

In Loving Memory of Yuri Mikhailovich Grigoriev

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On August 22, 2023, the Institute of Physics and Technology suffered a heavy loss – after a severe, long-term illness, Yuri Mikhailovich Grigoriev, a prominent scientist in the field of mechanics, an Honored worker of higher professional education of the Russian Federation, an Honored worker of science of the Republic of Sakha (Yakutia), a full member of the Academy of Sciences, passed away, Doctor of Physical and Mathematical Sciences, Head of the Department of Theoretical Physics at the NEFU Physical-Technical Institute.

Yuri Mikhailovich was born on July 18, 1959 in the village of Nyurba, Leninsky district of the YASSR, in a family of employees. His father – Grigoriev Mikhail Afanasyevich, was born in 1926. He was an honorary citizen of the Nyurbinsky district, Honored worker of the national economy of the Republic of Sakha (Yakutia), veteran of the Great Patriotic War. His mother – Marfa Nikolaevna Grigorieva, was born in 1928. She was a veteran of the home front and labor. In 1966, Yuri entered the 1st grade of the Khalbakinsky school in the Vilyuisky district. At Antonovskaya Secondary School he studied in grades 4-7. After the 7th grade, he entered the Republican School of Physics and Maths and graduated in 1976.

In 1976 Yu. M. Grigoriev entered the physics department of the Faculty of Physics and Mathematics of YSU. During his years of study at YSU, he was actively involved in social work: he was a Komsomol organizer of a group, head of a group of theorists, chairman of the FF student scientific society, and a member of the FF trade union bureau. Every year in the summer he went to the Student's labor camp. In the 3rd year he participated in the All-Russian Olympiad in Physics in Tomsk. In 1981, he graduated with honors from the Faculty of Physics of YSU with a specialization in theoretical physics, completing coursework and diploma work under the guidance of V.V. Naumov. His thesis was devoted to the theory of regular quaternion functions, this is a class of functions that generalize the concept of analytic complex functions to three-dimensional space. In the fall of 1981, Yu. M. Grigoriev became a research intern at NSU. In 1982, he entered graduate school at the Faculty of Mechanics and Mathematics of NSU. Yuri Mikhailovich defended his dissertation in December 1985 at the M. A. Lavrentiev Institute of Hydrodynamics, Siberian Branch of the Russian Academy of Sciences on the topic "Solving spatial static problems of the theory of elasticity by methods of the theory of quaternion functions." Until 1993, he worked as an assistant, senior lecturer and associate professor at the Department of Theoretical Physics. In 1993 Yu. M. Grigoriev was appointed dean of the Physics Faculty of YSU and elected head of the department of theoretical physics. During his work, he was responsible worker on economic contractual and state budget research projects, and supervised state budget research projects. The topics of scientific research of the department were very diverse – problems of electrification of space satellites, electromagnetic compatibility, creation of the theory of high-temperature superconductivity, design of optimal forms of fancy diamonds, design of optimal devices for enrichment and mining of minerals, etc. In 1996, he entered full-time doctoral studies at NSU, as a scientific consultant was appointed prof. B. D. Annin. He completed his doctoral studies in 1999, and in February 2000 defended his dissertation for the degree of Doctor of Physical and Mathematical Sciences on the topic "Methods for solving problems of modeling body deformations and electromagnetic compatibility" at the Institute of Computational Mathematics and Mathematical Geophysics SB RAS (Novosibirsk). In April 2006, he was elected a full member of the Academy of Sciences of the Republic of Sakha (Yakutia) in the field of mechanics. In August 2011,

at the X All-Russian Congress on Theoretical and Applied Mechanics (Nizhny-Novgorod), he was elected a member of the Russian National Committee on Theoretical and Applied Mechanics.

Since 1999, he worked as a professor and head of the Department of Theoretical Physics at the NEFU Physico-Technical Institute named after M.K. Ammosova. Under his leadership, a number of grants and projects from the Russian Foundation for Basic Research and the Ministry of Education and Science of the Russian Federation were completed, and three Ph.D. theses were defended. He is a recognized expert in the field of mechanics, the author of about 300 scientific works, including 4 patents and 6 registered computer programs, 19 educational and methodological works.

Yuri Mikhailovich devoted a lot of strength and energy to the development of science and strengthening of higher education in the Republic of Sakha (Yakutia). He was a member of the Russian National Committee on Theoretical and Applied Mechanics; member of the international scientific community for applied analysis and computing ISAAC; member of the European Society of Mechanics EUROMECH; member of a number of scientific councils (United Scientific Council on Physical Sciences SB RAS; Council on Science and Technology under the Head of the RS(Ya); Educational Institutions of the Academy of Sciences of the RS(Ya) for physical and technical sciences and Earth sciences; Scientific Councils of NEFU, MAN RS(Ya)), IKFIA SB RAS; dissertation councils D 212.306.04 at NEFU and DM 003.020.01 at IGDS SB RAS; member of the presidium of the board of professors of NEFU (2016-2018); worked on the editorial boards of scientific journals "Natural Resources of the Arctic and Subarctic", "Science" and technology in Yakutia", "Mathematical notes of NEFU".

Yuri Mikhailovich was an active supporter of the opening and development of gymnasiums and lyceums in the republic. Yuri Mikhailovich provided enormous personal assistance for the opening of a technical lyceum in his native Nyurba district, and subsequently helped a lot to the staff and schoolchildren of the Nyurba technical lyceum.

Yuri Mikhailovich was a member of the Republican Council of the "Step into the Future" program in Yakutia. The Organizing Committee of the conference worked at the Department of Theoretical Physics during the republican stage. He was a member of the expert council of the section of the All-Russian Scientific Forum "Step into the Future".

Yuri Mikhailovich actively participated in the work of the Physics and Mathematics Forum "Lena Region". In 1999, he gave lectures to schoolchildren, students and young scientists at the First Summer School of the Forum, together with Russian scientists, whom he recommended and involved in the work of the Forum. Since 2013, he was the head, then a tutor, of the Department of Physics of the Minor Academy of Sciences of the Republic of Sakha (Yakutia). He headed the regional subject-methodological commission of the All-Russian Olympiad for schoolchildren in physics, is a member of the jury of the International Olympiad for schoolchildren "Tuymaada" in physics since 2001 and the chairman of the jury and methodological commission since 2002. Yuri Mikhailovich was one of the compilers of tasks in physics for the Olympiad Tuymaada, under His leadership published 2 collections of problems and assignments for the Olympiad. Physicists of the republic, under the leadership of Yuri Mikhailovich, with great responsibility, at the highest level, organized the 18th Asian Physics Olympiad in 2017. Yuri Mikhailovich was a member of the expert council of the Regional Center (MAN RS (Y)) and directly made recommendations and supervised the equipment of the new Educational laboratory building of the MAN.

A lot of work was done by Yu. M. Grigoriev as Deputy Rector for International Scientific and Technical Activities. An agreement was concluded on joint scientific leadership of the University of Cergy- Pontoise (France) and NEFU by postgraduate student E. F. Boyakinov. Together with INHA University (South Korea), the Research Institute of Ceramics Engineering Technologies (KICET), a master's program in English "Convergence: High Technologies" in physics has been developed. Cooperation is underway with the Bauhaus University (Weimar, Germany), with the scientific group of prof. K. Gurlebek.

Scientific and scientific-organizational activities of Yu. M. Grigorieva has repeatedly earned awards at different levels. In 1999, he won a competition for a scholarship from the head of the administration of the Novosibirsk region. He has repeatedly won YSU competitions (“Best Senior Teacher”, “Best Head of Department”, etc.). He is an Honored Scientist of the Republic of Sakha (Yakutia) (2014), awarded a diploma (2007) and badges “Honored Worker of Higher Professional Education of the Russian Federation” (2009), “For the Development of Research Work of Students” (2009) of the Ministry of Education and Science of the Russian Federation, “Excellence in Education of the Republic of Sakha (Yakutia)” (2003), “For Merit in the Field of Science” (2006) of the Ministry of Education and Science of the Republic of Sakha (Yakutia). Yu. M. Grigoriev - Honorary Citizen of the Oktyabrsky Nasleg of the Nyurbinsky District of the Republic of Sakha (Yakutia).

Yuri Mikhailovich was distinguished by integrity, love and devotion to science, a creative approach to solving any problem, tireless ability to work, and professional competence. He was a hard worker and loved life. He worked until the last days of his life, wrote articles, manuals, and was interested in the work of the department.

The bright memory of our dear person to us Yuri Mikhailovich will forever remain in our hearts.