

Preface

The International Scientific Conference “Construction and Architecture: Theory and Practice of Innovative Development” (CATPID-2020) is held from September 26 to 30, 2020 in Nalchik, Russia in a separate conference format for the third 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 construction theory, civil and industrial engineering.
- Architecture, design and reconstruction of architectural heritage.
- Building materials and technologies of binders, concrete and building ceramics.
- Mechanics of a deformable solid.
- Computational methods, mathematical models and information technologies in construction.
- Organization and technology of construction production. Surveying, cartography and photogrammetry.
- Innovations in utilities: heating, gas supply, ventilation and air conditioning, water supply and sanitation.
- Operation and reliability of transport and technological machines and complexes.
- Construction of roads, bridges, tunnels and airfields.
- Economics in construction.
- Reliability, efficiency and safety of fuel and energy facilities and construction complexes.
- Technosphere safety.
- Materials and nanotechnology in chemistry.

572 participants from 32 regions of the Russian Federation and 14 participants from 5 countries of the near and far abroad (Uzbekistan, Armenia, Vietnam, Taiwan, Belarus) were registered for the conference in 2020.

The important problems of construction and architecture (from ideas and projects to immediate implementation) are raised and 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 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.

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

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