

PAPER • OPEN ACCESS

Preface

To cite this article: 2021 *IOP Conf. Ser.: Mater. Sci. Eng.* **1030** 011001

View the [article online](#) for updates and enhancements.



Editors:

- Prof. Pavel Akimov
- Prof. Uktam Umurzakov
- Prof. Sultan Ahmedov
- Prof. Orifjon Bazarov
- Abdugani Sanginov
- Prof. Asel Azhibaeva
- Prof. Aleksandr Tusnin
- Dr. Anna Doroshenko

Organized by:

- National Research Moscow State University of Civil Engineering
- Tashkent Institute of Irrigation and Agricultural Mechanization Engineers
- Samarkand State Architectural and Civil-Engineering Institute
- Karshi Engineering Economic Institute
- JSC "Uzbekgidroenergo"
- Kazakh-German University





Date: November 11-14, 2020

Venue: Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Republic of Uzbekistan, Tashkent city, Kari Niyozov street, 39-house

Main Topics:

- Building materials
- Reliability and Safety in Construction
- Engineering and Smart Systems in Construction
- Modelling and Mechanics of Building Structures
- Management in Construction
- Hydrotechnical Construction and Melioration
- Mechanization, electrification of agriculture and renewable energy

Conference Chairmen:

- Prof. Pavel Akimov (Professor, DSc, Full Member of the Russian Academy of Architecture and Construction Sciences (RAACS), Acting rector of National Research Moscow State University of Civil Engineering)
- Prof. Uktam Umurzakov (Professor, Rector of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers)
- Prof. Sultan Ahmedov (Professor, Rector of Samarkand State Architectural and Civil-Engineering Institute)
- Prof. Orifjon Bazarov (Professor, Rector of Karshi Engineering Economic Institute)
- Abduqani Sanginov (President JSC "Uzbekgidroenergo")
- Prof. Asel Azhibayeva (Professor, Rector of Kazakh-German University)

International Scientific Committee:

- Prof. Vladimir Andreev, DSc, Professor, Full Member of RAACS, Head of Department of Strength of Materials, National Research Moscow State University of Civil Engineering, Russia
- Prof. Hua Ge, Professor, Department of Building, Civil and Environmental Engineering, Concordia University, Canada
- Prof. Enrico Bernardo, Professor, Department of Industrial Engineering, University of Padova, Italy
- Prof. Vladimir Molokov, Professor, Department of Fire Safety Science, Uister University, Great Britain
- Prof. Rudolf Hela, Professor, Department of Building Materials and Prefabrications, University of Technology Brno, Czech Republic
- Prof. Sergey Kuznetsov, DSc, Professor, Leading Scientist of Department Wave Dynamics, Institute for Problems in Mechanics, Russia
- Prof. Marco Di Ludovico, PhD, Associate Professor, Department of Structures for Engineering and Architecture, University of Naples Federico II, Italy

- Dr. Vyacheslav Semenov, PhD, Head of the Department Building Materials and Materials Science, National Research Moscow State University of Civil Engineering, Russia
- Prof. Targo Kalamees, Professor, Department of Structural Design, Tallinn University of Technology, Estonia
- Prof. Denis Jelagin, Professor, Department of Civil and Architectural Engineering, KTH University, Sweden
- Prof. Nguyen Viet Anh, Director of Institute for Environmental Science and Engineering, National University of Civil Engineering, Vietnam
- Prof. Mirziyoyd Mirsaidov, DSc, Professor, Department of Theoretical and Construction Mechanics, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Republic of Uzbekistan
- Prof. Abdulkhakim Salokhiddinov, DSc, Professor, Department of Water Resources and Environmental Management, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Republic of Uzbekistan
- Prof. Ashot Tamrazyan, DSc, Professor, Advisor of RAACS, Member of the Russian Engineering Academy, Head of Department of Reinforced Concrete and Stone Structures, National Research Moscow State University of Civil Engineering, Russia
- Dr. Peter Kotes, Department of Structures and Bridges, University of Zilina, Slovak Republic
- Dr. Armen Ter-Martirosyan, DSc, Department of Soil Mechanics and Geotechnics, National Research Moscow State University of Civil Engineering, Russia
- Prof. Maciej Major, PhD, Professor, Dean, Faculty of Civil Engineering, Czestochowa University of Technology, Poland
- Dr. Jaroslaw Rybak, PhD, Assistant Professor, Faculty of Civil Engineering, Wroclaw University of Science and Technology, Poland
- Prof. Valeriy Telichenko, DSc, Professor, Full Member of RAACS, Honorary President of National Research Moscow State University of Civil Engineering, First Vice-President of RAACS, Russia
- Prof. Zaven Ter-Martirosian, DSc, Professor, Honorary Member of RAACS, Professor of Department of Soil and Geotechnical Engineering, Chief Research Scientist of REC "Geotechnical Engineering". National Research Moscow State University of Civil Engineering, Russia.
- Prof. Tahir Sultanov, Professor, Vice Rector of Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan
- Prof. Natalya Verstina, Professor, Department of Management and Innovation, Moscow State University of Civil Engineering, Russia
- Prof. Nikolay Vatin, Professor, Institute of Civil Engineering, Peter the Great St.Petersburg Polytechnic University, Russia
- Prof. Katarzyna Ignatowicz, Professor, Faculty of Building and Natural Sciences, Bialystok University of Technology, Poland
- Prof. Gintautas Skripkiunas, Professor, Department of Building Materials and Fire Safety, Vilnius Gediminas Technical University, Lithuania

Organizing Committee:

MGSU: Prof. Alexander Tusnin, Prof. Vera Galishnikova, Prof. Ekaterina Nezhnikova, Dr. Taymuraz Kaytukov, Dr. Anna Doroshenko, Dr. Vladimir Filatov, Dr. Alla Sokolova, Dr. Nikolay Makisha, Dr. Stanislav Sergeev, Dr. Vadim Kanhva, Viktor Evstratov, Irina Molchanova, Olga Konakova, Pavel Vorobev.

TIAME: Dr. Ruzimurat Choriev, Prof. Bakhtiyor Khasanov, Prof. Bakhrudin Khasanov, Prof. Dilshod Bazarov, Dr. Edward Kan, Dr. Sanat Khidirov, Dr. Bekhzod Norkulov, Farrukhjon Irisov, Dr. Sherzod Rakhmonov.

KEEI: Prof. Zafar Batirov, Prof. Sobir Eshov, Prof. Ulugmurod Zhonkobilov, Dr. Mahmud Rakhmatov.

SamSACEI: Dr. Erkin Isakov, Dr. Kutfidin Yakubov, Dr. Otaboy Zhumanov.

DKU: Dr. Barbara Janusz-Pawletta, Alexey Kobzev.

JSC "Uzbekgidroenergo": Inoyat Sunatov.

Technical Operator of the Conference: LLC "Quintet"

PREFACE

VII International Scientific Conference «INTEGRATION, PARTNERSHIP AND INNOVATION IN CONSTRUCTION SCIENCE AND EDUCATION» (IPICSE-2020) was held from November 11 to November 14, 2020 in Tashkent, Uzbekistan. The Conference was organized by the National Research Moscow State University of Civil Engineering (NRU MGSU, Russia), the Tashkent Institute of Irrigation and Agricultural Mechanization (TIAME Uzbekistan) together with JSC "Uzbekhydroenergo" (Uzbekistan), the Samarkand State Architecture and Civil Engineering Institute named after Mirzo Ulugbek (SamSACEI, Uzbekistan), the Karshi Engineering Economic Institute (KEEI, Uzbekistan), the Kazakh-German University (KNU, Kazakhstan).

The Conference promotes the popularization of research and development results in the field of construction in the international scientific and information space, the expansion of scientific cooperation, the formation of new interdisciplinary projects.

The main sections of the Conference are building materials; reliability and safety in construction; engineering and smart systems in construction; modelling and mechanics of building structures; management in construction; hydrotechnical construction and melioration; mechanization, electrification of agriculture and renewable energy.

Scientists from 16 countries took part in the work of the Conference. These proceedings contain 179 papers. All papers were selected for the Conference by the Scientific Committee.