Call For Papers

The 2021 IEEE Space Hardware and Radio Conference (SHaRC 2021) will be a part of 2021 IEEE Radio and Wireless Week (RWW2021) which will be held the week of 17 January 2021 in San Diego, CA, USA.

RWW2021 will also feature:

- IEEE Radio and Wireless Symposium (RWS)
- 21st Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF)
- IEEE Topical Conference on Wireless Sensors and Sensor Networks (WiSNet)
- IEEE Topical Conference on RF/Microwave Power Amplifiers for Radio and Wireless Applications (PAWR)
- Focus sessions on 5G and MM-Wave to THz Technologies and Applications

Each of these events will be organized separately, with their own call for papers found at http://www.radiowirelessweek.org/.

The IEEE Space Hardware and Radio Conference (IEEE SHaRC) addresses new concepts, novel implementations as well as emerging applications for space-based hardware for communications, earth observation, and other novel disruptive services. To meet recent needs, there has been a renaissance of interest and investment in space- and suborbital-based systems especially for high-data-rate communications networks. These new global satellite networks are disruptive, and many applications are feasible: e.g. the creation of a worldwide car-to-car communications network or global sensor & control systems for autonomous vehicles. The IEEE Space Hardware and Radio Conference provides a forum for discussions on this new frontier.

Papers featuring innovative work are solicited in (but not limited to) the following areas of the space hardware and systems:

- Manufacture and Deployment of Large LEO Satellite Constellations (1000 to 4000 Satellites)
- Lower-Cost Alternatives
- Unmanned Air Systems
- Terrestrial Systems
- Cubesat Hardware and Systems
- Satellite and Balloon Concepts
- Small and Micro-Satellite Design
- Orbital Configurations & Operations
- Radiation Effects
- Phased Arrays
- High Data Rate Links
- Geolocation
- Earth Observation
- Frequency Spectrum Allocations
- International Regulations & Standards
- SIGHT Applications of the IoS

SHaRC 2021 Co-Chairs
Holger Maune, Technical University of Darmstadt
Charlie Jackson, Northrop Grumman

Paper submission instructions can be found at http://www.radiowirelessweek.org/. Submissions should be formatted according to the submission review template available on the RWW website. Authors should indicate preference for oral or poster presentation. All submissions must be received by 24 July 2020. All accepted papers will be published in a digest and included in the IEEE Xplore® Digital Library. Submissions will be evaluated based on novelty, significance of the work, technical content, interest to the audience, and presentation.