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MEMBERSHIP SERVICES

WICE: Promoting the Role of Women in Communications Engineering

Interview with Octavia Dobre, Chair of the WICE Standing Committee

By Stefano Bregni, Vice-President for Member and Global Activities, and Octavia A. Dobre, Chair of WICE Standing Committee

This is the fifth article in the series started in November 2016 and published monthly in the IEEE ComSoc Global Communications Newsletter, which covers all areas of IEEE ComSoc Member and Global Activities. In this series of articles, I introduce the six MGA Directors (Sister and Related Societies; Membership Services; AP, NA, LA, EMEA Regions) and the two Chairs of the Women in Communications Engineering (WICE) and Young Professionals (YP) Standing Committees. In each article, one by one they present their sector activities and plans.

In this issue, I interview Octavia A. Dobre, Chair of the IEEE ComSoc Standing Committee on Women in Communications Engineering (WICE). Octavia is a Professor and Research Chair with Memorial University, Canada. She is the Editor-in-Chief of *IEEE Communications Letters*, and has served as editor and senior editor for other prestigious journals. She also chairs the ComSoc Signal Processing for Communications and Electronics Technical Committee and has served as an officer for other technical committees, as well as technical co-chair of symposia at various conferences.



Stefano Bregni



Octavia A. Dobre

It is my pleasure to interview Octavia and offer her the opportunity to outline her current activities and plans for ComSoc WICE.

Bregni: Hello Octavia! This is the second time I have the opportunity to interview you for the GCN, after our first article in 2015, to present the activities of the IEEE ComSoc WICE Standing Committee. I am particularly glad I again have this chance. True equal opportunities for women in our field of engineering is one of the five strategic directions I have set in ComSoc Member and Global Activities, as I indicated since the beginning of my first term as Vice-President. Therefore, your Committee is key to this goal. Would you recall how it developed in the last years?

Dobre: I have been the WICE Chair since 2014, when it became a Standing Committee of ComSoc. In almost four years, the committee has been growing and its activities have been increasing significantly. It has a very active website (<http://wice.committees.comsoc.org/>) and Facebook page, as well as a very large number of subscribers to the mailing list.

It is a vivid committee, which organizes a significant number of activities to promote the visibility and roles of women communications engineers and to provide a venue for their professional growth. Certainly, any ComSoc member is welcome to the WICE events.

Bregni: What about the Board working with you on organizing the various WICE activities?

Dobre: WICE has seven positions on the Board, e.g., industry liaison, student activity coordinator, publicity chair, WICE committee society coordinator, as well as five members-at-large and a representative to the ComSoc Student Competition. The WICE members in these positions are very active, organizing various events and supporting other WICE initiatives.

(Continued on Newsletter page 4)



Photos from the Third Women's Workshop on Communications and Signal Processing at IEEE GLOBECOM 2016, Washington DC, US.

IEEE ComSoc Panama Chapter: Winner of the 2016 Chapter Achievement Award

Activities and Accomplishments in 2015-2016

By Maytee Zambrano N., Panama Chapter Chair

One key element of current society and its development are the telecommunication systems. For instance, technologies such as 5G, wireless networks, and IoT are crucial for the development of smart cities. Therefore, it is important as an organization related to telecommunications to have a presence and participation in the community. This motivated our interest, in 2015, in reactivating the IEEE Panama Communications Chapter with a board made up of professionals with different backgrounds including industry, academia and government.

Our main objective during 2015-16 was to offer a variety of technical and non-technical activities that contribute to the professional enrichment of our local members and the local professional and student community in the field of telecommunications.

To reach our goal, we organized several technical activities during 2015. They included: two IEEE Distinguished Lecture Tours, one about "Applications of Field-Programmable Gate Arrays in Scientific Research" by Dr. Jinyuan Wu, and the other on "Attacks and Hardware Defenses for Network Infrastructure" by Dr. Tillman Wolf, and a technical conference "Mobile Communications: Evolution and Challenges" by Eng. Orlando Calderon, who is a technical account manager for Xceed-Anite Technologies.

Considering the fundamental role of telecommunications in almost all fields, we developed a half-day seminar about the fundamentals of telecommunications for non-engineering professionals. The audience targeted were professionals in marketing, sales, customer service and media IT industries, lawyers, managers and executives who needed a basic knowledge in telecommunications for their activities.

During 2015, we met with members of the board of the Panamanian Secretariat of Science, Technology and Innovation (Senacyt) and The Panamanian Chamber of Professional and Companies in IT Sector (CAPATEC) to promote the ComSoc chapter and attract new members, with a view to carrying out future joint activities and achieving synergy with other scientific and industry professionals.

In 2016, following the current trends in telecommunications, several technical activities were organized on hot topics, such as 5G, spectrum regulation, and smart cities. The distinguished lecturers for the 5G half-day conference were Jose Otero, Director of Latin America and the Caribbean for 5G Americas, and Hector Marin, Director for Business Development for Qualcomm in Latin-America and the Caribbean. The scope of this conference was the Evolution of 5G and the policies for its implementation, the roadmap for standardization, and the challenges and perspective



Participants of the conference "Challenges of Panama city to become a Smart city" with the Schneider's representative and the Panama City Vice Major Raisa Banfield after the event.



Communications Chapter Board 2015-2016. From the left Eng. Alkin Saucedo, Eng. Hector Saavedra, Dr. Maytee Zambrano, Eng. Jorge Ruiz and Dr. Carlos Medina.



During the visit of Dr. Tillman Wolf the chapter presented a certification for his distinguished conference.



Participants of the 5G half Day Conferences with José Otero from 5G Americas and Hector Marin from Qualcomm Latin America.

for Latin America from a technical and commercial point of view.

To reach the undergraduate student community, the benefits of being a member of the IEEE Communications Society were explained to them during the 1st Congress of Electrical Engineering Students of Panama. In addition, a technical activity in spectrum management and local regulations was given for undergraduate students by Eng. Alkin Saucedo, Deputy Director of Radio, Television and Spectrum Management of the Panamanian Regulatory Agency.

Considering that the city of Panama growing rapidly, the Panamanian chapters of the Communications Society and the Power and Energy Society organized together a technical conference on smart cities in 2016. The objective was to review the challenges that the city of Panama faces in order to become a smart city. A Schneider's representative showed the different technologies they offer for smart cities and explained some of their local projects. Also, the Vice Major of Panama City, Ms. Raisa Banfield, presented the scope of projects of the major's office related to automation and data collection in the city. Attendees were students and professionals from academia and industry.

In 2016, the IEEE Communication Society recognized our work by granting us the "Latin-America Chapter Achievement Award" based on our 2015 accomplishments.

Our motivation behind each activity is to highlight the benefits of "being part of the top of the world: a member of the IEEE Communication Society."

RNDM 2016 Workshop and COST CA15127-RECODIS 2nd Meeting Highlights from the Resilience Week in Halmstad, Sweden

By Magnus Jonsson, Sweden, Jacek Rak, Poland, Dimitri Papadimitriou, Belgium, and Arun Somani, USA

Leading network resilience researchers took part in the Resilience Week on Sept. 12-15, 2016 at Halmstad University, SE by Prof. Magnus Jonsson from the Centre for Research on Embedded Systems (CERES), Halmstad University, SE, and Prof. Jacek Rak from Gdansk University of Technology, PL. It included two major events:

- The 2nd Meeting of COST CA15127-RECODIS Action (Resilient Communication Services Protecting End-user Applications from Disaster-based Failures, <http://www.cost-recodis.eu>) held on Sept. 12-13, 2016.

- RNDM 2016-8th International Workshop on Resilient Networks Design and Modeling on Sept. 13-15, 2016.

The meeting of COST RECODIS was attended by approximately 45 researchers from 24 European countries and the US. Its agenda included sessions scheduled for meetings of the Management Committee (MC) and Working Groups (WGs). Special focus was on communication resilience issues related to disaster-based failure scenarios including large-scale natural disasters, weather-based disruptions, technology-related disasters and malicious human activities. The main objective was to summarize the results of the first stage of the Action (i.e., analysis of state-of-the-art solutions) as well as to discuss the respective research issues to be solved in the near future including tasks to be completed in the framework of Short Term Scientific Missions (STSMs).

The meeting of COST RECODIS was enriched by the invited talk by Prof. Biswanath Mukherjee (IEEE Fellow from University of California, Davis, US) on network resilience for massive failures and attacks.

The meeting of COST RECODIS was followed by the 8th edition of RNDM workshop co-organized on Sept. 13-15, 2016 at Halmstad University, SE by Prof. Magnus Jonsson, SE, Prof. Jacek Rak, PL and Prof. Arun Somani (Iowa State University, US). RNDM 2016 followed the success of its seven former editions gathering over 40 leading researchers from both academia and industry.

After a detailed review process (each paper submitted to



Prof. Jacek Rak, RNDM 2016 General Chair, Sahel Sahhaf and Francesco Musumeci, recipients of RNDM 2016 Best Paper Awards, and Prof. Magnus Jonsson, RNDM 2016 Co-chair.

RNDM 2016 received at least four reviews), accepted papers were organized into the following technical sessions:

- Theory of network resilience
- Optical networks survivability
- Models and algorithms of resilient networks design
- Disaster resilience
- Methods of evaluation and improvement of network resilience
- Resilience of virtualized and cloud architectures
- Special session of COST CA15127-RECODIS

Apart from regular presentations, RNDM 2016 offered three invited talks, a panel discussion on disaster resilience—research challenges and perspectives, and two keynote talks, by Prof. Biswanath Mukherjee from the University of California, Davis, US entitled “Disaster resilience of telecom infrastructure,” and by Prof. Yan Zhang from University of Oslo, NO on “Reliable smart energy networks.”

The Best Paper Award was given to presenters of two papers: Sahel Sahhaf from Ghent University-iMinds, BE for the paper entitled “Resilient availability and bandwidth-aware multipath provisioning for media transfer over the Internet,” and Francesco Musumeci from Politecnico di Milano, IT (related to the paper on “Virtual network function placement for resilient service chain provisioning”).

A special issue of *Networks*, published by Wiley, is being prepared for extended versions of selected RNDM 2016 papers.

RNDM 2016 was organized in conjunction with the 4th International Workshop on Understanding the Inter-play between Sustainability, Resilience and Robustness in Networks (USRR 2016), and the 11th International Workshop on Communication Technologies for Vehicles (Nets4Cars 2016 Fall).

The next edition of RNDM will be in Alghero, Sardinia, Italy on September 4-6, 2017. More information can be found at <http://www.rndm.pl/2017/>



Participants of the 2nd meeting of COST CA15127-RECODIS.



Participants of the RNDM 2016 Workshop.

Inauguration of the Singapore International Cyber Week: GovernmentWare (GovWare) 2016

By Leo Hwa Chiang, Director of IEEE Asia Business Development, Singapore

The foundation event for the inaugural Singapore International Cyber Week, GovernmentWare (GovWare), was held at the Suntec Singapore Convention & Exhibition Centre, 10–12 October 2016. The Prime Minister of Singapore, Lee Hsien Loong, was the Distinguished Guest-of-Honor. He gave an opening speech at GovWare and highlighted the theme for this year, “Building a secure and resilient digital future through partnership,” reflecting Singapore’s desire to strengthen the digital future through building robust local and international partnerships. This conference was organized by the Cyber Security Agency of Singapore (CSA), with a speaker faculty of over 100 Government officials.

In collaboration with the IEEE Communications Society, the Director of IEEE Asia Business Development, Mr. Leo Hwa Chiang, organized two workshops at this premier conference. The first workshop, Cyber Forensics, was held on 11 October 2016. There



Workshop organized by Leo Hwa Chiang.

were 15 attendees at this workshop, with an objective to inspire and boost interest in cyber security. Participants in this workshop had the opportunity to learn the fundamental principles of cyber forensics and explore the specialized software tools, techniques and processes employed to preserve and recover digital evidence.

On 12 October 2016, Leo organized a Cyber Risk Management Workshop. This workshop attracted 16 attendees. Participants were enthusiastic in joining the discussion to share their organizations’ experience with cyber risk management, and also discuss the challenges they have encountered in improving and maintaining their cyber risk management capability.

WICE/Continued from page 1

Bregni: What is the most significant event organized by WICE in the last year?

Dobre: In December 2016, we organized the Third Women’s Workshop on Communications and Signal Processing in conjunction with GLOBECOM 2016 in Washington, DC, USA. It was a fabulous event, with well known speakers from industry and academia, such as Prof. Andrea Goldsmith (Stanford University), Monique Morrow (CISCO), Dr. Antonia Tulino (Nokia Bell Labs), Dr. Peiyang Zhu (Hua-wei), and Dr. Grace Wang (National Science Foundation).

In addition to technical talks, there were discussions focusing on the role of women in the IEEE and IEEE ComSoc, as well as panel discussions to address questions regarding career development in both industry and academia. The panel was led by Prof. Katie Wilson (Santa Clara U.), and the invited panelists were Dr. Sheila Hemami (Draper Labs and IEEE VP Publications), Prof. Muriel Medard (MIT), Prof. Elza Erkip (NYU), and Dr. Antonia

Tulino. The workshop attracted 54 attendees, from Australia, Canada, China, France, Germany, Ireland, Italy, India, New Zealand, Spain, Switzerland, Sweden, Turkey, UK, and US.

Bregni: What other recent initiatives run by WICE can you briefly highlight?

Dobre: WICE presents three awards annually. In 2016, they were presented at the WICE workshop to Prof. Elza Erkip (Outstanding Achievement Award), Prof. Shalinee Kishore (Outstanding Service Award), and Prof. Urbashi Mitra (Mentorship Award).

In 2017, starting with WCNC, and continuing with ICC and GLOBECOM, we are organizing various panels led by WICE members. An example of such a panel is “How to encourage young women in Communications Engineering – best practices and experiences,” which was led by Profs. Ana Garcia Armada and Meryem Simsek at WCNC, and supported by Intel.

ComSoc student members also participate in the organization of these events, being provided with travel grants. The WICE organizers serve as mentors for the students as well.

In 2016, WICE also presented the first Child Care Grants to the IEEE GLOBECOM 2016 attendees, who were IEEE ComSoc members and brought small children to the conference or incurred extra expenses in leaving their children at home. We hope this program will continue at the IEEE ICC and GLOBECOM conferences, and extend to others, such as IEEE WCNC.

Bregni: Oh, be sure that the Child Care Grant program is among my priorities as VP-MGA. As you remember, we had to push strongly and spend a considerable effort to make it real, solving non-trivial practical and legal issues. I will do my best to make it a permanent program in ComSoc MGA also in the future.

This is the fourth and therefore last year of your two terms as WICE Chair. Is there any special remark you wish to make?

Dobre: As my two terms as WICE chair come to an end in 2017, I would like to take this opportunity to express my gratitude and appreciation to the entire WICE Board, the organizers of the WICE Workshop, as well as to other colleagues and friends whom I worked with over the past four years. Without their contributions and support, WICE would not be the amazing committee that is today.

I would also like to thank you, Stefano, the ComSoc President, as well as the ComSoc staff for your steady support. My wish is that WICE will continue to thrive, and thus, contribute to the growth of our Society.

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