Dear Colleagues!

Ladies and Gentlemen!

On August 22-24, 2022, the 4th annual international conference “Construction Mechanics, Hydraulics and Water Resources Engineering” (CONMECHYDRO-2022) was held, dedicated to the 70th anniversary of Doctor of Economics, Professor Uktam Pardaevich UMURZAKOV, which was held in hybrid mode (offline + online).

This conference was dedicated to the 70th anniversary and blessed memory of Doctor of Economics, Professor Uktam Pardaevich Umurzakov, Chairman of the Consortium of Agricultural Universities for the Development of the Countries of Central Asia and the South Caucasus, Member of the Executive Committee of the Global Confederation of University Associations for Agricultural and Life Sciences, Chairman of the Council higher education of the Republic of Uzbekistan, a member of the Council of Rectors of the leading agricultural universities of the CIS countries, the rector of the “Tashkent Institute of Irrigation and Agricultural Mechanization Engineers” National Research University (“TIIAME” NRU).

Professor U.P. Umurzakov was the founder of this conference, under his chairmanship and leadership, the previous sessions of the international conference “Construction Mechanics, Hydraulics and Water Resources Engineering” were held in 2019-2021.

The organizers of this conference were the "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" National Research University ("TIIAME" NRU) (Uzbekistan), which took first place in the annual ranking of universities of the Republic of Uzbekistan in 2021, and took 221st place in the international ranking of higher educational institutions in Eastern Europe and Central Asia.

The traditional 4th International Scientific Conference "Construction Mechanics, Hydraulics and Water Resources Engineering" (CONMECHYDRO-2022) of this level and scale brought together representatives of the most popular areas of hydraulic engineering, hydromelioration, mechanization and electrification of agriculture, hydropower, renewable energy, integrated water resource management, climate change adaptation from around the world.

Its main goal was to popularize the results of research and development in the above areas in the international scientific and information space, expand scientific cooperation and form new interdisciplinary projects, develop scientific communications and scientists’ competencies.

Within three days, 258 papers were discussed in a hybrid format with the organization of access for all participants to the materials of the presented conference reports.
The CONMECHYDRO-2022 conference was held within the walls of the "TIIAME" NRU and during the discussions, more than tens of thousands of questions were received at the conference alone.

The discussion was attended by scientists, young specialists from the USA, Germany, Japan, Poland, Vietnam, South Korea, Syria, Bulgaria, the Russian Federation, Uzbekistan, Tajikistan, Kyrgyzstan, Afghanistan and other countries of near and far abroad.

In total, 258 poster reports were heard at the Conference during three working days in five thematic sections:

- **Section 1.** Ecology, hydropower and modeling of physical processes;
- **Section 2.** Road construction, building structures and materials;
- **Section 3.** Hydraulics of structures, hydrotechnical and reclamation construction;
- **Section 4.** Mechanization, electrification of agriculture and renewable energy sources;
- **Section 5.** Engineering materials science, intelligent transport systems and transport logistics.

Following the results of the conference, the reports of the participants, subject to the observance by the authors of all conditions and terms, the texts of the articles adopted as a result of review and discussion, were included in this collection of conference materials.

I express my gratitude to all participants of the international scientific conference and guests who showed interest in our joint event and thank you for your active participation, and we look forward to further cooperation.

Sincerely,

Chairman of the Conference Organizing Committee
Professor D.R. BAZAROV, Doctor of Technical Sciences,
“Tashkent Institute of Irrigation and Agricultural Mechanization Engineers”
National Research University