## HISTORY OF THE DEPARTMENT



Head of the department "Theoretical and construction mechanics",

Doctor of Technical Sciences, Professor

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The history of the Department of "Theoretical and Structural Mechanics" is rooted in the distant 1923, when the first 16 specialists in hydraulic engineering have graduated from the Turkestan University. The Department of Structural Mechanics was first headed by Zhuval Kazimir Frantsevich, a highly qualified specialist in bridge building, and a railway engineer who graduated from the St. Petersburg Railway Institute in 1911. Zhuval Kazimir Frantsevich had deep knowledge and rich experience, in a simple and accessible manner he lectured at a high level on such subjects as the strength of materials and structural mechanics. In 1933, he was awarded the title of Professor of the department. After K.F.Zhuval, the department was headed until 1932 by Semen Makarovich Sukhanov, a young specialist who gained extensive experience in structural mechanics and reinforced concrete structures in production plants, and graduated from the Leningrad Institute of Railways in 1924. Due to his open-mindedness, he quickly got along with the students, and his lectures were informative and interesting. People who knew S.M. Sukhanov and his students still remember him as a beloved teacher and close friend. Students at that time studied 3 subjects: strength of materials, structural mechanics and the theory of elasticity for engineers of agriculture and water management. From 1932 to 1946, a civil engineer of transport communications Konstantin Trofimovich Venediktov headed the department. He began his teaching career in 1932 by teaching "Building Mechanics" at the Central Asian Industrial Institute, then headed the Department of "Building Mechanics" at the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, and in 1948, received a Ph.D. in technical sciences. K.T. Venediktov continued the pedagogical traditions of Professor S.M. Sukhanov, his lectures were clear, logical, and accurate. From 1959 to 1976, Associate Professor Ivan Ignatievich Gribanov worked as the fourth head of the department. Under his leadership, the Department of Structural Mechanics continued its development. During this period, the number of teachers increased, the quality of education improved, and the content of subjects deepened. Ivan Ignatievich made a lot of efforts to organize a materials testing laboratory in the department. Thanks to his enthusiasm, the scientific work of the department staff was revived and the educational process was improved. From 1976 to 1980, the department was headed by Associate Professor Vladimir Nikolaevich Frolov. He graduated from the Tashkent Institute of Railway Transport in 1958 and was an engineer with extensive practical experience in this sphere of industry. He came to the department as an assistant in

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1961 and began scientific research under the guidance of I.I. Gribanov, in 1968 he received the degree of Candidate of Technical Sciences. From 1980 to 1991, the head of the department was Associate Professor Abdulla Ostonovich Kurbanov. In 1970, he graduated from the irrigation and amelioration faculty of the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers and began his work as an assistant to the department. In 1975, he completed his postgraduate studies at the laboratory "Hydrotechnical Structures" of the former All-Union Scientific Research Institute "VODGEO". A. O. Kurbanov did a great job of improving the methodological work of the department and the working conditions of employees. The Department of Theoretical Mechanics was founded at the Institute in 1946. Until 1949 it was headed by Associate Professor N.A. Salarov, in 1949-1968 - by Associate Professor M.G. Klebansky, in 1968-1978 - by Associate Professor D.G. Mavlyanova. The heads of the department were Associate Professors L.I. Tolipova, U. Mambetov, 1989-1997 - Professor K. Latypov and 1997-2000 - Professor G.Sh. Zokirov. From 2000 to 2004, the Department of Theoretical Mechanics was headed by Associate Professor K. Khusanov. In 1991, Doctor of Technical Sciences, Professor Mirziyod Mirsaidovich Mirsaidov, currently the head of the Department of Theoretical and Structural Mechanics, was elected the head of the Department of Structural Mechanics. M. Mirsaidov graduated from the Tashkent Polytechnic Institute in 1971, with a degree in mechanical engineering, and in 1986 from Tashkent State University with a degree in mathematics. In 1971, he began his career at the Institute of Mechanics and Seismic Stability of Structures of the Academy of Sciences of Uzbekistan, starting from the position of an engineer and ending as the head of the laboratory of that institute. From 1973 to 1976, he was a postgraduate student at the Department of Mechanics of the Moscow Institute of Electronic Engineering, and in 1976, he defended his Ph.D. In 1986, he defended his doctoral thesis and got a scientific degree of Doctor of Technical Sciences at the Scientific Council at the Presidium of the Siberian Branch of the Academy of Sciences of the former USSR (Novosibirsk) in the same specialty. M. Mirsaidov received the title of professor in 1991. In 2004, the Department of Theoretical Mechanics merged with the Department of Structural Mechanics, and beginning from that year to the present the department is called Theoretical and Structural Mechanics. In 2017, Mirsaidov M.M. was elected an academician of the Academy of Sciences of the Republic of Uzbekistan. M. Mirsaidov is one of the famous scientists who has his own scientific school; he made a significant contribution to the theory and practice of such directions as "Mechanics of a Deformable Rigid Body" and "Dynamics of Structures". The scientific results obtained by M. Mirsaidov and his students in such areas as "Mechanics of a Deformable Rigid Body" and "Dynamics of hydro-technical structures", the developed theories and methods form the basis of many promising new scientific areas of great scientific importance in the science of mechanics. Under the scientific guidance of M. Mirsaidov, 17 Candidates of Sciences, 4 Doctors of Sciences were trained; they are currently working in various regions of our republic. M. Mirsaidov, together with his students, published 7 monographs, 17 textbooks and manuals, more than 400 articles and he is the author of more than 40 copyright certificates. More than 40 scientific articles based on the results of scientific work conducted at the department are in the Scopus database, published in English in foreign journals with a high impact factor and in conference proceedings (in the USA, Japan, Singapore, Italy, Austria, Vietnam, Brazil, Portugal, Croatia, Serbia, Russia, Ukraine). Three textbooks and teaching aids published were recognized as the "Best Textbook" and "Best Teaching Aid" in the country in different years. Six textbooks and teaching aids were translated into Kazakh in the Republic of Kazakhstan. Scientific developments worked out by professors and teachers of the department are included in textbooks and teaching aids published by the department. Teachers of the Department of Theoretical and Structural Mechanics constantly conduct scientific research on fundamental and applied studies on the basis of the state budget and grants. Currently, the department is conducting scientific work financed by the Fund for Support of Seismology, Seismic Stability and Seismic Safety of Structures under the Cabinet of Ministers of the Republic of Uzbekistan, scheduled for 2022-2023 on topic No. 29/2022 "Seismic stability of earth dams taking into account unstable filtration propagating through the body of the dam", scientific work is also underway on a fundamental grant on topic No. FZ-20200929327 "Development of a theory and methodology for assessing the strength and reliability of earth dams, taking into account soil moisture content and non-linear filtration", funded by the Ministry of Innovative Development of the Republic of

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Uzbekistan, the grant is planned for 2021-2026. Starting from the 2020-2021 academic year, the department began training highly educated personnel within the undergraduate program "Mechanics and Mathematical Simulation". In 2021, the department put into operation new scientific-educational laboratory equipment. At the same time, an educational and laboratory room was organized in the department, equipped with modern computers and information and communication technologies, called "Mechanics and Mathematical Simulation". Along with this, it is worth mentioning that the following lecturers worked with dedication and devotion at the department training mature engineering, bachelor's and master's personnel for our independent republic: Professor Punagin V.N. and Associate Professors Godovannikov A.M., Frolov V.N., Yusupov K., Manin V.N., Mavlyanova D.G., Boimurodova L.I., Karimova M., B. Atajanov, I. Shulgina, N.V. Khasanova, Senior Lecturers A.A. Tolkodubova, L.I. Osipova, L.Kh. Mamasheva, F.M. Gainulina, N.P. Kuzmina, K.I. Malyshev, G.V. Braun, M.R. Mansurova, F. Ziyaev and Assistants T.P. Kotov and I.A. Shal. At present, Doctor of Technical Sciences, Prof. Mavlonov T.M., Doctor of Technical Sciences, Prof. Sultanov T.Z., Doctor of Physical and Mathematical Sciences., Prof. Sultanov K.S., Doctor of Technical Sciences, Prof. Abduvaliev A.A., Ph.D., Associate Professor Khusanov K., Ph.D., Associate Professor Yuldoshev B.Sh., Ph.D., Associate Professor Sh. Khudoynazarov, Ph.D., Associate Professor Ishmatov A.N., Ph.D., Associate Professor Toshmatov E.S., Ph.D., Associate Professor Yarashov Zh.A., Senior Lecturer B. Urinov, Assistant I. Khazratkulov are actively working in the department preparing bachelors and masters. In 2021, the lecturers of the department Yarashev Zh. and Toshmatov E. defended their dissertations for the degree of Candidate of Sciences. Currently, 7 basic doctoral students of the department (Dzhuraev D., Turajonov K., Khamidov S., Urazmukhamedova Z., Vafoeva O., Numonov A., Berdiev M.) are conducting scientific research preparing candidate dissertations. In 2022, Abdusaliev Berik, a student of the 207th group of the "Hydro-technical Structures" faculty, won the 3rd prize at the International Olympiad held in Turkmenistan on the subject of "Strength of Materials". The department organized study groups: under the guidance of Ph.D., Associate Professor K. Khusanov - "Young Mechanics" and under the guidance of Associate Professor E. Toshmatov and basic doctoral student Z. Urozmukhammedova - "Young Programmers". The study group "Young Mechanics" under the guidance of Associate Professor K. Khusanov conducts practical training for talented students of the faculties of Agricultural mechanization, Hydraulic engineering, Mechanization of irrigation and drainage works and Hydromelioration of the University on the basic concepts of mechanics, types of machines and mechanisms, mechanical interaction, principles of operation of mechanisms and other topics. In the study group "Young programmers" every Wednesday and Friday additional practical classes are held in an educational and laboratory room equipped with modern computers and information and communication technologies for students of the direction "Mechanics and Mathematical Simulation", so that they can master the methods of calculating problems in mechanics using modern licensed complexes of computer programs "ANSYS" and "Workbench".

Faculty of Hydrothechnical constructionSubjects taught at the departmentScientificworksResearchersPartnership activitiesThe staffClubsTimetable of classesPrograms

## Contacts