

Welcome

This volume contains the papers presented at the **13th IEEE International Symposium on Broadband Multimedia Systems and Broadcasting (BMSB)** held on June 6-8, 2018 in Valencia (Spain).

The BMSB symposium is the premier forum for the presentation and exchange of technical advances in the rapidly converging areas of multimedia broadcasting, telecommunications, consumer electronics, and networking technologies. The Broadcast Technology Society (BTS), the official sponsor organisation of the symposium, is one of the founding organisations of IEEE, and has a history that stretches to the formation of the Institute of Radio Engineers in 1912. The BTS mission is to serve the needs of the members of the Broadcast Technology Society to enhance their professional knowledge and vitality by keeping them informed of the latest research results and their practical applications.

IEEE BMSB 2018 is organized by the Institute of Telecommunications and Multimedia Applications (iTEAM) of the Universitat Politècnica de València (UPV), Spain.

The theme of IEEE BMSB 2018 is "Leading the Way to Future Multimedia Systems and Broadcasting". 2018 will be remembered as the year of the first normative specifications of the fifth generation of wireless systems 5G. As a novelty of this year's edition, IEEE BMSB 2018 is co-located with a one-day tutorial on emerging 5G broadcast technologies and applications by the 5G-PPP project 5G-Xcast (www.5g-xcast.eu). IEEE BMSB 2018 also counts with a number of workshops on 5G organized by several 5G-PPP projects, covering a wide range of topics from 5G transport, media delivery, cloud, V2X communications, visible light communications, optical communications, and 5G Broadcast. The following 5G-PPP projects organized a workshop: 5G-Xcast; IoRL; 5G Transformer, 5G Coral and 5G Ex; Bluespace; NGPaaS; and 5GCAR. In addition to 5G topics, IEEE BMSB 2018 has also a strong presence of the next-gen terrestrial broadcast standard ATSC 3.0, 4G MBMS, advances in video compression and new video coding applications (specially Virtual Reality), DASH and Quality of Experience for ultra-high definition and virtual reality applications.

There were in total 161 paper submissions. Each submission was reviewed by at least 2, and on the average 3.2, reviewers. The program committee decided to accept 122 papers, which means a 25% rejection rate. The final program is organized into 21 oral sessions and 1 poster session. Besides the oral sessions and the poster session, we have 9 outstanding keynote talks and one panel. The IEEE BMSB 2018 keynotes are: Roland Beutler (SWR), Thomas Stockhammer (Qualcomm), Erik Guttman (Samsung), Kenichi Murayama (NHK), Maria Cuevas (BT), Benjamin Bross (Fraunhofer HHI), Rich Chernock (ATSC), Dazhi He (NERCDTV) and Peter Siebert (DVB). The conference will be concluded with the panel on Research Challenges for 2030 Broadband Multimedia Systems and Broadcasting.

Finally, the organization of an event like BMSB would not be possible without the participation of an enthusiastic group of people from the Universitat Politècnica de Valencia, together with the program committee and the BTS staff. All they have made possible that this conference will be a memorable event.

Enjoy BMSB 2018 and welcome to Valencia! A nice and modern city on the shore of the Mediterranean Sea, that combines history, tradition and modernity in an unusual way!

June 5, 2018
Valencia (Spain)

David Gomez-Barquero
IEEE BMSB 2018 General Chair