## Tomsk State University Faculty of Radiophysics



# 10th International Scientific and Practical Conference "Actual problems of radiophysics"

Dedicated to the 70th anniversary of the Faculty of Radiophysics and the 145th anniversary of Tomsk University

#### FIRST INFORMATION MESSAGE

#### **ORGANIZERS OF THE CONFERENCE:**

- Tomsk State University (TSU).
- Faculty of Radiophysics, TSU.
- Center for Collective Use "Center for Radiophysical Measurements, Diagnostics and Research of the Parameters of Natural and artificial materials TSU".

#### TIME AND VENUE September 26-29, 2023, Tomsk

#### **CONFERENCE SECTIONS**

- Section 1. Physics of radio waves: radiation, reception and use.
- Section 2. Radio electronics and electrodynamics of microwave, extremely high frequencies and hyper high frequencies.
- Section 3. Solid-state electronics, micro- and nanoelectronics.
- Section 4. Laser and optoelectronic systems: development, creation, application.
- Section 5. Quantum electronics and photonics.
- Section 6. Modern measuring instruments and technologies.
- Section 7. Modern problems and technologies for training specialists in the field of radiophysics, radio engineering and optics.

#### SCIENTIFIC DIRECTIONS OF THE CONFERENCE

- Physics of interaction of radio waves with inhomogeneous media and objects.
- Radiotomography and ultra-wideband sounding.
- Metamaterials, magnetic materials and nanotechnology in radiophysics and electronics.
- Nanoelectromagnetism.
- Methods and tools for measuring the electromagnetic characteristics of materials in the gigahertz and terahertz ranges.
- Materials and devices for micro-, opto- and nanoelectronics.
- Semiconductor detectors and sensors.
- Laser and optoelectronic systems in the study of materials and media.
- Computer optics, digital holography, image processing.
- Quantum electronics, photonics and nonlinear optics.
- Materials and devices for nanophotonics and nanoplasmonics.
- Nonlinear dynamics, synergetics and fractal geometry in radiophysics and optics.
- Information technology in the study of complex structures.
- Physics of the magnetosphere, ionosphere, the upper atmosphere of the Earth.
- Solar-terrestrial physics and physical ecology.
- Modern technologies of teaching radiophysical and radio engineering disciplines.

#### **PROGRAM COMMITTEE**

Chairman: Demin V.V. - Associate Professor, Cand. Phys.-Math. Sciences (Tomsk, Russia).

Committee members:

Blaunstein N.Sh. - professor, doctor of physics and mathematics Sciences (Beersheba, Israel).

Maksimenko S.V. – professor, doctor of physics and mathematics Sciences (Minsk, Belarus).

Baryshnikov N.V. - professor, dr. tech. Sciences (Moscow, Russia).

Belyaev B.A. - professor, dr. tech. Sciences (Krasnoyarsk, Russia).

Voitsekhovsky A.V. – professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

Dunaevsky G.E. - professor, dr. tech. Sciences (Tomsk, Russia).

Ivonin I.V. – professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

Kistenev Yu.V. - professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

Kolesnik S.A. - associate Professor, cand. Phys.-Math. Sciences (Tomsk, Russia).

Koshelev V.I. - professor, dr. phys.-math. sciences (Tomsk, Russia).

Krutikov V.A. – dr. phys.-math. Sciences (Tomsk, Russia).

**Nikiforov A.I.** – dr. phys.-math. Sciences (Novosibirsk, Russia).

Lukin V.P. – professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

**Prudaev I.A.** – cand. phys.-math. sciences (Tomsk, Russia).

Pchelyakov O.P. - professor, doctor of physics and mathematics Sciences (Novosibirsk, Russia).

Samokhvalov I.V. - professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

Sredin V.G. – professor, doctor of physics and mathematics Sciences (Moscow, Russia).

Tarasenko V.F. – professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

Tikhomirov A.A. - Professor, Dr. tech. Sciences (Tomsk, Russia).

**Tolbanov O.P.** – professor, doctor of physics and mathematics Sciences (Tomsk, Russia).

Filimonov S.N. – cand. of Phys.-Math. Sciences (Tomsk, Russia).

Shchukin G.G. – professor, doctor of physics and mathematics Sciences (St. Petersburg, Russia).

#### **ORGANISING COMMITTEE**

Chairman of the organizing committee: A.G. Korotaev, dean of RFF, cand. phys.-mat. Sciences (Tomsk, Russia).

Co-chairman: Yurchenko A.V., professor, dr. Sciences (Tomsk, Russia)

Deputy Chairmen: Shipilov S.E., professor, doctor of physics and mathematics. sciences (Tomsk, Russia).

Members of the organizing committee: Belichenko V.P. – professor, doctor of physics and mathematics sciences; Kokhanenko A.P. – professor, doctor of physics and mathematics sciences; Kochetkova T.D. - associate professor, Cand. phys.-math. sciences; Satarov R.N. - scientific collaborator, cand. phys.-math. sciences; Klokov A.V. - associate professor, cand. phys.-math. sciences; Bryukhanov V.V. - associate professor, cand. phys.-math. sciences; Bryukhanov V.V. - associate professor, cand. phys.-math. sciences; Kharapudchenko O.V. - associate professor, cand. of pedagogical sciences.

The organizing committee in each section holds a competition of scientific reports of students, graduate students and young scientists. The best reports will be awarded with diplomas.

#### **Publications**

Based on the results of the conference, a collection of works (RSCI) will be published and selected articles will be published in the journal Izvestia Vuzov. Physics".

#### REGISTRATION FEE

Payment of the registration fee is carried out after notification of the acceptance of the report for the conference until July 15, 2023. The registration fee for participants includes payment for: programs, conference materials, participation in the work of sections, tea and coffee during the breaks of the work of sections, a buffet table.

	Early (before June 10), RUB	Late (after June 10), RUB	During the conference, RUB
Participants	6 000	8 000	10 000
Students, postgraduates	1 500	2 000	2 000

#### HOW TO TAKE PART IN THE CONFERENCE

Information about the conference is presented on the website <a href="http://apr.tsu.ru">http://apr.tsu.ru</a>.

Those wishing to take part in the conference must fill out the registration form on the conference website by June 15, 2023 inclusive.

Information for registration for participation in the conference "APR - 2021"

Surname, name, patronymic of the speaker, position, academic title, academic degree,	
date of birth (DD.MM.YYYY):	
Surname, name, patronymic of co-authors, position, academic title, academic degree:	
Country, city (for all coauthors):	
Organization (for all coauthors):	
Contact e-mail:	
Contact number:	
Form of participation (full-time, part-time):	
The title of the report, the names of the authors and a short annotation in Russian:	
The title of the report, the names of the authors and a short abstract in English:	
Section number and name:	

We invite authors to submit the final texts of their reports (electronic version, expert opinion) no later than July 15,

2023. The rules for preparing reports are posted on the website in the publications section. The Organizing Committee sends a second notice (on the inclusion of the report in the program) no later than June 30, 2023. The third (final) notice, which is sent by e-mail no later than August 30, 2023, contains more detailed information about the conference: a preliminary scientific program, the procedure for registering and holding events.

### The conference will include

School of young scientists on synchrotron radiation.

#### Seminars and presentations of firms - developers of measuring equipment and instruments

information on the program of seminars and presentations will be announced additionally.

#### TOURIST, EXCURSION AND CULTURAL PROGRAMS

Excursions around Tomsk and museums of Tomsk State University will be organized for the participants. The opportunity will be given to visit scientific laboratories and departments of the Faculty of Radiophysics.

#### WAIT FOR YOUR OFFERS

The organizing committee invites you to take an active part in the preparation and holding of the conference and all events related to the APR. By joining forces, we can make our conference more interesting and useful.

#### **SPONSOR OFFERS**

We invite national and international sponsors for financial, informational and other types of support of the conference. The following features are offered:

- to include representatives in the composition of the Organizing Committee;
- place the logo and name of the company on the materials of the conference;
- include in the conference program the scientific direction of interest to the sponsor;
- put up a product and hold a presentation of materials;
- to organize scientific and practical seminars on topics of interest to the sponsor in the framework of the conference;
- include advertising materials in the information package of the conference participant;
- to place in the collection of reports of the conference advertising materials about the sponsor's products and projects.

#### **CONTACT ADDRESSES AND PHONES:**

Mailing address for correspondence: 634050, Tomsk, Lenin Ave., 36, TSU, RFF Actual address: 634012, Tomsk, st. Lytkina, 28 g, educational building No. 11 TSU, RFF

Conference website: <a href="http://apr.tsu.ru">http://apr.tsu.ru</a>

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