GLOBAL
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NEWSLETTER

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Observing IEEE Day in Conjunction with ComSoc Distinguished Lecturer Talks in New Zealand 2013

By Nurul I Sarkar, IEEE ComSoc Chair of New Zealand North Section

The IEEE New Zealand (NZ) Communications Society (ComSoc) is a joint chapter of IEEE NZ North and South Sections. Being a ComSoc representative of IEEE NZ North section, Associate Professor Nurul Sarkar had nominated Associate Professor Maode Ma (Nanyang Technological University, Singapore) for IEEE ComSoc Distinguished Lecturer (DL) tour to NZ. Professor Ma gave two public lectures in Auckland, one lecture in Wellington and one in Christchurch covering the three major cities of NZ as part of his DL program during September-October 2013.

In Auckland, the DL talks held at the Auckland University of Technology (AUT), Auckland CBD. AUT's School of Computer and Mathematical Sciences hosted this event on Monday September 30, 2013. In Wellington, Professor Ma gave a talk at the Victoria University of Wellington on Wednesday October 2. The talk was organised by IEEE NZ Central Chapter Chair Dr Terence Betlehem. In Christchurch, the DL talk was held at the University of Canterbury, Christchurch on Friday October 4 which was organized by Professor Harsha Sirisena. All four lectures went very well as far as professional development for the members of the society and the wider university communities is concerned. However, in this article we highlight the event and activities held in Auckland only.

Professor Maode Ma stayed in a Scenic Hotel Auckland; walking distance to AUT University and the presentation venue. On 30 September in the morning, Prof Ma visited AUT's School of Computing and Mathematical Sciences and met with key academic staff including Head of Schools Professor Ajit Narayanan and Professor Philip Sallis, and other academic staff and research students. In the afternoon staff from computer sciences joined Prof Ma and the attendees at the presentation venue (AUT Business Faculty Building).

IEEE ComSoc Iraq Chapter Chairman Prof. Dr. Eng. Sattar B. Sadkhan with the K. L.University Students participated in the ICARET 2013.

IEEE ComSoc DL talks attendees in Auckland.

Chapter Chair/representative Nurul Sarkar introduced A/Professor Maode Ma.

Prior to DL talks, we had light refreshments and people took the opportunity for informal discussion and networking. People have enjoyed the round table facilities provided by AUT University. Overall, it was a productive session for the attendees as far as networking, academy-industry link, and sharing ideas are concerned.

The talk began with a short introduction by Chapter Chair Dr Nurul Sarkar highlighting the role of ComSoc Chapter and its association with IEEE NZ North Section. He then introduced Prof Ma for his talk entitled "Systems QoS Provisioning in LTE/LTE-Advanced 4G Wireless Networks."

Professor Ma gave a nice presentation on QoS provisioning in LTE and beyond. He first introduced the architecture and quality of service (QoS) provisioning for long-term evolution (LTE). The advanced 4G technology, LTE-A design and security issues were also discussed. The talk concluded with some open research areas that generated a lot of interest among the participants for further discussion. The tutorial style presentation helped audience to understand the material very well. There was ample opportunity for question/answer after the talk.

We had a short break after the first talk for further discussion and networking. Just before the second talk of Prof Ma, Dr Sarkar gave a short talk and reminded the audience about the IEEE day which will be held on the 1st October worldwide. He highlighted the significance of the day with respect to professional development for the members of the society and the wider community. In fact we celebrated IEEE day in Auckland in conjunction with our IEEE ComSoc DL program. The IEEE day was also observed by various chapters throughout the month of October especially the IEEE GOLD (Young Professionals) of NZ North Section.

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Twenty Year Tradition of TELSIKS Conferences – TELSIKS 2013

By Milan Jankovic, RATEL, Serbia

Following the 20 years long tradition, 11th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services — TELSIKS 2013 was held at the Faculty of Electronic Engineering, University of Niš, Serbia, on October 16–19, 2013.

TELSIKS conference is one of the leading scientific conferences in the region in the field of information and telecommunication technologies, systems and services. As in the previous years, the conference was organized by the Faculty of Electronic Engineering, Niš and the national Society for Microwave Technique, Technologies and Systems, under auspices of the Serbian Academy of Sciences and Arts, Serbian Ministry of Education, Science and Technological Development, Serbian Ministry of Foreign and Internal Trade and Telecommunications, in cooperation with the Academy of Engineering Sciences of Serbia, IEEE Serbia and Montenegro Section, Serbia and Montenegro IEEE MTT-S Chapter, Serbia and Montenegro IEEE Communications Chapter, Telecommunications Society of Serbia and Serbian ETRAN Society.

The conference was technically cosponsored by IEEE MTT Society and IEEE AP Society as well as by IEEE Region 8. As in the previous years the conference proceedings will be included in digital IEEE Xplore database.

The conference was officially opened by Prof. Vera Dondur, president of the National Council for Scientific and Technological Development, Serbia. The scientific part of the conference was organized within oral and poster sessions where scientists and experts from more than 100 different institutions allover the world presented their latest achievements. The conference started with the plenary lecture given by Peter Russer, professor emeritus with the Technical University of Munich, Germany. Among the contribution-oriented papers there were 20 invited talks, given by the well known experts in the fields covered by the conference program, presenting the state-of-the art in the mentioned fields.

To illustrate contents and quality of the papers presented at the conference, here some of the presented and discussed topics are mentioned: wireless power transfer system for electrical vehicles providing the possibility for efficient charging of the batteries on the roads, development of the devices with advanced characteristics and compact dimensions based on artificial electromagnetic structures to be applied in wireless communication systems, design of the antennas for UWB communication systems as well as numerical methods for performance analysis of the antennas on large platforms, novel methods for characterizations, measurements and modeling of advanced semiconductor devices and circuits, especially transistors and power amplifiers for modern communication systems.

Further, the presented results refers on applications of the alternative techniques for routing in telecommunication networks, development of strategies for further extending of the telecommunication networks capacity, techniques enabling the regulatory bodies to control prices of the telecommunication services, techniques for identification of critical elements in ICT infrastructure

Meeting of Conference Chairman, Prof. Dr. Bratislav Milovanovic, with worldwide known leading experts.

Dean of Faculty of Electronic Engineering, Prof. Dr. Dragan Jankovic, addresses participants during opening session.

in order to increase its reliability and safety. Then, there were papers on noise analyses in LTE mobile systems, techniques for bandwidth increasing in MIMO systems, design techniques for advanced 5G terminal equipment for access to multimedia services in heterogeneous wireless and mobile networks, achievements in cloud computing. Many other aspects of modern communication systems and their elements were presented and discussed.

Along with the presentation of scientific papers, there were several additional events organized during the conference related to the scientific and professional trends in the world and in Serbia, as well as to the applications of the latest ICT achievements in the industry in Serbia. The most important among them are:

• Round table "Digitization: Rational use of the radio frequency spectrum," held on Wednesday October 16, is a part of the continual activities of the Serbian Agency for electronic communications (RATEL) related to digitization in Serbia, started by a round table at the TELISKS conference in 2007. The event was organized jointly with RATEL with participation of representatives of regional and local TV stations, telecommunication operators, Niš Cluster of Advanced Technologies, Regional Chamber of Commerce Niš as well as number of professionals in the field. The event started with an introductory talk given by Stefan Lazarevic, state secretary with the Ministry of Foreign and Internal Trade and Telecommunications. The discussion was related to analysis of the results of digitization of the broadcasted TV programs in the recent years. With switching from analogue to digital broadcasting of terrestrial TV signals a part of the frequency spectrum is released and it can be further used for new advanced broadband access technologies, which further opens possibilities for development of new services for improvements in the administration, medicine, education, culture and many other areas. The positive effect of the rational use of the radio frequency spectrum realized as a result of digitization is not only increasing of the workload and profit of the telecommunication operators but also development of software supporting these services and related hardware at a national level. The importance of the round table is also in taking the responsibility of the key participants in the process of digitization, as well as in preparation of the national industry, especially small and medium enterprises, for accepting new technologies and their applications.

• International Professional Conference "Development and implementation of advanced cable services and effective business models — DIACAS 2013," with a topic: "Financial models in realization of re-distribution of media contents and development and implementation of advanced cable services in the country and region" was held on Thursday, October 17. The aim of this international professional conference was to assess the current state of development of cable services in the country and region, analysis of financial models for realization of the author rights and rights for re-distribution of media contents, and to identify problems in

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IEEE Pakistan Student, GOLD & WIE Congress 2013 (PSGWC'13)

By Prof. Dr. BS Chowdhry, Pakistan

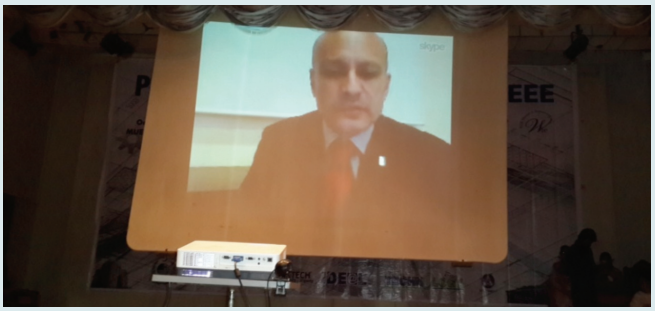
Mehran University of Engineering& Technology (MUET), Pakistan in collaboration with IEEE Karachi Section and IEEE Communications Society — Karachi Chapter organised a three day mega event IEEE Pakistan Student, GOLD & WIE Congress (IEEE PSGWC'13) at its campus in Jamshoro betweenOctober 23–25, 2013.The theme of the congress was "Engineering: A sustainable future for Pakistan."

In his welcome address, Chief Organiser for IEEE PSGWC'13, Prof. Dr. BS Chowdhry said that IEEE is the world's leading professional association for the advancement of technology. He continued that the IEEE community is mandated to serve professionals involved in all aspects of the electrical, electronic and computing fields and related areas of science and technology that underlie modern civilisation. He was pleased to mention that the congress attracted more than 400 participants from all over Pakistan. These participants included students, graduate engineers and experienced professionals from the industry. Prof. Chowdhry also announced that soon a petition will be filed to form a new subsection (IEEE Jamshoro subsection) under IEEE Karachi Section. This, he said, will bring many advantages to the students of universities in the vicinity of Jamshoro.

Engr. Parkash Lohana, Vice Chair of IEEE Karachi Section, highlighted the learning opportunities provided by IEEE within engineering sciences, research, and technology. The goal of the IEEE education programs, he said, is to ensure the growth of skill and knowledge in the engineering-related technical professions and to foster individual commitment for continuing education among IEEE members, the engineering and scientific communities, and the general public.

Prof. Dr. MA Uqaili, the Chief Guest of the inauguration ceremony,who is also the Pro-Vice-Chancellor of MUET, eulogised the role of IEEE as one of the leading standards-making organisations in the world. He said that through the IEEE Standards Association (IEEE-SA), IEEE performs standards making and maintaining functions. These standards affect a wide range of industries including: power and energy, biomedical and healthcare, Information Technology (IT), telecommunications, transportation, nanotechnology, information assurance, and many more. He also said that just in 2013, IEEE has over 900 active standards, with over 500 standards under development. He said the MUET authority will extend all the cooperation needed for organizing IEEE activities.

Prof. Dr. BS Chowdhry delivering his welcome address at the inauguration of the congress.



Prof. Stefano Bregni, Vice-President for Member Relations of the IEEE Communications Society, addressing the participants through Skype from Milan, Italy.

Participants of the congress inside the auditorium at MUET.

The Chief Guest at the inauguration ceremony, Prof. Dr. Aslam Uqaili, addressing the participants.

As the event got started, it included 11 seminars, 4 technical lectures, 9 competitions, a panel discussion and 2 keynote talks from highly distinguished speakers.The seminars topics were IEEE SIGHT, IEEE TISP, IEEE EPICS, IEEE Academic,IEEE RDPP, Technical Report Writing, Career Planning, Leadership and Blogging amongst others.The technical lectures covered topics from the fields of telecommunications, electronics and electrical engineering. Meanwhile, the competitions included Project Competition, Matlab Programming Competition, Networking Competition, Innovative Ideas Competition, Poster Competition, Programming (general) Competition, Gaming and Videography Competitions amongst others. The panel discussion was tabled by Mr. John White of USAID Power Distribution Program, Engr. Tufail A. Shaikh, Dr Faisal Karim Shaikh, Engr. Parkash Lohana, and Prof. Dr. MR Abro and they discussed the what the country requires from its engineers so that it can progress. They also took questions from the audience.

The keynote speech on Day 1 was delivered by Prof. Dr. Tariq Durrani, who is an eminent research professor affiliated with the University of Strathclyde, Glasgow, UK. Prof. Durrani was also the IEEE President Elect candidate for 2013. In his speech, Prof. Durrani highlighted the importance of volunteering and participating in extra-curricular activities, especially for engineers. He said that "engineering" can really be the key to development for-Pakistan and discussed the role Pakistani engineers will have to play in this regard.

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The keynote speech on Day 2 was delivered by Prof. Stefano Bregni, who is an associate professor at Politecnico di Milano, Italy. Prof. Bregni is currently the IEEE Communications Society Vice-President for Member Relations. In his speech, Prof. Bregni talked about the role played by IEEE Communications Society in the development of telecommunication standards globally. He also talked about the benefits of attending such events and participating in competitions. At the end, he encouraged students participating at the congress to take part in IEEE Communications Society's "Communications Technology Changing the World" competition, which he said was designed to provide exposure to students working in the field of communication engineering and related technologies.

At the concluding ceremony, the Chief Guest Mr. Jam Khan Shoro, the Minister for Live Stock and Fisheries, Government of Sindh congratulated organisers from MUET on the success of IEEE PSGWC'13. He further said that it is good to know that the PSGWC'13 congress aimed at bringing together a wide spectrum of national and international experts to facilitate a creative environment for the promotion of collaboration and knowledge transfer under the umbrella of IEEE.He called upon the young generation of engineers and researchers to come forward with zeal and zest to provide beacon light to solve the problems that the country faces due to lack of appropriate technology, data and information.While commenting on the high ranking of MUET amongst engineering universities in the country, he said that it makes the Sindh government proud to know that institutions within the province do not lag behind in the field of engineering and technology.

Dr. AQK Rajput, Vice Chancellor of MUET mentioned that it is due to the appreciation of merit within the university and the highly qualified faculty, MUET has taken lead in imparting quality engineering education for less privileged people of the region coming from remote areas. He said that MUET produced first Ph.D. in engineering in the country and faculty members here are taking maximum efforts in empowering students to build their careers, and giving back to society. He along with Dr. MA Uqaili also appreciated the tireless efforts of organising committee of the event.

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IEEE Asia Pacific Region 10 Student Activities Committee Chair Engr. Om Perkash Batra, who travelled all the way from Australia to attend the congress, motivated students to work hard, arm themselves with latest technology and get maximum benefits by taking part in IEEE professional development activities.

At the end Chief guest awarded shields to guest speakers, judges and organising committee members. He also distributed cash awards to winning teams who took part in competitions. The event was sponsored by IEEE Karachi chapter, higher education commission Pakistan, ICT R&D Fund Pakistan, and IEEE Communication Society — Karachi Chapter. Also the event was cosponsored by Jublee Corporation, Ideal distribution Line, Paktech Instruments and Rastek Technologies Karachi.

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business and implementation of new services in a constructive exchange of the experience, resulting in finding solutions that will enable better business environment for cable operators, increase workloads and improve the Quality of Service. The intention is to convene a conference with long-lasting tradition that will cover variety of current topics and issues in the filed of cable broadcasting.

• Workshop: "The Appropriate Design of the Reconstruction Filter and its Influence on the Output Power and Efficiency of Class-S and Quasi Class-S Power Amplifiers," was given by Dr. Kurt Blau, Ilmenau University of Technology, Germany on Friday October 18. The aim of the workshop was to present a deep analysis of reconstruction filters for current mode class-S and partial of quasi class-S power amplifier systems in order to show and discuss requirements for realization of the mentioned filters. Analysis of the application of these filters in the power amplifier systems is based on the highest output power levels and high efficiency in a wide frequency range.

Among previous activities, round table "Women's participation in science and technology — opportunities, challenges and way forward," was held during the IEEE Women in Engineering — Affinity Group of Serbia and Montenegro Section meeting, as a part of the project supported by Center for the Promotion of Science of Republic of Serbia. The main idea behind is to open discussion how to increase visibility of women in science and technology in public and media and how to motivate girls and young women to chose their carriers in these areas.

DISTINGUISHED LECTURER/*continued from page 1*

However, Prof. Ma offered second talk on "Security Enhancement for M2M in Cyber-Physical Systems. He highlighted the authentication protocol for machine to machine (M2M) communication in the cyber-physical systems (CPS) and/or the Internet of things. Again, the talk generated a lot of interest among the participants for further discussion.

Despite of the busy time of the year about 20 people (15 IEEE and 5 non-IEEE members) mostly academic staff and postgraduate students attended the talk in Auckland. Overall, the event was very successful in terms of networking and professional development. People have enjoyed talking/networking during the refreshment. Dr. Nurul Sarkar (Chair/representative of NZ North Section) has organized Prof. Ma's visit to NZ. The event was cosponsored by IEEE ComSoc and IEEE NZ North section. We also thank Akbar Hossain and Priyanka Undugodage for setting up tables for refreshments.

IEEE DLs are very high profile professional in their field of specialization, and Prof. Ma's visit to New Zealand provided an opportunity for professional development through international link and collaboration for the members of the society and the wider University community.

In addition to IEEE DL Program, ComSoc chapter is organising a day-long workshop and other professional activities in Auckland which will be reported in the next newsletter.