

# Preface

The International Scientific and Technical Conference «Construction and Architecture: Theory and Practice of Innovative Development» (CATPID-2021 Part I) was held from July 01 to 05, 2021, in Nalchik. CATPID-2021 part 1 was held in a separate conference format for the fourth time.

The work of the conference is aimed at providing an opportunity for scientists, graduate students, and representatives of the construction industry to generalize the recent achievements results in the field of industrial and civil construction (design, organization of all types of work, construction materials, etc.), discussing promising directions for the construction industry development and establishing useful partner relationships for future interaction.

The conference is held on numerous topics:

- Structural mechanics and structural theory, civil and industrial construction
- Architecture, design, and reconstruction of architectural heritage
- Building materials and technologies of binders, concrete, and building ceramics
- Deformable Solid Mechanics
- Computational methods, mathematical models, and information technology in construction
- Organization and technology of construction production. Geodesy, cartography, and photogrammetry
- Innovations in engineering communications
- Engineering and technology of land transport
- Construction of roads, bridges, tunnels, and airfields
- The economy in the industry
- Reliability, efficiency, and safety of objects of fuel and energy and construction complexes
- Natural and technosphere safety

303 participants from 25 regions of the Russian Federation and 18 participants from 5 countries near and far abroad (Poland, Vietnam, Germany, Belarus, Lithuania, Armenia, Ukraine, Czech Republic, Uzbekistan) were registered for the conference in May 2021.

The important problems of construction and architecture (from ideas and projects to immediate implementation) are raised. The ways of their solution and optimization are suggested in the reports presented in frameworks of these topics. Many reports were prepared as a benefit of the state support of science in the forms of grants, federal target programs, resolutions of the Government of the Russian Federation, and other programs.

Particular attention is paid to young researchers, whose works are evaluated separately. The general impression associated with the organization and holding of the conference is very positive.

Annual holding of such conferences is planned to be organized on the main topics of the construction industry.

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