



VI International Scientific and Technical Conference
“**Innovative Designs and Technologies
of Nuclear Power**” (ISTC NIKIET-2022)



Sixth Information Letter

JSC “N.A. Dollezhal Research and Development Institute of Power Engineering” (JSC NIKIET) sends out this invitation to take part in the Sixth International Scientific and Technical Conference “Innovative Designs and Technologies of Nuclear Power” (ISTC NIKIET – 2023), which will be held with the support from the Rosatom State Corporation and the Nuclear Society of Russia on October 2023 (the date will be specified later in March 2023) in Moscow.

CONFERENCE HIGHLIGHTS

1. Innovative designs of nuclear facilities for various applications (power, research, meltsalt, etc.).
2. Nuclear fuel and new materials (including additive manufacturing).
3. Closed fuel cycle technologies, SNF and RW management, technological answers to the problems of non-proliferation.
4. Small size power reactors (stationary, floatable, transportable, submarine, space).
5. Integrated computation codes of a new generation for safety analysis of nuclear power facilities and their fuel cycles.
6. Fusion technology (controlled fusion, thermonuclear reactor, etc.).

The Conference will also include round-table discussions on “**Global Nuclear Power Development and Present Challenges**”.

The Conference programme covers plenary sessions, section activities, poster presentations and round-table discussions.

ORGANIZING COMMITTEE

Chairman – Andrey KAPLIENKO, Director General of JSC “NIKIET”

Deputy Chairman – Aleksander PIMENOV (JSC “NIKIET”)

Executive Deputy Chairman – Boris GABARAEV (JSC “NIKIET”)

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PROGRAMME COMMITTEE

Chairman – Evgeny ADAMOV, Scientific Supervisor (JSC “NIKIET”)

Deputy Chairman – Aleksander LOPATKIN (JSC “NIKIET”)

Scientific Secretary – Aleksander DZHALAVYAN (JSC “NIKIET”)

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E-mail: istc_nikiet@nikiet.ru

THE CONFERENCE WORKING LANGUAGES

The Conference working languages are Russian and English.

SUBMISSION OF ABSTRACTS AND FULL-LENGTH PAPERS

Abstracts no more than 1 page long shall be submitted to the Programme Committee **no later than February 7, 2023**.

Full-length papers no more than 12 pages, including illustrations, tables and references, shall be submitted to the Programme Committee **no later than April 18, 2023**.

Abstracts and full-length papers shall be submitted **in English** in electronic form (Microsoft Word). The presenters will download all their materials into their personal areas on the conference website (<http://istc-2023.nikiet.ru>) after the registration. The website will be opened on September 15, 2022.

Where difficulties arise with the virtual personal area operations, the materials may be e-mailed to Boris GABARAEV, Executive Deputy Chairman of the Organizing Committee: boris-gabaraev@yandex.ru.

The format requirements for abstracts and full-length papers are attached (**Annexes 1 and 2**). It is planned to have the conference abstracts and papers issued in a CD format by the beginning of the conference.

Presentations shall be **in English**.

JSC “NIKIET” and the Conference Organizing and Programme Committees shall not be held responsible for any potential damage inflicted upon an organization or an individual **in consequence of any information having been disclosed in an unauthorized manner** as part of the materials provided in writing or verbally during the conference by its participants. Full responsibility for such damage shall rest with the participant in the conference who has provided this information.

VENUE

JSC “NIKIET”, Moscow, Malaya Krasnoselskaya, 2/8, Conference Hall.

ORGANIZATIONAL AND FINANCIAL ISSUES

The applications for participating in the conference will be received until January 28, 2022 (with papers) and until July 29, 2022 (without papers).

The organizational fee is 900 Euro for each conference participant. Members of Organizing and Programme Committees as well as teachers, students and graduate students of Universities will be exempted from having to pay the organizational fee.

The fee payment covers organizational services (including the lunch and coffee breaks); simultaneous and consecutive interpreting; publication of the book of abstracts on paper, publication of abstracts and papers in the conference proceedings in electronic form (on a CD), publication of the conference proceedings on the JSC “NIKIET” official website and on the ISTC NIKIET – 2023 website; as well as the Krasnoselskaya metro station – JSC “NIKIET” transfers.

The organizational fee shall be paid to the bank account of JSC “NIKIET” (Bank details will be placed on the ISTC NIKIET – 2023 website at <http://istc-2023.nikiet.ru>). The payment by a plastic card on the conference days is also possible.

The online registration form for the participants, the conference information, the conference preliminary programme and the agreement form will be available on the ISTC NIKIET – 2023 website at <http://istc-2023.nikiet.ru> and on the JSC “NIKIET” website at <http://www.nikiet.ru>.

Where difficulties arise with the online registration on the conference website, the **application for the participation** may be e-mailed to Boris GABARAEV, Executive Deputy Chairman of the Organizing Committee E-mail: boris-gabaraev@yandex.ru , telephone: +7 985 991 17 08, fax: +7 499 788 20 52.

The application form is attached (**Annex 3**).

ABSTRACT FORMAT

Abstracts **in English**, no more than 1 page long (A4, 21×29.7 cm), shall be submitted to the Programme Committee **no later than February 7, 2023** in electronic form (Microsoft Word).

The presenters will upload their abstracts into their personal areas on the conference website (<http://istc-2023.nikiet.ru>) after the registration. The online registration will be open on February 7, 2023. Where difficulties arise with the virtual personal area operations, abstracts may be e-mailed to Boris GABARAEV, Executive Deputy Chairman of the Organizing Committee: boris-gabaraev@yandex.ru

General abstract text parameters:

Margins – all margins are 2.5 cm; common printable field dimensions are 16×24.7 cm.

Font – Times New Roman 12 pt.

Line spacing – single.

Abstract text arrangement on the page:

- paper title – semibold font, all capital letters, center alignment, space before 12 pt, space after 6 pt;
- authors – family name, initials, name of the organization, city, country: center alignment, space before 6 pt, space after 6 pt;
- abstract text – justified alignment, paragraph (first line) indent 1.2 cm.

No illustrations or references shall be attached to abstracts.

PAPER TITLE

Ivanov I., Frolov F. (JSC “NIKIET”, Moscow, Russia)
Petrova P. (JSC “GNC RF NIIAR”, Moscow, Russia)
Sidorov S. (NRC “Kurchatov Institute”, Moscow, Russia)

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FULL-LENGTH PAPER FORMAT

Full-length papers **in English** (A4, 21×29.7 cm) of not more than 12 pages, including illustrations, tables and references, shall be submitted to the Programme Committee **no later than April 18, 2023** in electronic form (Microsoft Word).

The presenters will upload their papers into their personal areas on the conference website (<http://istc-2023.nikiel.ru>) after the registration. The online registration will open on February 7, 2023. Where difficulties arise with the virtual personnel area operations, papers may be e-mailed to Boris GABARAEV, Executive Deputy Chairman of the Organizing Committee: boris-gabaraev@yandex.ru.

General paper text parameters:

Margins – all margins are 2.5 cm; common printable field dimensions are 16×24.7 cm.

Font – Times New Roman.

Line spacing – single.

Page numbers – page bottom, center, 12 pt, ordinary font.

Paper text arrangement on the page:

- paper title – semibold 12 pt font, all capital letters, center aligned, space before 12 pt, space after 6 pt;
- authors – (family name, initials), name of the organization, city, country: 12 pt, center alignment, space before 6 pt, space after 6 pt;
- paper body – 12 pt ordinary font, full justification, paragraph (first line) indent 1.2 cm.
Possible headlines within the paper body:
 - section headline: 12 pt, semibold font, left justification, space before and after 6 pt;
 - subsection headline: 12 pt, italic, left justification, space before and after 6 pt;
 - table heading: 11 pt, semibold font, center alignment, space before and after 6 pt;
 - table number: 11 pt, italic, right alignment, space before and after 6 pt.

Figures and tables are placed in the paper body. Page, table and figure numbering is continuous. Table text – 11 pt, ordinary font. The table heading positions shall be as shown in the format example. The caption – 11 pt, italic, space after – 6 pt. There is no numbering for single figure or table in the paper, and no words *Figure* and *Table* shall be used in these cases while the caption, the table heading and references to them are obligatory.

The list of references shall be placed at the end of the paper and its format shall be **in accordance with the general requirements for scientific and technical publications**.

The references to tables, figures and literature within the paper body shall not be reciprocal (no Word editor tool shall be used).

Introduction and Conclusion shall be formatted as section headlines but shall not be numbered.

A paper body format example follows.

PAPER TITLE

Ivanov I., Frolov F. (JSC “NIKIET”, Moscow, Russia)
Petrova P. (JSC “GNC RF NIIAR”, Moscow, Russia)
Sidorov S. (NRC “Kurchatov Institute”, Moscow, Russia)

Introduction

1. Section headline

1.1. Subsection headline

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1.2. Subsection headline

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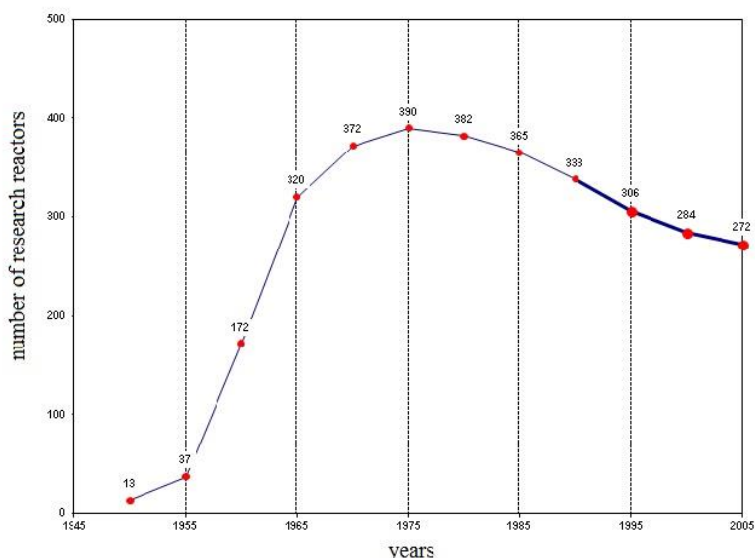


Fig. 1. Dynamics in the number of research reactors worldwide in 1945-2005

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2. Section headline

2.1. Subsection headline

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Data on nuclear research facilities (NRF) worldwide [3]

Country	Number of NRFs built	NRFs in operation	NRFs with $W \geq 1$ MW, in operation	RRs with $W \geq 15$ MW, in operation
Great Britain	36	3	0	0
Germany	46	13	4	2
India	10	6	4	3
Canada	19	10	4	1
China	18	16	9	2
Republic of Korea	4	2	1	1
Russia	97	54	13	7
USA	227	52	20	3

This page is arranged to the required full-length text format. This page is arranged to the required full-length text format (Table. 2).

Table 2

Table heading

Name of parameter	Quantity	Value 1	Value 2	Value 3
Parameter 1	10	3	0	0
Parameter 2	20	13	4	2

2.2. Subsection headline

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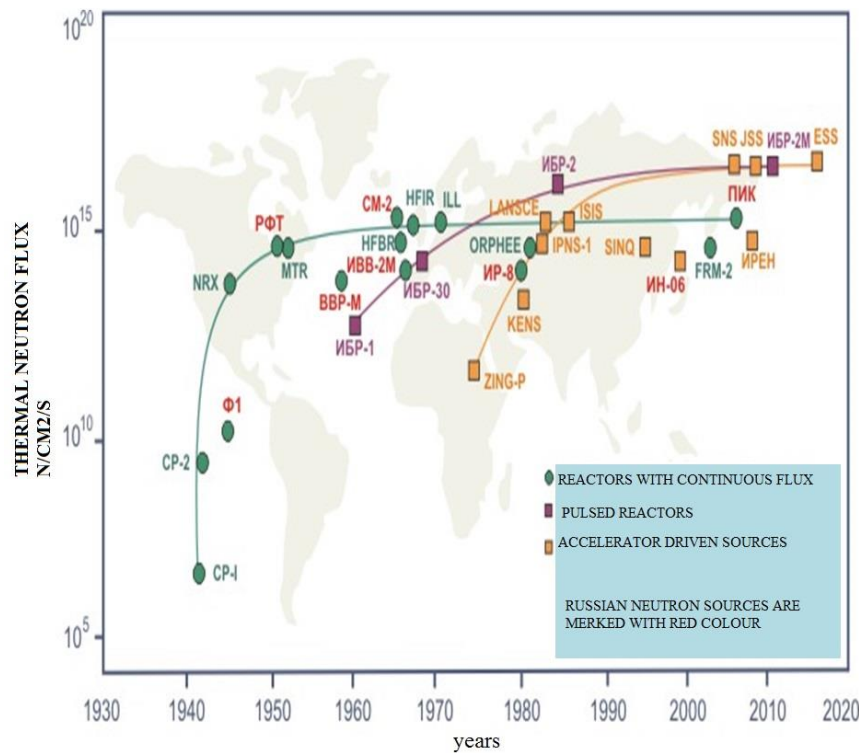


Fig. 2. Evolution of different neutron sources worldwide prior to 2020

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Conclusions

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References

1. Strength Analysis Code for Components and Pipelines of Nuclear Power Plants: Rules and Regulations in Nuclear Power (PNAE G-7-002-86). Moscow: Energoatom Publ., 1989. 25 p. (in Russian).
2. Filatov V.M., Barsanov V.N., Evropin S.V. Reactor Irradiation Effects on the Cyclic Strength of Zirconium Alloys // *Atomnaya Energiya*. 1983. V. 55. Iss. 1. P. 29-31 (in Russian).
3. Nuclear Research Reactors in the World. September 2000 Edition. IAEA, Vienna, 2000. 10 p.
4. Keeping Tools Available for Future Nuclear Research in Europe / J. Guidez, D. Iracane, P. Ledermann, L. Martin. European Nuclear Conference ENC 2005, Versailles, France, 11-14 December, 2005. 10 p.
5. IAEA Electronic Database on Nuclear Research Facilities, www.iaea.org/worldatom/rrdb/.

**Application for the participation
in the Sixth International Scientific and Technical Conference
“Innovative Designs and Technologies of Nuclear Power”
(ISTC NIKIET – 2023)
October, 2023 (the date will be specified later in March 2023)**

Family Name	
First Name	
Country	
Post Address	
Phone number	
Fax number	
E-mail	
Profession	
Organization	
Position	
Paper (if any)	
Paper authors	
Reporter Name	
Organizational fee payment method* (choose one option)	Transfer to the account based on a contract Transfer to the account without making a contract Payment by plastic card on the conference day