

#### **DESIGN**

Gain access to the latest research, methods, and technologies in structural engineering design. Engaging with leading academics and practitioners will help broaden your professional horizons and uncover innovative solutions for your research projects and scientific inquiries.

#### MODELLING

Discover the latest advances in BIM modelling that are revolutionising approaches to structural engineering design. The experience gained from examining real-world engineering case studies will enable you to significantly accelerate design processes, minimise errors, and create cost-effective solutions — positioning you as a specialist in the digital transformation of construction.

#### **OPTIMISATION**

Explore real-world case studies and strategies for navigating complex challenges in construction—from designing structures for extreme loads to implementing AI and digital tools. Acquire practical, ready-to-implement solutions you can immediately apply to your own projects.

#### **About CIDS 2025**

CIDS 2025 is an annual international scientific and technical symposium that brings together researchers, engineers, specialised software developers, and other construction industry professionals. The event focuses on modern methods of calculation, modelling, and optimisation of building structures. Participants have the opportunity to discuss the latest advancements, exchange experiences, and present their own research.



SCAD SOFT LLC

http://www.scadsoft.com



**Department of Computer Technologies** in Construction

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### **Scientific Committee**

#### **Chairman:**

A.V. Perelmuter – DSc (Engineering), SCAD SOFT LLC.

#### **Deputy Chairmen:**

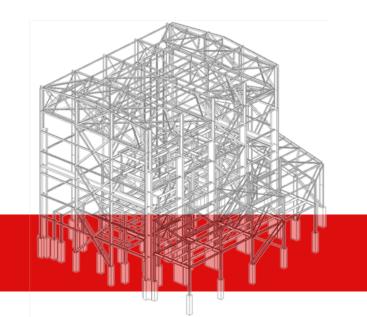
- P.P. Lizunov DSc (Engineering), Professor, Kyiv National University of Construction and Architecture;
- A.V. Makhinko DSc (Engineering), Professor, State University "Kyiv Aviation Institute".

#### **Members of the Scientific Committee:**

- S.I. Bilyk DSc (Engineering), Professor, Kyiv National University of Construction and Architecture;
- H.L. Vatulia DSc (Engineering), Professor, O.M. Beketov National University of Urban Economy in Kharkiv;
- V.M. Hordiiev DSc (Engineering), Professor, V.M. Shymanovskyi Ukrainian Institute of Steel Construction LLC;
- S.F. Pichuhin DSc (Engineering), Professor, National University "Yuri Kondratyuk Poltava Polytechnic";
- V.A. Semko DSc (Engineering), Professor, Poznań University of Technology;
- Ye.V. Klimenko DSc (Engineering), Professor, Odesa State Academy of Civil Engineering and Architecture;
- D.V. Kochkarev DSc (Engineering), Professor, National University of Water and Environmental Engineering;
- E.Z. Kriksunov PhD (Engineering), SCAD SOFT LLC;
- N.O. Makhinko DSc (Engineering), Professor, State University "Kyiv Aviation Institute";
- H.H. Fareniuk DSc (Engineering), Professor, State Research Institute of Building Constructions (DP DNIIBK).

#### **Symposium Moderator:**

S.O. Skliarenko – PhD (Engineering), Senior Researcher, PP Poltava Proje



## **Terms of Participation**

To participate in CIDS 2025, preliminary registration and submission of materials are required. Please send the following via email:

- a cover letter specifying the title of the research and a brief author bio for each researcher (full name, academic degree, academic title, organisation/professional association, position, phone number, and email address);
- an electronic version of your abstract in Ukrainian or English.

Accepted materials will be published on the official website <u>scadsoft.com</u>. Participation in the symposium is free of charge.

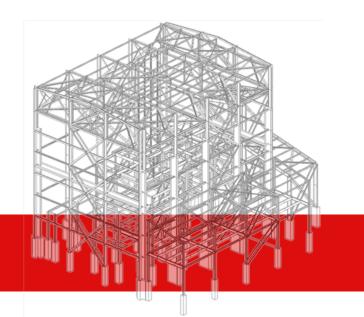
## **Important Dates**

Submission of applications and abstracts: until 15 October 2025 Symposium dates: 30–31 October 2025

The symposium will be held in a hybrid format, hosted by SCAD SOFT LLC, with online participation available via the Google Meet platform.

#### **Contact Information**

- SCAD SOFT LLC, 03037, Kyiv, 3a Osvity Street
- Department of Computer Technologies in Construction, State University "Kyiv Aviation Institute", 03058, Kyiv, 1 L. Guzara Avenue, Room 5.510
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- e -mail: <a href="http://www.scadsoft.com">http://www.scadsoft.com</a> <a href="http://www.scadsoft.com">ktb@npp.kai.edu.ua</a>



## **Symposium Thesis Guidelines**

#### **Formatting Requirements:**

- **Text Preparation:** The text must be prepared in Microsoft Word and be ready for printing.
- Length: 1-2 pages (A4 size).
- Language: Ukrainian or English.
- File Format: .doc or .docx
- Page Layout:
  - Margins: 2 cm on all sides.
  - First line indent: 1 cm.
  - o Font: Times New Roman, 11 pt.
  - Spacing: Single.
- Formulas: Must be created using MathType or Equation Editor 3.0.
- Illustrations: Must be of high quality and resolution.

#### **Recommended Structure:**

The thesis should contain the following sections:

- 1. **Introduction:** State the relevance of the topic, define the problem, analyse recent research and publications that have addressed this problem, and identify the specific aspects that remain unsolved and to which the thesis is dedicated.
- 2. **Objective:** Formulate the aim of the work, presenting the problem in a general context and its connection to important scientific or practical tasks.
- 3. **Main Body:** Present the core research material. This includes a description of the theory, methods, and research models used, accompanied by a justification of the scientific results obtained and their discussion.
- 4. **Conclusions:** Summarise the findings of the research and outline future perspectives for work in the chosen direction.

References: A list of cited sources, formatted according to the IEEE standard.

Publication is contingent upon successful peer review and a positive decision from the Scientific Committee.



### **Scientific Tracks:**

#### 1. Mechanics of Deformation and Fracture of Materials and Structures

Modelling of Life Cycles of Structures and Buildings during their construction and operational phases, including resistance to progressive collapse. Non-linear models for materials, building structures, and civil engineering works. Models for structurally complex materials (composites, nanomaterials, etc.). Modelling of damage and fracture in materials and structures. Behaviour of materials and structures under non-stationary physical conditions and complex loading scenarios.

#### 2. Mathematical Modelling and Monitoring in Construction

Mathematical Models in Structural Health Monitoring Systems. Informational and Mathematical Modelling in Construction.

# 3. Computational Methods and Computer Modelling in Structural Mechanics

Computational Mathematics Methods in Building Physics, Numerical and Numerical-Analytical Analysis of Structures and Civil Engineering Works. Capabilities of Modern Software Tools for the Analysis and Design of Construction Objects. Solvers in Building Physics Problems. Application of Parallel Architecture Computing. Challenges and Prospects.

#### 4. Artificial Intelligence and Digital Technologies in Construction

Artificial Intelligence Methods in Construction. Digital Technologies, Mathematical and Informational Modelling in the Context of Training Future Civil Engineers and Researchers.

# **5. Educational and Methodological Aspects of Modern Technology Implementation**

Methodological Aspects of Modern Software Implementation in Education. Discussion on Challenges and Prospects of Integrating Digital Tools into the Curriculum

#### 6. Special Session for Early-Career Researchers

Research Contributions by Postgraduates, Masters, and Early-Career Researchers in the Fields of Structural Mechanics, Computational Design, and Modern Project Technologies.

Working languages: Ukrainian, English.

CURRENT ISSUES
IN THE DESIGN OF
STRUCTURES