

V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY
NATIONAL SCIENCE CENTER KHARKIV INSTITUTE OF PHYSICS AND TECHNOLOGY
MAX PLANCK INSTITUTE OF MICROSTRUCTURE PHYSICS
TARAS SHEVCHENKO NATIONAL UNIVERSITY OF KYIV
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NATIONAL AEROSPACE UNIVERSITY NAMED AFTER N.E. ZHUKOVSKY (Kharkiv)
CJSC "INSTITUTE OF INFORMATION TECHNOLOGY" (Kharkiv)
KHERSON NATIONAL TECHNICAL UNIVERSITY
TEAM INTERNATIONAL SERVICES, INC. (Lake Mary, USA)

Scientific and Technical International Conference

«COMPUTER MODELLING IN HIGH TECH (CMHT-2022)»

<http://www-csd.univer.kharkov.ua/science/konferentsiyi/>

November 23-25, 2022, Kharkiv, Ukraine

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1st official announcement
October 1st, 2022

Welcome to Participate in the Seventh Conference
«COMPUTER MODELLING IN HIGH TECH (CMHT-2022)»,



that will take place
through online-format between
23 and 25 November, 2022
at **V.N. KARAZIN KHARKIV
NATIONAL UNIVERSITY**



**Scientists, lecturers, postgraduates
and students participating in research programs
are invited**

CONFERENCE SCOPE:

- 1. Mathematical modeling of technological processes and devices.**
- 2. Modeling of the informational processes in complex and distributed systems.**
- 3. Systems of the computer-aided acquisition and cognitive representation of the scientific data.**
- 4. Modeling of physical processes in radiation, plasma and other modern technologies.**
- 5. Security of information systems and technologies.**
- 6. Models of software development and quality assessment.**
- 7. Students, graduates and young scientists**

After the presentation and discussion, the papers recommended by the section leadership will be published in the conference proceedings.

Working languages: **Ukrainian and English.**

Plan of preparations:

26.09.2022 – 02.10.2022 – publication of the Organizing Committee 1st announcement,
03.10.2022 – 30.10.2022 – submission of applications to participate in the conference,
24.10.2022 – 30.10.2022 – publication of the Organizing Committee 2nd announcement,
03.10.2022 – 06.11.2022 – submission of the scientific reports,
14.11.2022 – 22.11.2022 – delivery of personal invitations and the CMHT-22 program,
23.11.2022 – opening of the CMHT-2022 at V.N. Karazin KhNU.

The official address of the conference:

**V.N. Karazin Kharkiv National University,
Svobody Sq., 6, Kharkiv, Ukraine, 61022**

Tel. : **+38(057) 705-42-81, +38(067)834-834-8**

Fax: **+38(057)707-50-18**

E-mail: : **kmht@karazin.ua**

Website: **<http://www-csd.univer.kharkov.ua/science/konferentsiyi/>**

The Conference Proceedings Format Requirements

It is recommended to use the **MS Word** template that will be attached to the letter with the second information announcement to prepare the text of report.

The report volume must be between **two (full)** and **four** A4 pages prepared in **MS Word 2003-2010**.

The page margins should be of 25 mm each, header and footer are to be of 12.5 mm.

The report font must be 11 pt Times New Roman, unless otherwise stated. Line-breaks are not allowed. All the elements must be single-spaced.

The first page must have the following structure:

The page footer must contain the author's copyright notice, left aligned.

The UDC index (in bold) must be placed in the upper left corner of the printing area.

The names of authors have to be placed below.

Next goes the centered title of the report typed in 14 pt bold capitals. The title total length must not exceed 120 characters, and it is not recommended to use in it more than 12 words (excluding prepositions). If the report title consists of more than one line, the first one should be separated by the character of line break (as by the key "Enter").

The annotation is justified in 9 pt Times New Roman font, keywords are typed in 9 pt Times New Roman Cyr font.

The text body must consist of justified single-spaced lines with font size of 11 pt and no hyphenation. The paragraph indent must be 12,5 mm.

The section headings should be in 11 pt Times New Roman font. They must be left aligned and (except the first) separated from the preceding text by a single blank line. There will be no additional spacing between a section heading and the text below it.

The subheadings are to be formatted in the same way as the headings do. Only one level of subheading nesting is allowed.

The figures contained in the report can be executed in any format supported by Word; their size should not exceed the text field. All figure elements should be grouped. A caption has to be typed under the picture in 10 pt italic Times New Roman, as in the example below:

Fig. 1 The drawings caption

The formulae should be typed with the help of built-in Equation Editor 3.0 only. The font sizes are: normal – 11 pt, large index – 7 pt, small index – 6 pt, large symbol – 16 pt, small symbol – 11 pt. The formula number has to be placed in brackets to the right of formula (at the end of a line).

The tables should be centered. The table title comprised of the table number and title must be placed under the table and left aligned. Its font must be 10 pt Times New Roman. The numeration must be successive, starting from 1.

The list of references follows the text of the report double-spaced. It has to be typed in 11 pt Times New Roman according to the form of the example below. The referred sources should be numbered beginning from 1 and meet the State Standard 8302:2015.

The recommended examples of the literary sources formatting:

[lib.znau.edu.ua > images > phocagallery > Pryklady DSTU 8302 2015](http://lib.znau.edu.ua/images/phocagallery/Pryklady_DSTU_8302_2015)
<https://periodicals.karazin.ua/mia/libraryFiles/downloadPublic/66>

The example of the references list is shown below:

REFERENCES

1. Стеценко І.В. Моделювання систем: навч. посіб. Черкаси: ЧДТУ, 2010. 399 с.
2. Олифер В., Олифер Н. Компьютерные сети. Принципы, технологии, протоколы : Учебник для вузов. Питер: 5-е изд. СПб, 2016. 992 с.
3. Лосев Ю. І., Руккас К. М., Шматков С. І. Комп'ютерні мережі: навч. посіб. / за редакцією Ю. І. Лосева. Харків : ХНУ імені В. Н. Каразіна, 2013. 248 с.
4. Ляшенко В.П., Кобильська О.Б., Дям'янченко О.П. Математичні моделі теплообміну з умовами імпедансного типу у багатошарових областях. *Вісник Кременчуцького національного університету імені Михайла Остроградського*. 2017. Вип. 6/2017 (106). С. 37–43.
5. Боков І. П., Бондаренко Н. С., Стрельнікова О. О. Дослідження поведінки узагальнених переміщень, отриманих із використанням теорії {m,n}-апроксимації. *Вісник Харківського національного університету ім. В.Н. Каразіна серія «Математичне моделювання. Інформаційні технології. Автоматизовані системи управління»*. 2018. Вип. 38. С. 14–24.
6. Курило І. А., Грудська В. П., Спінул Л. Ю., Щерба М. А. Розрахунок перехідних процесів у лінійних електричних колах із зосередженими і розподіленими параметрами : навч. посіб.

- Київ: НТУУ “КПІ”, 2013. 289 с. URL : toe.fea.kpi.ua/te_sait/posibniki/per_proc.pdf (дата звернення: 11.08.2018).
7. Bulanchuk G., Ostapenko A. Modeling of the viscous fluid flow around rotating circular cylinders with the lattice Boltzmann method at moderate Reynolds numbers. *Bulletin of V. Karazin Kharkiv National University, series Mathematical Modelling, Information Technology, Automated Control Systems*. 2017. Issue 36. P. 27–37. DOI: 10.26565/2304-6201-2019-41-09. URL: <https://periodicals.karazin.ua/mia/article/view/10086/9614> (Last accessed: 20.11.2018).
 8. eLearning Industry [Internet source], available at the URL: <https://elearningindustry.com/> (last accessed on 21.10.2019).

The details about the authors: full name, academic degree, title, position, company name, and (up to 3 lines) research interests, should be placed at the end of the report. The example is shown below:

IVANOV Viktor – PhD, professor of the Chair of Systems and Technologies Simulation at V.N. Karazin Kharkiv National University; affiliation address, E-mail : (corporate email if available); ORCID*: XXXXXXXXXXXXXXXXXXXX.

* – ORCID (a unique and persistent identifier that distinguishes you from every other researcher and connects you to your research activities. You can obtain your unique personal identifier ORCID by registering on the <https://orcid.org/register>

Research interests:

- *The mathematical models in the mechanics of deformable solids.*

The separate document saved in the separate file must contain brief abstracts (up to 6 lines) preceded by the report title and the authors' names. The document should be prepared as the single-spaced text in 11 pt Times New Roman Cyr. The abstracts must be presented in Ukrainian (required for citizens of Ukraine), Russian (required for citizens of Ukraine and Russia) and in English (mandatory). The example is placed below:

Abstract:

Shevchenko I.O., Yatsenko P.P. Computer methods of the determination of the splashes parameters in the empirical dependences. *Proceedings of the 8rd International Conference "Computer modeling of high-technology (CMHT-2022)*

Computer methods of the distinguishing of the splashes in the empirical dependences in the assumption of weak change of the values of a base curve in the field of splashes are developed. The questions of the efficiency computer technologies of the analysis of the results of experimental investigation in the physics of the plasma discharge are discussed. (English abstract must be at least 1800 characters).

Шевченко І.О., Яценко П.П. Комп'ютерні методи визначення параметрів сплесків в емпіричних залежностях. *Праці 8-ої Міжнародній конференції «Комп'ютерне моделювання в наукоємних технологіях (КМНТ-2022)*

Розвинені комп'ютерні методи виділення сплесків в емпіричних залежностях у припущенні про слабке зміння значень базової кривої в областях сплесків. Обговорюються питання ефективності комп'ютерних технологій аналізу результатів експериментальних досліджень у фізиці плазмового розряду. (до 2000 знаків).

Dear participants! Reports, which would not meet all design requirements, would not be published in the Conference Proceedings.

Information of the organizing committee