

IEEE Communications Society Technical Committee on Signal Processing and Communications Electronics Technical Committee (SPCE)

NEWSLETTER

Issue 1 – May 2017

Dear Signal Processing and Communications Electronics colleagues:

Welcome to the first issue of the SPCE Technical Committee Newsletter. It is conceived as a way to share important information for the members of the committee and to have some brief contact approximately every six months. We would like it to be a useful communication tool so it will be brief and at the same time open for everybody to contribute.

Please feel free to send us any piece of news that you believe can be of interest for our community.

Kindest regards,

Ana Garcia Armada

anagar@ing.uc3m.es

SPCE TC Newsletter Editor

1. Contact information

The Officers of the SPCE TC are:

Chair:

Octavia A. Dobre
Memorial University, Canada

Standards Liaison:

George C. Alexandropoulos
Huawei Technologies France

Vice Chair:

Xianbin Wang
Western University

Newsletter Editor:

Ana Garcia Armada
University Carlos III of Madrid, Spain

Secretary:

Jingxian Wu
University of Arkansas

Student Competition Representative:

Sinem Coleri Ergen
Koc Univeristy, Turkey

Please refer to our web page for further information:

<http://spce.committees.comsoc.org/officers/>

How to join SPCE Committee and mailing list

Membership on the IEEE SPCE TC is open to all members of the IEEE Communications Society who share an interest in signal processing in communications.

To join the SPCE, you simply subscribe to the SPCE mailing list by using the following link:

<https://comsoc-listserv.ieee.org/cgi-bin/wa?SUBED1=spce&A=1>

2. Message from the Chair

Dear SPCE members:

The SPCE Technical Committee has been one of the first committees of the IEEE Communications Society, in service of our scientific community. Last year, the committee went through the re-certification process. Following the meeting at Globecom 2016, the officers have successfully answered to the remaining questions of the Recertification Committee, and I am happy to report the positive outcome.

It is a time of significant research advances in our field, when we can intensify the activities of our committee and further increase its initiatives. We have two special interest groups, namely “Signal processing techniques in 5G communication systems” and “Signal processing techniques for Big Data in Wireless Networks”, which are very active. However, we are open to other initiatives, and would like to hear your opinions. Please, let us know of one or two technologies and/or research directions that you believe will shape signal processing for communications in the near future, and what SPCE may do to promote and support them. Also, please let us know your thoughts about activities that the SPCE Technical Committee can further undertake. Please email your responses to Dr. Jingxian Wu (wuj@uark.edu) before June 15, 2017.

With kind regards,
Octavia Dobre

3. Committee meetings

Last SPCE TC meeting was held at IEEE Globecom in Washington DC, December 7 2016. The minutes are available here:

<http://spce.committees.comsoc.org/meeting-reports/globecom-16/>

Next SPEC TC meeting will be held at IEEE ICC in Paris on Tuesday 23 May, 12:30-14:00, at the Courcelles room, Le Meridien , with the following agenda:

- Welcome & Introduction
- Approval of meeting minutes from Globecom 2016
- Technical program committee reports

- SIG activity reports
- TC recertification
- New initiative: SPCE TC Newsletter
- Other businesses

4. Committee awards

The following two awards are granted on a yearly basis by the SPCE TC:

IEEE SPCE Technical Recognition Award

To recognize and encourage continuous and outstanding services to the technical activities sponsored and endorsed by the SPCE Technical Committee.

IEEE SPCE Outstanding Service Award

The award recognizes members of the IEEE Communications Society who have made outstanding contributions to the technological advancement of signal processing for communications.

Please find additional information here:

<http://spce.committees.comsoc.org/awards/awards-by-laws-procedures/>

and the list of past recipients:

<http://spce.committees.comsoc.org/awards/awards-by-laws-procedures/>

5. Conferences

Flagship conferences

- Next IEEE ICC will be held in Paris, 21-25 May 2017.

<http://icc2017.ieee-icc.org/>

SPCE sponsors this conference and appointed the following representatives:

Tomohiko Taniguchi (Signal Processing for Communications Co-Chair)

Fulvio Babich (Communication Theory Co-chair)

- Next IEEE Globecom will be held in Singapore, 4-8 December 2017

<http://globecom2017.ieee-globecom.org/>

SPCE sponsors this conference and appointed the following representatives:

Xianbin Wang (Signal Processing for Communications Co-Chair)

Wei Chen (Communication Theory Co-chair)

Other related conferences/special issues

SPCE sponsors the following conferences:

- 24th International Conference on Telecommunications, ICT 2017 (Limassol, Cyprus, May 2017)
SPCE members involved: Rui Dinis, Chau Yuen, Yik-Chung Wu
<http://ict-2017.org/>
- 14th International Symposium on Wireless Communication Systems, ISWCS 2017 (Bologna, Italy, August 2017)
SPCE members involved: Andrea Conti, Marco Chiani, Jordi Perez Romero
<http://iswcs2017.org/>
- The 38th IEEE Sarnoff Symposium, IEEE SARNOFF 2017 (University Heights Newark, USA, September 2017)
SPCE members involved: Telex Ngatched, Adam Noel, Redha M. Radaydeh
<https://ewh.ieee.org/conf/sarnoff/2017/>
- 9th International Conference on Wireless Communications and Signal Processing, WCSP 2017 (Nanjing, China, October 2017)
SPCE representatives: Jingxian Wu, Cheng Li, Jinhong Yuan
<http://www.ic-wcsp.org/>
- 11th International Conference on Signal Processing and Communication Systems, ICSPCS 2017 (Surfers Paradise, Australia, December 2017)
SPCE representatives: Tad Wysocki, Octavia A. Dobre, Lajos Hanzo, Joao Paulo da Costa
http://www.dspsc-witsp.com/icspcs_2017/index.html
- International Conference on Computing, Networking and Communications, ICNC 2018 (Maui, Hawaii, March 2018)
SPCE representatives: Yahia Eldemerdash, Haijun Zhang, Francesco Verde
<http://www.conf-icnc.org/2018/>

6. Standardization activities

In the first semester of 2017, one meeting for all the plenaries of all three Technical Specification Groups (TSG) in 3rd Generation Partnership Project (3GPP) took place in Dubrovnik, Croatia in the beginning of March. Reports and documents can be found:

- For Radio Access Networks (RAN) at: <http://www.3gpp.org/DynaReport/Meetings-RP.htm>.
- For Services & Systems Aspects (SA) at: <http://www.3gpp.org/DynaReport/Meetings->

[SP.htm](#).

- For Core Network & Terminals (CT) at: <http://www.3gpp.org/DynaReport/Meetings-CP.htm>.

Details (meeting and documents) for each Working Group (WG) of 3GPP TSG are available at:

- For RAN at: <http://www.3gpp.org/specifications-groups/ran-plenary>.
- For SA at: <http://www.3gpp.org/specifications-groups/25-sa>.
- For CT at: <http://www.3gpp.org/specifications-groups/28-rubrique34>.

7. Special Interest Groups activities

SIG on Signal processing techniques in 5G communication systems

The SIG has prepared the following special issues (SI): IEEE JSAC SI on “Millimeter Wave” (Jul. 2017), IEEE Wireless Communications SI on “NOMA”, IEEE Transactions on Multimedia SI on “Video over Future Networks: Emerging Technologies, Infrastructures, and Applications”, IEEE Access Journal SI on “Cooperative and Intelligent Sensing”, Elsevier Digital Communications and Networks SI on “Next Generation Wireless Communication Technologies” (Nov. 2016), IEEE Access SI on “The Internet of Energy: Architectures, Cyber Security, and Applications”, IEEE Wireless Communications Magazine SI on “Wireless Big Data: Technologies and Applications”, IEEE Access SI on “Deployment and Management of Small Heterogeneous Cells for 5G” They have also played a key role in several IEEE conferences.

SIG on Signal processing techniques for Big Data in Wireless Networks

The SIG has prepared special issues in JSAC, IEEE Access, EURASIP WIN, etc. They have also played a key role in several IEEE conferences, workshops and special sessions: Globecom (e.g. GC’16 Workshop on Big Data and Wireless Networks), ICC, WCNC, GlobeSIP, etc.

More information about the SIGs may be found in our web page:

<http://spce.committees.comsoc.org/special-interest-groups/>

8. 5G summits

In order to engage industry members with high value and innovative technologies, IEEE Communication Society is holding a series of high impact one day Summits in emerging technology areas related to 5G (<http://www.5gsummit.org/>). The idea is that these summits will provide a venue to join efforts from the industry and academic community to collaborate and exchange ideas in emerging technologies that may help in driving the standards and rapid deployment.

Upcoming 5G summits will be held in:

Casablanca, Morocco - 11 May 2017: <http://www.5gsummit.org/casablanca/>

Istanbul, Turkey – 5 June 2017: <http://www.5gsummit.org/turkey/>

Honolulu, Hawaii – 5-6 June 2017: <http://www.5gsummit.org/hawaii/>

Thessaloniki, Greece – 11 July 2017: <http://www.5gsummit.org/greece/>