

Ministry of Education and Science of Ukraine
KHARKOV NATIONAL UNIVERSITY OF RADIO ELECTRONICS
ACADEMY OF APPLIED SCIENCES OF RADIO ELECTRONICS

First Information Message

The Sixth International Radio Electronics Forum

**“APPLIED RADIO ELECTRONICS.
THE STATE AND PROSPECTS OF DEVELOPMENT”
IRF-2017**

On October 10-12 2017 the VI-th International Radio Electronic Forum "**APPLIED RADIO ELECTRONICS. THE STATE AND PROSPECTS OF DEVELOPMENT (IRF-2017)**" will be held in Kharkov, Ukraine, with the support of Ministry of Education and Science of Ukraine, National Academy of Sciences of Ukraine.

Organizers of the Forum: **Kharkov National University of Radio Electronics, Academy of Applied Sciences of Radio Electronics (AS ARE).**

Co-organizers of the Forum: IRE NAS of Ukraine, STC AS ARE, State Center of Radio Frequencies of Ukraine, R&DI “Quantum”, R&DI for Radar Systems “Quantum-Radar”, Radio Astronomy Institute of NAS of Ukraine, NSC KhPTI NAS of Ukraine, NSC “Institute for Metrology”, LLC “RADIONICS”, NTU “KhPI”, Kharkov National University named after V.N. Karazin, Kharkov University of Air Forces named after I. Kozhedub, CE “SIC “Iskra”, SJS NASci. of Ukraine, Kharkov Chapter of IEEE, etc.

We invite you to take part in the work of IRF -2017.

To participate in the work of the Forum **you should submit:**

- The application according to the applied form (Appendix 1);
- The electronic version of the report in copy in one of the working languages (English, Russian, Ukrainian), formed according to the requirements and the attached example (Appendices 2, 3) sent by E-mail (E-mail: erd@nure.ua).

Appendix1

Application Form for Participation in the Forum:

- The title of the thematic Conference or Seminar;
- The title of the thematic section of the Conference;
- The author’s surname, name, patronymic (in full), scientific rank, degree, position;
- The title of the organization (in full);
- The address for correspondence: city, index, fax, telephone number for contacts (with indication of the code), E-mail;
- The language: Russian or Ukrainian

Appendix 2

SUBMISSION GUIDELINES:

- The volume of the report should not exceed **2-4 pages** (A4 size paper), the volume of the invited reports – **up to 6 pages**;
- Margins– **30mm**; the indent - **1cm**;
- The set: **Times New Roman**, 11 points, one interval between lines;
- Summary in English (up 10 lines);
- The text of the manuscript should be structured and it should contain all *main parts typical for description of the scientific investigation*: **introduction** (it should represent the *urgency*, and state the *objectives* and *problems* of the research); the **essential part** (it should contain the presentation of the main material of this research with description of the idea, method and substantiation of the obtained scientific results); **conclusions** (they should present results of the research, their *scientific novelty* and *practical significance*, comparison with the world analogues, prospects)
- Formulae, symbols, variables in the text should be typed as the **Microsoft Equation** objects. The size in the formulae: variable – 10 points, index – 8 points, superscript and subscript – 8 points, the main (index) mathematical symbol – 12(10) points.
- Figures and tables should be clear, compact. Redactors: CorelDraw, Table Editor, Microsoft Excel.

The order of the material arrangement:

TITLE OF THE REPORT (capital letters, bold, in the middle of the line).

The next line – the author's name, initials (small letters, in the middle of the line).

The next line – the complete title of the organization (small letters, in the middle of the line).

The next line – the mail address, telephone number, E-mail of the organization or of the authors.

The next line – the summary in English (up to 10 lines).

The text of the report should be printed in an interval, indent a line.

References are allowable (no more than 5 references in a report, no more than 15 references in the invited report).

Time of the report delivery is up to 15 min., time of the invited report delivery is up to 20 minutes.

EXAMPLE

Appendix 3

SMALL OBJECTS DETECTION SYSTEMS

Ivanov I. I., Serguejev N. A.

Kharkov National University of Radio Electronics

Systems Engineering Department, 14, Lenin Ave., 61166, Kharkov

Tel. (057) 702-13-06, E-mail: ivanov@kture.kharkov.ua ; факс (057) 702-11-13

The given work is devoted to the modern developments in the field of microwave devices used for measuring etc. ... (up to 10 lines).

The text of the report ...

Deadline for application submission –August 15, 2017.

Deadline for complete camera-ready report submission –September 15, 2017.

The organizing fee for a participant is:

600 hryvnas for participants - citizens of Ukraine

200 hryvnas for participants – students, post-graduates citizens of Ukraine

100 € for participants - citizens of other countries

The organizing fee covers publication of the program and Proceedings of the Forum, expenditures connected with organization and holding of the Forum including transport expenses within Kharkov Region, advertising, communication, coffee break etc.

The authors, whose reports will provoke the greatest interest, will be offered to publish their work in the specialized scientific magazine of the HAC of Ukraine “Applied Radio Electronics”.

The information of the Organizing Committee concerning adoption of reports and bank requisites for money transfer will be sent to you before **September 15, 2017** in the second information message.

The given information message is an invitation card for participation in the Forum.

The list of the thematic conferences of the IRF-2017 is applied **Appendix 4** to this information message.

Organizing committee and Executive secretariat address of IRF-2017:

KHARKOV NATIONAL UNIVERSITY OF RADIO ELECTRONICS

14, Nauka Ave., 61166, Kharkov, Ukraine. Tel.: (+38 057) 702-13-97, 702-17-35, 702-16-79

Fax: (+ 38 057) 702-13-97; 702-17-35, 702-17-35, E-mail: erd@nure.ua; akad@kture.kharkov.ua

ORGANIZING COMMITTEE OF THE FORUM

List of thematic scientific conferences of
International Radio Electronic Forum (IRF-2017)
“Applied Radio Electronics. The State and Prospects of Development”
 October, 2017. Kharkov:

1. **International Scientific Conference “RADAR, SATELLITE NAVIGATION, RADIO MONITORING”**, 10-12 October, 2017, KNURE. Kharkov
Section 1. Radar, television and acoustic systems and technologies.
Section 2. Global, local and integrated systems of satellite navigation and precise positioning.
Section 3. Systems and technologies for managing the use of radio frequency resource.

Responsible for organizing the conference: Kalyuzhnyi N.M.

2. **International Scientific Conference- “PROBLEMS OF BIOMEDENGINEERING. SCIENCE AND TECHNOLOGIES”**,
 10-12 October, KNURE, Kharkov.
Section 1. Methods and means for processing and analysis of medical signals and images.
Section 2. Clinical engineering
Section 3. Mathematical modeling and methods of investigation in biology and medicine
Section 4. Information technologies and systems in medicine, biology, pharmacology, psychology and ecology
Section 5 Bio nano technologies and bio materials science

Responsible for organizing the conference: Prof Bykh A.I.

3. **International Scientific and Practical Conference “PROBLEMS IN INFOCOMMUNICATIONS. SCIENCE AND TECHNOLOGIES”**, 10-12 October, KNURE. Kharkov
Section 1. Foundations of telecommunications systems theory..
Section 2. Management, adaptation, self-organization in info-communication systems, program-configurable networks.
Section 3. Methods for building, designing and planning of info-communication systems
Section 4. Processing and protection of information in info-communication systems
Section 5. Mobile info-communication systems and signals processing
Section 6, Cognitive technologies and systems
Section 7. Information security in info-communication systems.

Responsible for organizing the conference: Prof. Popovskiy V.V.

CONFERENCES WHICH WILL BE HELD IN THE FORUM FRAMEWORKS (IRF-2017) OUTSIDE KNURE (typescript requirements, information letters at the University site: www.nure.ua)

4. **International Scientific Conference “METROLOGY, INFORMATION MEASUREMENT TECHNOLOGIES AND SYSTEMS”** 10-12 October, Institute for Metrology, Kharkov
Section 1. Theoretical foundations of metrology.
Section 2. Measurement of geometric and mechanical values.
Section 3. Electroradiometry
Section 4. Measurement of the volume flow of pressure and temperature.
Section 5. Measurement of light and color values.

Responsible for organizing the conference: Prof. Ruzhentsev I.V. (Tel. 70-21-331)

5. International Scientific Conference “FUNCTIONAL BASE OF NANO ELECTRONICS”
18-23 September, Odessa,

Scientific directions of the Conference:

- new fundamental provisions of the theory and technology of forming nanoelectronic elements;
- nanomaterials and structures of nanoelectronic element base;
- metamaterials for nanoelectronics;
- scanning probe methods of diagnostics and technology in nanoelectronics;
- nanoelectronic sensors of physical quantities;
- nanobiological structures;
- nanoelectronics in microsystems technology;
- photonics based on nanoscale structures;
- heterostructures in nanoelectronics;
- elements of functional nanoelectronics;
- self-organizing structures for nanoelectronics;
- nanoimprinting, micro- and nanorobots;
- sources and receivers of radiation based on nanotechnologies;
- simulation in nanoelectronics;
- electrodynamics and nanoelectronics of THz and GHz wavebands;;
- metamaterials and their application in nanoelectronics of THz and GHz bands.

Responsible for organizing the Conference: Prof. Slipchenko N.I. (Tel.70-21-362)

6. International Scientific-Technical Conference “INFORMATION SYSTEMS AND TECHNOLOGIES” “IST-2017”, dedicated to the 80th anniversary of birth of Sviridov V.V., 18– 23 September, Kharkov, KNURE

Section 1. Modern information systems and technologies: problems, methods, models.

Project and program management.

Section 2. Mathematical and computer modeling of information systems.

Section 3. Information resource-saving, environmentally safe technologies.

Geoinformation systems and technologies.

Section 4. Image recognition, digital processing of images and signals.

Section 5. Information systems and technologies in economics, education and polygraphy.

Section 6. Software engineering.

Section 7. Communication, GRID and cloud technologies.

Section 8. Data protection. Information Security.

Section 9. BigData-technologies of analysis and prediction.

Section 10. Infocommunication systems and technologies.

Responsible for organizing the conference: Prof. Tevyashev A.D. (Tel.70-21-436)

7. International Conference “PRODUCTION AND MECHATRONIC SYSTEMS” 17-19 October, KNURE, Kharkov

Section 1. Systems of industrial automation.

Section 2. Production management systems.

Section 3. System engineering.

Section 4. CAD/CAM/CAE systems.

Section 5. Mechatronics (electronic mechanical systems, electronic tools of control systems, mechanical CAD systems).

Section 6. Robotics and means of intellectualization.

Section 7. MEMS (MEMS advanced materials and manufacturing technologies).

Section 8. Components and technologies of automation of oil and gas production, processing and transportation.

Responsible for organizing the conference: Prof. Nevludov I. Sh. (70-21-486)

The conditions for holding thematic conferences No. 4, 5, 6, 7 and the design of information materials are set independently by the Program Committees of these conferences.