

SPECIAL ISSUE

Dedicated to Efim Pelinovsky on the occasion of his 75th Birthday

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Editorial

July 12, 2020, was the 75th birthday of the Doctor of Physico-Mathematical Sciences, Professor Efim Naumovich Pelinovsky, main scientist of the Department of Nonlinear Geophysical Processes of the Institute of Applied Physics of the Russian Academy of Sciences. In 1963, E.N. Pelinovsky graduated with honors from the Dzerzhinsky Electromechanical College and worked for six months as an electrical technician at a chemical plant in Dzerzhinsk. Then he entered the Radiophysical Faculty of the Lobachevsky State University in Gorky and graduated with honors in 1969. After graduating from the post-graduate school, he worked at the Radiophysical Research Institute (1972-1977), and at the Institute of Applied Physics of the Russian Academy of Sciences (from 1977 to the present).

Efim Naumovich Pelinovsky is the author of almost twenty books and more than seven hundred articles. He is one of the most frequently quoted scholars in Russia, a world-famous scientist. The main scientific achievements of E. N. Pelinovsky are associated with the development of physical and mathematical models of wave processes and their application in predicting marine natural disasters. He developed a number of mathematical methods that made it possible to study the generation, propagation, transformation, and dissipation of nonlinear waves in inhomogeneous and random media. For this series of works he was awarded the State Prize of Russia (1997). E. N. Pelinovsky was awarded the national medal "For Labor Valor" (1985) for his research work on remote methods of studying the ocean.

Now Professor Pelinovsky is one of the world's leading scientists in the field of surface and in-



ternal waves. He was one of the first to introduce the term "rogue waves" into the world scientific community and was the founder of the development of various theoretical models for the generation of such waves on the surface of the ocean. He co-authored a book on rogue waves with a young Russian scientist A. V. Slyunyaev and French professor C. Kharif. The book is very popular among scientists around the world. E. N. Pelinovsky developed the tsunami models that made it possible to propose a tsunami diagram of the zoning of the Pacific coast of Russia.

He participated in the research of catastrophic earthquakes and tsunamis in the Kuril Islands

(1972–1994), in Korea (1993), Indonesia (1996 and 2004), Montserrat (2003), Guadeloupe (2004) and investigated tsunami risk in a number of countries. E. N. Pelinovsky is a member of the international and Russian tsunami commissions, as well as a member of the International Tsunami Expert Group. The research conducted by E. N. Pelinovsky on the waves in the ocean were awarded international prizes: W. Adams Award (1993) from the International Natural Hazards Society, and the Prize of the International Tsunami Society (2012). In 2006, E. N. Pelinovsky was awarded the prestigious S. Solovyov Medal from the European Geophysical Union for his outstanding contribution to the study of marine natural disasters, and in 2018 he received the prestigious Mandelstam Prize of the Russian Academy of Sciences for studying the physical mechanisms of rogue wave formation.

For ten years, E. N. Pelinovsky was the Secretary of the European Geophysical Union for Marine Natural Disasters. Since 1995, he becomes a member of the Editorial Board of the Natural Hazards magazine; since 2008, he has been the editor-in-chief of the Open Oceanography Journal, and since 2009 a member of the editorial boards of the Fundamental and Applied Hydrophysics and Izvestiya Atmospheric and Oceanic Physics journals. In recent years, Professor Pelinovsky has been engaged in the

ultra-long-range propagation of the sea waves, and not only the sea waves, but also acoustic waves in plasma. He has been developing the theory of coastal waves he proposed earlier, as well as studying the water basin of the Nizhny Novgorod region, in particular, he developed a number of scenarios for forecasting emergency environmental situations on the Oka and Volga rivers.

He conducts active pedagogical work, being a professor at the Department of Applied Mathematics of the Nizhny Novgorod State Technical University (since 1984) and at the Higher School of Economics. Under his leadership, 20 master's theses were defended, including students abroad. Among his students there are already 11 doctors of science and some of them have been awarded with prestigious international and Russian prizes.

Many talents of Efim Naumovich and his human charm attract many colleagues, friends, and followers. E. N. Pelinovsky is approaching his birthday full of creative plans. The editorial board of the Russian Journal of Earth Sciences cordially congratulates Efim Naumovich on his anniversary and wishes him a good health and new successes in his creative plans.

**Editors of the Special Issue:
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