



First Call for Papers



The 6th International Conference

IEEE MICROWAVES, RADAR AND REMOTE SENSING SYMPOSIUM (MRRS-2020)

<http://ieee.nau.edu.ua/mrrs-2020/>

The conference is postponed from June 22 – 27 to second part of September / first part of October, Kharkiv, Ukraine

Organized by IEEE SP/AES Societies Ukraine Joint Chapter in collaboration with National Aviation University (Kiev) and Karazin Kharkiv National University, Ukraine

The 6th Microwaves, Radar and Remote Sensing Symposium (MRRS-2020) continues the series of very successful MRRS Symposium which are conducted regularly since 2005. For the first time, MRRS-2020 is organized in the framework of the First IEEE Ukrainian Microwave Week that will be held in Kharkiv city during *second part of September / first part of October, 2020*. We expect excellent conditions for the successful MRRS-2020. All researchers, experts and students who work in microwaves, radar, remote sensing and adjacent fields are cordially invited to submit original papers and attend MRRS-2020. We are waiting for all our traditional participants as well as new colleagues and friends.

Objectives and grounds

The Symposium is planned to be a forum of ideas exchange and results discussion in the field of electromagnetics and applications, radar technology and systems, signal processing, remote sensing methods, radar meteorology, and data processing. The Symposium covers both passive and active methods and systems of all frequency bands.

Suggested topics

- Electromagnetic fields and guided waves, Wave propagation in complex media, scattering, RCS, clutter, and polarimetry
- Active and passive components, analog and digital components for radar and electronic systems
- Math modeling, simulation, signal processing, and data interpretation, including polarimetric and Doppler techniques
- Primary and secondary, passive and active radar systems and subsystems
- Beam-Forming, Signal Generation and Reception: Digital beam-forming, MIMO detection, MIMO processing
- Multi-sensor architectures: network systems, passive, and MIMO radars, multi-sensor and multi-static systems, data fusion, cooperative radar
- Subsurface and near field techniques: GPR and Through-the-Wall surveillance, foliage penetrating radar, detection of landmines, biomedical imaging
- Radar detection, measurements, tracking, classification and identification including robust and multi-dimensional detection, robust estimation techniques, compressive sensing, and sparse representations
- Airborne and spaceborne surveillance systems
- Remote sensing of Land/Atmosphere
- Data and image processing and representation: High resolution processing, 1D, 2D and 3D target imaging, MTI/STAP/SAR processing and techniques, tomography, polarimetry, interferometry
- Acoustic and radio-acoustic systems
- SAR and ISAR
- Nanoelectronics in advanced signal processing, microwave and radar applications
- Radar and electronic system applications: Meteorological, Biomedical, Security and Defense, Automotive, Industrial and others
- Metamaterials in radar and electronic systems
- Electronic equipment for light air vehicles and UAV

- Innovative Radar Concepts: cognitive radar and bio-inspired radar, software defined radar, etc.
- Educational and historical aspects

Language of all papers, presentations and discussions at the MRRS Symposium is English

Program

The scientific program of the MRRS-2020 Symposium will consist of invited lectures and contributed oral presentations. Poster session will be organized, if the number of accepted papers exceeds capacity of rented rooms.

Camera-ready 4-page papers should be downloaded for
TPC consideration before **June 1, 2020**, 2020

Reviewing will be done by at least 3 independent international experts. Notification of acceptance is planned by June 25; and **final versions and copyrights** of the accepted contributions are required before July 5.

Publications

The Proceedings will be prepared directly from the final papers supplied by authors; therefore, careful preparation in accordance with the instructions and comments is required. Detail information will be contained on the Symposium home page in the menu "Author Info". We plan EuMA and IEEE technical co-sponsorship and IEEE Xplore publication. Extended versions of the papers, presented at the Symposium, can be recommended for publication in one of the following international journals:

"International Journal of Microwaves and Wireless Technologies" (<http://journals.cambridge.org/mrf>),

"Telecommunications and Radio Engineering" (<http://www.begellhouse.com/journals/>),

"Electronics and Control Systems" (<http://jrnl.nau.edu.ua/index.php/ESU>),

"International Journal of Image, Graphics and Signal Processing" (<http://www.mecs-press.org/ijigsp/>).

For further information please visit our web page at <http://ieee.nau.edu.ua/mrrs-2020/> or contact us by E-mail: ayua@nau.edu.ua; yanovsky@nau.edu.ua

Young Scientist Travel Grants

Modest travel grants are expected to help young scientists to attend the MRRS-2020 symposium. The number and amount of grants will depend on the success of the on-going search for sponsors.

Young Scientist Contest

The MRRS International Jury will award the Young Scientist Prizes (sponsored by EuMA) to engineers, researchers or students who have presented outstanding papers at the MRRS-2020 Symposium. Each prize includes cash money and a colorful certificate.

Honorary MRRS Chair

Professor Dr. Felix Yanovsky, IEEE Fellow
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MRRS 2020 Symposium Chairperson

Professor Dr. Yuliya Averyanova, IEEE Senior Member, EuMA Member
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