



**12th international scientific and technical conference  
«Open Semantic Technologies  
for Intelligent Systems»**

**Open Semantic Technologies for Intelligent Systems**

**OSTIS-2023**

**April 20-22, 2023 Minsk. Republic of Belarus**

**C A L L F O R P A P E R S**

We invite you to take part in XIII International Scientific and Technical Conference “Open Semantic Technologies for Intelligent Systems” (OSTIS-2023), which will focus on areas of use of the semantic technologies.

Conference will take place from *April, 20th to April, 22th, 2023* at the Belarusian State University of Informatics and Radioelectronics, Minsk, Republic of Belarus.

Research Papers Collection language: English

Working languages of the conference: Russian, Belarusian, English

**MAIN ORGANIZERS OF THE CONFERENCE**

- Ministry of Education
- Ministry of Communications and Informatization
- Belarusian State University of Informatics and Radioelectronics (BSUIR)
- The State Scientific Institution «The United Institute of Informatics Problems of the National Academy of Sciences of Belarus» (UIIP NASB)
- State Institution “Administration of High Technologies Park” (Republic of Belarus)
- Educational-scientific association in the direction of "Artificial Intelligence" (ESA-AI)
- Belarusian State University (BSU)
- Brest State Technical University (BrSTU)
- Minsk State Linguistic University (MSLU)
- Euphrosyne Polotskaya State University of Polotsk
- Yanka Kupala State University of Grodno
- Belarusian State Medical University
- Russian Association of Artificial Intelligence (RAAI)
- Belarusian Public Association of Artificial Intelligence Specialists (BPA of Artificial Intelligence Specialists)

**CONFERENCE TOPICS:**

- *Principles underlying interoperable intelligent computer systems and technologies for comprehensive support of their life cycle*
- *Semantic representation and ontological systematization of knowledge in semantically compatible interoperable intelligent computer systems*
- *Multi-agent problem solving models in semantically compatible interoperable intelligent computer systems*
- *Ontological models of interfaces for semantically compatible interoperable intelligent computer systems*
- *Methods and means of comprehensive support for the design of semantically compatible interoperable intelligent computer systems*
- *Software and hardware platforms for the implementation of semantically compatible interoperable intelligent computer systems*
- *An ecosystem of semantically compatible interoperable intelligent computer systems that provides comprehensive automation of various types and areas of human activity*

**CONFERENCE GOALS AND FORMAT**

The goal of the conference is to discuss problems of creation of the **open complex technology for component design of semantically compatible interoperable hybrid intelligent systems that ensures compatibility and integration of various private artificial intelligence technologies**. This determines the Conference format, which involves wide discussion of various questions of creating of such technology and poster sessions.

During the **poster sessions** every participant of the conference will have an opportunity to demonstrate his results. Conference format assumes exact start time of each report, and exact time of its

exhibition presentation.

One of the major objectives of the conference is to attract not only scientists and postgraduate students, but also students who are interested in artificial intelligence, as well as commercial organizations willing to collaborate with research groups working on the development of modern technologies for intelligent systems design.

## **PARTICIPATION TERMS AND CONDITIONS**

All those interested in artificial intelligence problems, as well as commercial organizations willing to collaborate with research groups working on the development of modern technologies for intelligent systems design are invited to take part in the Conference.

To participate in the OSTIS-2023 conference, it is necessary to register in the [CMT](#) system **before March 13, 2023**, find conference page, and from there:

- submit a **participation form** for the OSTIS conference. Each participation form field is required, including indication of the reporter. By filling in the registration form, you agree that your personal data will be processed by the Organizing Committee of the Conference, and that the paper and information about the authors will be published in printed and electronic format. Participation form should contain information on all of the authors. If author(s) are participating with a report, participation form should have their **color photo(s)** attached (they are needed for the Conference Program);

- upload an **article** for publication in the OSTIS Research Papers Collection. Papers should be formatted according to the provided template (see <https://proc.ostis.net/for-authors/>). Six full pages is a minimum size of a paper.

- send the signed **scan of the letter of consent**

If a report is submitted to participate in one of the contests, this intention should be clearly indicated in the participation form.

The selection of papers for publication in the Research Papers Collection and participation in the Conference is performed by a number of reviewers from among the members of the Conference Program Committee.

Incompliant applications and papers will be rejected.

Conference participation does not require any fees.

## **PAPERS SUBMISSION PROCEDURE**

Papers (only on topics mentioned above) should be submitted ready for publication (<http://proc.ostis.net> -> For authors). The text should be logically complete and contain new scientific and practical results. Each author is allowed to submit two reports maximum.

After receiving the article, it is sent for review. The authors can get acquainted with the results of the review in [CMT](#), if necessary, correct the comments of the reviewers and send them for re-review.

The Organizing Committee reserves the right to reject any paper, if it does not meet the formatting requirements and the Conference topics, as well as if there was no participation form submitted for the paper.

## **YOUNG SCIENTIST REPORTS CONTEST**

Authors of the report submitted to the contest may include scientists with scientific degrees, but the report should be made by those without a degree and under 35 years old.

To take part in the young scientists report contest, it is necessary to:

- 1) fill in the participation form, where your participation in the contest is clearly indicated;
- 2) write an article and upload it to the [CMT](#) website;
- 3) fill in, sign, scan and send letter of consent via the email.
- 4) make a report at the conference (in person);

## **YOUNG SCIENTIST PROJECTS CONTEST**

Projects of applied intelligent systems and systems aimed at supporting the design of intelligent systems are allowed to take part in the contest; they have to be presented by a scientist without a degree and under 35 years old.

To take part in the young scientist projects contest, it is necessary to:

- 1) fill in the participation form, where your participation in the contest is clearly indicated;
- 2) write an article and upload it to the [CMT](#) website;
- 3) make a report at the conference (in person);
- 4) make an exhibition presentation of the software

### **STUDENT INTELLIGENT SYSTEM PROJECTS CONTEST**

To participate in the contest, a project must meet the following criteria: (a) it was developed by students and/or undergraduates of the higher education institutions, and (b) project consultants and advisors must hold a scientific degree and title. To participate in this contest, it is necessary to:

- 1) familiarize yourself with contest's terms and conditions (<http://conf.ostis.net>);
- 2) fill in the participation form for the contest (<http://conf.ostis.net>);
- 3) prepare a summary of the project (<http://conf.ostis.net>).
- 4) submit the participation form and project summary to the student projects' email address: [ostis.stud@gmail.com](mailto:ostis.stud@gmail.com).

### **CONFERENCE PROCEEDINGS PUBLICATION**

The Conference Organizing Committee plans to publish the papers selected by the Program Committee based on the results of their review, in the Conference Proceedings, on the official Conference website <http://conf.ostis.net> and on the Conference Proceedings website <http://proc.ostis.net>.

Upon successful review author sends a letter of consent to the Organizational Committee. Author therefore agrees that his paper can be made freely available in electronic form at other resources at the Editorial Board's discretion.

Since 2020, the OSTIS Research Papers Collection has been included in the List of Scientific Publications of the Republic of Belarus for publishing the results of dissertation research (List of the Higher Attestation Commission of the Republic of Belarus) in the technical field of science (informatics, computer technology and management).

In addition, following the results of the conference, it is planned to publish the Selected Papers Collection of the OSTIS conference in the series "Communications in Computer and Information Science" (CCIS) published by Springer. Detailed information about this can be found on the conference website (<http://conf.ostis.net>).

### **KEY DATES OF THE CONFERENCE**

<b><i>March 1, 2023</i></b>	paper submission opens
<b><i>March 13, 2023</i></b>	paper submission deadline
<b><i>March 27, 2023</i></b>	paper review deadline
<b><i>April 10, 2023</i></b>	final decision on paper publication; sending out invitations and notifications on inclusion of a paper in the OSTIS Research Papers Collection
<b><i>April 13, 2023</i></b>	Draft Conference Program publication on the conference website <a href="http://conf.ostis.net">http://conf.ostis.net</a>
<b><i>April 17, 2023</i></b>	Research Papers Collection publication on the conference website <a href="http://proc.ostis.net">http://proc.ostis.net</a>
<b><i>April 20, 2023</i></b>	Participant registration and OSTIS-2023 conference opening
<b><i>April 20-22, 2023</i></b>	OSTIS-2023 Conference
<b><i>May 2, 2023</i></b>	Photoreport and conference report publication on the conference website: <a href="http://conf.ostis.net">http://conf.ostis.net</a>
<b><i>May 20, 2023</i></b>	Research Papers Collection will be uploaded to the Russian Science Citation Index database

### **CONFERENCE PROGRAM FORMATION**

Conference program is formed by the Program Committee according to the paper review results; author(s)' confirmation of participation is required as well.

## CONTACTS

All the necessary information about the forthcoming and previous OSTIS Conferences can be found on the conference website <http://conf.ostis.net> and <http://proc.ostis.net>.

For questions regarding conference participation and dispute resolution please contact: [ostisconf@gmail.com](mailto:ostisconf@gmail.com).

Methodological and advisory support to the conference participants shall be provided through the conference e-mail only.

The conference venue is the 5<sup>th</sup> academic building of the Belarusian State University of Informatics and Radioelectronics (39, Platonov str., Minsk, Republic of Belarus).