to identify members able and willing to solve high-profile grand challenges that are important to society.

At the end of the day, it's all about teamwork – we're all one IEEE!



Conference calendar

Workshops, conferences & symposia in Region 8

See also www.ieee.org/web/conferences/home

JANUARY

SAMI 2011

9th IEEE International Symposium on Applied Machine Intelligence and Informatics
27–29 January 2011
Smolenice, Slovakia
<http://conf.uni-obuda.hu/sami2011>

FEBRUARY

GCC 2011

6th IEEE GCC Conference and Exhibition: For Sustainable Ubiquitous Technology
19–22 February 2011
Dubai, United Arab Emirates
www.ieeeegcc.org

MECBME'11

1st Middle East Conference on Biomedical Engineering,
22–25 February 2011;
American University of Sharjah,
UAE
www.mecbme.org

MARCH

HRI 2011

6th ACM/IEEE International Conference on Human-Robot Interaction
08–11 March 2011
EPFL Lausanne, Switzerland
www.hri2011.net

GeMiC 2011

German Microwave Conference
14–16 March 2011
Darmstadt, Germany
www.gemic2011.de

ME-SBC

Second IEEE Middle East Student Branch Congress
15–18 March 2011
Texas A&M University at Qatar (TAMUQ) Doha

WIT-2011

8th International Workshop on Intelligent Transportation
22–23 March 2011
Hamburg, Germany
<http://wit.tu-harburg.de>

APRIL

ISPLC 2011

IEEE International Symposium on Power Line Communications and Its Applications
03–06 April 2011
University of Udine, Udine, Italy
www.ieee-isplc.org

CFP: IEEE SSCI

IEEE Symposium Series on Computational Intelligence
11–15 April 2011
Paris, France
www.ieee-ssci.org

ICDE 2011

IEEE International Conference on Data Engineering
11–16 April 2011
Hannover Congress Center, Germany
www.icde2011.org

ICM

IEEE International Conference on Mechatronics
13–15 April 2011
Istanbul Technical University, Turkey
www.icm2011.itu.edu.tr

EUROCON 2011 and CONFTELE 2011

27–29 April 2011
IST Congress Center, Lisbon, Portugal
www.eurocon2011.it.pt

MAY

EEEIC 2011

10th International Conference on Environment and Electrical Engineering
8–11 May 2011
Rome, Italy
<http://eeeic.eu>

VTC 2011-Spring

IEEE Vehicular Technology Conference
15–18 May 2011
Budapest Marriott Hotel, Hungary
www.ieeevtc.org/vtc2011spring

SACI 2011

6th IEEE International Symposium on Applied Computational Intelligence and Informatics
19–21 May 2011
Timisoara, Romania
<http://conf.uni-obuda.hu/saci2011>

ICASSP 2011

IEEE International Conference on Acoustics, Speech and Signal Processing
22–27 May 2011
Prague Congress Centre, Prague, Czech Republic
www.icassp2011.com

JUNE

CTW 2011

2011 IEEE Communication Theory Workshop
19–22 June 2011
Melia Sitges, Spain
www.ieee-ctw.org/2011

WHC 2011

IEEE World Haptics Conference
22–24 June 2011
Harbiye Military Museum, Istanbul, Turkey
www.haptics2011.org

INES 2011

15th IEEE International Conference on Intelligent Engineering Systems 2011
23–25 June 2011
AquaCity, Poprad, Slovakia
www.ines-conf.org

SEPTEMBER

IDAACS'2011

IEEE 6th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications
12–14 September 2011
Czech Technical University, Prague, Czech Republic
www.idaacs.net

AFRICON 2011

13–15 September 2011
The Falls Resort & Convention Centre, Victoria Falls, Zambia
www.africon2011.co.za

OCTOBER

TELSIKS 2011

10th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services
5–8 October 2011
University of Niš, Serbia
www.telsiks.org.rs

EUROCON 2011

www.eurocon2011.it.pt

27–29 April 2011 • Lisbon, Portugal

Computer as a Tool:
telecommunications, IT, circuits
and systems, power systems and
renewable resources, industry-
oriented technical applications

Note to Organizers

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.