

NATIONAL TECHNICAL UNIVERSITY OF UKRAINE "IGOR SIKORSKY  
KYIV POLYTECHNIC INSTITUTE"



INSTITUTE OF TELECOMMUNICATION  
SYSTEMS  
RESEARCH INSTITUTE OF THE  
TELECOMMUNICATIONS



**MCT 2023**

18-21 April 2023, Kyiv, Ukraine,  
Seventeenth International Scientific and  
Technical Conference  
**"MODERN CHALLENGES IN  
TELECOMMUNICATIONS"**

**ПТ 2023**

Сімнадцята Міжнародна  
науково-технічна конференція  
**«ПЕРСПЕКТИВИ ТЕЛЕКОМУНІКАЦІЙ»**,  
18-21 квітня 2023 р. Київ, Україна

***The conference is dedicated***

***125th anniversary of the National Technical University of Ukraine "Igor Sikorsky  
Kyiv Polytechnic Institute" On the 20th anniversary of the Educational and  
Scientific Institute of Telecommunication Systems 30th anniversary of the  
Department of Telecommunications***

## Second Announcement

At a meeting of the Program Committee of the 16th International Scientific and Technical Conference "Modern Challenges in Telecommunications" (MCT-2022), held in Kyiv on June 30, 2022, decided to hold a conference

**on April 18-21, 2023**

Presentations at the conference will be made in the following areas:

1. Reliability and effectiveness of information transmission.
  2. Network, optical fiber technologies and security.
  3. Wireless technologies, mobile communication systems.
  4. Information technologies in telecommunications.
  5. Sensor networks and the Internet of Things.
  6. Exhibition: Innovative developments in the field of telecommunications.
- Seminar "Innovative activity of students of NN ITS" (Within the framework of student MNTC "PRITS").

CONFERENCE LANGUAGES – UKRAINIAN, ENGLISH

## MCT-2023 PROGRAM COMMITTEE

(in brackets are indicated numbers of listed areas formed by committee members)

### Conference Co-Chairs:

M.Y. ILCHENKO – Director of Telecommunication systems Institute of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, Academician of the National Academy of Sciences of Ukraine, Doctor of Technical Sciences, Professor;

A.A. BARANOV – Head of the Scientific Research Center for Digital Transformations and Law of the Scientific Research Institute of Informatics and Law at the National Academy of Legal Sciences (NDIIP NAPrN) of Ukraine, Doctor of Law, Professor.

### Coordinator of the Program Committee:

Rina Novogradskaya – Ph.D., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (Pl, 6).

Sergiy Kravchuk – d.t.s., Prof., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (Pl, 3).

### Committee members:

BOGUSH V.M. – Ph.D., NAU, Kyiv, (2);

CHECHELNITSKY V.Ya. – d.t.s., Professor, ONPU, Odessa, (2);

CHUMACHENKO S.M. – Ph.D., Senior Scientist, NUFT, Kyiv, (5);

FELDMANN M. – Dr.-Eng. Technical University of Dresden, Dresden, Germany;

GLOBA L.S. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (4);

GUDYMENKO I.A. – Dr.-Eng. at T-Systems MSC, Dresden, Germany;

KAPSHTYK V.S. – Ph.D., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (3);

KATOK V.B. – d.t.s., Professor, JSC “Ukrtelecom”, Kyiv, (2);

KISSELEFF S. – PhD St. of Friedrich-Alexander-University, Nurnberg, Germany;

KOT T. – Dr.-Eng., Solutions Architect, NVision Czech Republic, Prague, Czech Republic;

LAVRUT O.O. – d.t.s., Professor, Hetman Petro Sahaidachnyi National Army Academy, Lviv, (2),

LEMESHKO O.V. – d.t.s., Professor, KNURE, Kharkiv, (2);

LUNTOVSKYY A.O. – Prof. at BA Dresden University, Dresden, Germany;

LYSENKO O.I. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (5);

MAKSIMOV V.V. – Ph.D. Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (1);

MINOCHKIN D.A. – Ph.D. Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (3);

MOSHYNKA A.V. – d.t.s., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (1);

NARYTNIK T.N. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv;

NAZARENKO O.I. – Ph.D., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (1);

POPOV V.I. – Dr.h.phys., Prof., Riga Technical University, Riga, Latvia;

PRAVILO V.V. – Ph.D., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (5);

ROMANOV A.I. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (2);

ROMANYUK V.A. – d.t.s., Professor, VITI, Kyiv, (5);

SERGIENKO M.I. – Ph.D. Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (6);

SKULYSH M.A. – d.t.s., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (4);

SPILLNER J. – Dr. at ZHAW School of Engineering, Zurich, Winterthur, Switzerland;

STRYZHAK O.E. – Ph.D., SC “Mala ANU” Kyiv, (4);

TENSHI HARA – Dr.-Eng. Technical University of Dresden, Dresden, Germany;

TOLIUPA S.V. – d.t.s., Professor, Shevchenko Kiev National University, Kyiv, (2);

TRUBIN O.O. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (2);

URYVSKY L.O. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv (1);

YAKORNOV E.A. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (2);

YAVISYA V.S. – Ph.D., Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (3);

ZAVYSLYAK I.V. – Dr.ph.-m.s., Professor, Shevchenko Kiev National University, Kyiv, (2);

ZHUK Ya. S. – d.t.s., Professor, Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, (5).

## INFORMATION ABOUT REGISTRATION

For registrations on conference you need to follow <http://conferenc.its.kpi.ua/2023> choose “Account”, carefully fill profile, and choose “Create”. Instruction is located on <http://www.its.kpi.ua/conferences> in bookmark XVII International Scientific Conference “Modern Challenges in Telecommunications”.

The deadline for materials receipt for Organizing Committee is **March 31, 2023**.

## SUBMISSION PROCEDURE

◇ Papers (only for the above areas) are presented in the final form for publication. The report should be logically complete, which contains new ideas, hypotheses, research and/or new technical solutions obtained in laboratory or industrial testing.

◇ Size of the paper, including a brief translation, illustrations and references, should be 3 A4 full pages of (210x297 mm). An increase of up to four or five pages is possible only by agreement with the member of the Program Committee, which forms the program of the corresponding section.

◇ For terms of the correspondence with the authors, please, follow <http://conferenc.its.kpi.ua/2023>. Emails formed and sends by program of conference *automatically*.

◇ The correspondence with the authors will be conducted only by email. Email of Organizing Committee [conf@its.kpi.ua](mailto:conf@its.kpi.ua), [t.me/MNTK\\_PT](https://t.me/MNTK_PT).

## RULES FOR MATERIALS DESIGN, SUBMITTED TO THE MCT-2020 CONFERENCE

# Materials should be submitted:

a) in the Ukrainian or Russian languages, the English abstract is obligatory (name of the report, organization of authors and their details); abstract size should be between 3 to 8 lines (see sample); or

b) in the English language with the obligatory abstract in the Russian or Ukrainian languages (the title of the report, organization of authors and their details) abstract size should be between 3 to 8 lines (see sample).

# Margins: top and bottom are 20 mm, left is 25 mm, right is 15 mm. The whole text and illustrations must be located within the area 170x252 mm.

# Font for the main text: Times New Roman; the main text is 14 pt, abstract and references is 12 pt; single line spacing for the whole text; name is 14 pt, bold, caps lock, centered; surnames (without titles and degrees) are 14 pt, bold; organization name, address are italic 14 pt; subtitles are 14 pt, bold, centered.

# Font for signatures on drawings: Times New Roman – 12 pt, single line spacing, centered.

# Titles:

Abstract (short description of the purpose of the article and its results). Text of the abstract should not duplicate the name of the report. Ukrainian, Russian and English versions of the abstract must match.

Literature - up to 10 references, should be designed in accordance with DSTU 8302:2015 «Information and documentation. Bibliographic reference. General requirements and rules of assembly».

# Abbreviations: all the not common abbreviations should be spelled out.

# Figures should be created in such a way that allows page-proof the text without “spilling” of the picture. The thickness of the lines in the figures SHOULD NOT BE LESS THAN 1 pt!

# Report materials should be prepared in electronic format (file format is \*.Doc, Word 97-2003) and after registration on <http://conferenc.its.kpi.ua/2023> downloaded on electronic platform with instruction, located on <http://www.its.kpi.ua/conferences> in bookmark 14th International Scientific Conference “Modern Challenges in Telecommunications”.

# The paper materials, made using the formula editor, must be sent both in .doc and .pdf formats (by accompanying file to materials giving on conference).

# Expert conclusions are represented at the discretion of the authors (for authors who represent universities of Ukraine, such a procedure is established by the Ministry of Education and Science of Ukraine in a letter dated 16.01.09 № 1/9-22). Expert conclusions should be sent unregistered at building 30, 2, Industrialny provulok, room 604, Kyiv 03056, the secretary of the organizing committee of the conference T.L. Ivanova, or as an image file to e-mail: [conf@its.kpi.ua](mailto:conf@its.kpi.ua).

## THE CONFERENCE PROGRAM FORMING

The conference program will be formed by the Program Committee meeting which is scheduled for mid March 2023 in Kyiv.

The conference program with the terms of participation and allocation will be posted on the conference website ((<http://conferenc.its.kpi.ua/2023> & <http://www.its.kpi.ua/conferences>)) in early -March. Brochure on the conference program will be issued to each participant upon registration.

Materials reports are also published on a single publishing-technical platform Open Journal Systems (OJS) (<http://journals.uran.ua>). URL-links to articles of previous conferences are located in the archives of numbers by year <http://conferenc.its.kpi.ua/proc/issue/archive>.

## TERMS AND CONDITIONS OF MATERIAL SUBMISSION

The following documents and materials should be sent up to **31.03.2023** sign up and give materials on <http://conferenc.its.kpi.ua/2023> on electronic platform of conference by instruction, located on <http://www.its.kpi.ua/conferences> in bookmark XVI International Scientific Conference “Modern Challenges in Telecommunications”.

The scanned document on the possibility of the publication of materials in the Ukrainian media (if needed) given by accompanying file to materials giving on conference (*use instruction*).

## Organization Fees

Before paying the fee, check the conference website to see if the terms of payment have changed

	Participation and publication in electronic collection (conf. website, site of the conference journal) <b>ISSN online 2664-3057</b>	Participation and publication in both electronic and book collection (typographic publication) <b>ISSN (print) 2663-502X</b>
Students and graduates	50 ₴	300 ₴
Experts and scientists	100 ₴	300 ₴

Program and paper compilation are published at the expense of organization fees that cover part of the costs of conference organization.

Registration fees should be transferred to the account of Telecommunications Research Institute (in UAH), only after receiving a positive review of the submission.

***Recipient: Igor Sikorsky Kyiv Polytechnic Institute***

***USREOU: 02070921***

***Bank: DSTSU Kiev***

***IBT: 820172***

***C/a: UA638201720313221007201013853***

***Purpose of payment specify: Full Name;***

***To participate in the TRI conference***

***"IIT-2023" on the balance No. 516***

For the foreign participants contributions will be accepted through accounts departments during registration in the national currency of Ukraine.

For more information:

t.me/MNTK\_PT

e-mail: [conf@its.kpi.ua](mailto:conf@its.kpi.ua)

<http://conferenc.its.kpi.ua/2023>

<http://its.kpi.ua>