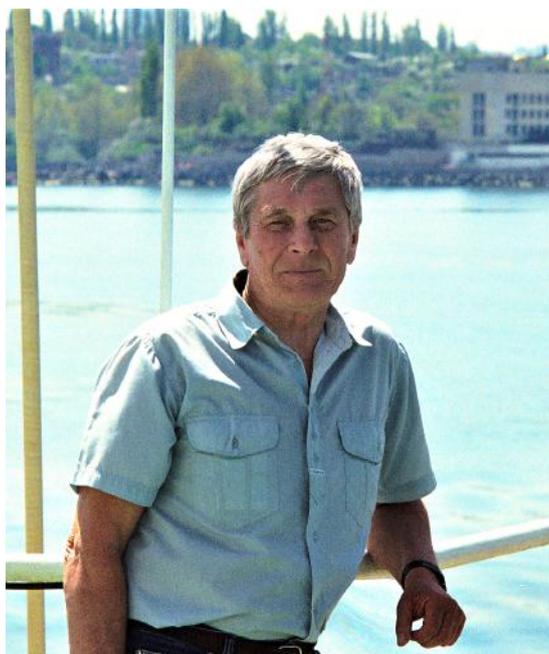


CHRONICLE AND INFORMATION

TO THE ANNIVERSARY OF ACADEMICIAN OF THE RAS VIKTOR EGOROV

This year, Viktor Egorov, IBSS Supervisor, Academician of the Russian Academy of Sciences, D. Sc., Prof., Editor-in-Chief of “Marine Biological Journal”, celebrates the anniversary. He developed the theory of mineral metabolism between marine organisms and the aquatic environment, discovered jet methane gas emissions from the bottom of the Black Sea, and created the basics of the biophysical theory of the ecological capacity of the marine environment in relation to pollutants. Viktor Egorov is the author of more than 360 articles and 6 monographs.



Staff of IBSS radiation and chemical biology department congratulates Viktor Egorov on his jubilee! We are proud to work in a team with the author of scientific discoveries and the outstanding scientist who has made a significant theoretical and practical contribution to the study of homeostasis of marine ecosystems.

At present, V. Egorov, D. Sc., Prof., Academician of the Russian Academy of Sciences (since 2016) and the National Academy of Sciences of Ukraine (since 2012), is the Supervisor of A. O. Kovalevsky Institute of Biology of the Southern Seas of RAS.

From the age of 18, attention of Viktor Egorov, native of Sevastopol, was riveted to the sea: at the beginning while working on fishing vessels in the Caspian Sea, then while modeling the dynamics of the movement of atomic submarines in the Sevastopol Higher Naval Engineering School, and since 1968 – in IBSS. Through competitive selection, V. Egorov first entered functioning of marine ecosystems department headed by Corresponding Member of the Academy of Sciences of the Ukrainian SSR Tamara Petipa, and later – radiation and chemical biology department headed by Gennady Polikarpov.

Over the years of work, Viktor Egorov has been steadily growing professionally. In 1968–1970, he was a senior engineer; then, until 1980, – a junior researcher. In 1975, he defended his candidate dissertation brilliantly and became a PhD with a degree in geophysics (sea physics). Then, he worked as a senior researcher; in 1983, he became the head of the laboratory of dynamic radiochemoecology. In 1988, he defended his doctoral dissertation in radiobiology. In 1989–1993, he was IBSS deputy director. At the same time (1991), he received a ship’s wheel (a symbol of the head of RCBD) from G. Polikarpov, Academician of the National Academy of Sciences of Ukraine. Heading the department at the difficult time (1990s), V. Egorov always made strategically correct decisions and overcame difficulties.



Gennady Polikarpov passes the ship's wheel (a symbol of the head of RCBD) to his student, scientific follower, and successor Viktor Egorov

During those difficult years, he proved himself to be a talented organizer of international marine research and the head of a creative scientific team. Thanks to him, 16 international grants were received for studying the Black Sea, and expeditionary work, financed by the European Union, the International Atomic Energy Agency, and intergovernmental funds, was realized. As a result of such cooperation, the scientific using of RV "Professor Vodyanitsky" was provided, and up to 70 % of marine expeditionary work of the NAS of Ukraine on the Black Sea was organized for the fulfilling in 1992–2005.

In the World Ocean science, Viktor Egorov has priority in several directions. These are the development of the theory of mineral metabolism between marine organisms and the aquatic environment, the management of research and the generalization of their results on the response of the Black Sea to the Chernobyl disaster, the discovery of jet methane gas emissions from the bottom of the Black Sea in the late 1980s, which caused a sensation in the scientific world and laid the foundation for many years of research on this phenomenon. He created the basics of the biophysical theory of the ecological capacity of the marine environment in relation to pollutants. The conditions of the stability of the system of biotic self-purification of the photic layer of seawaters were studied using mathematical models. It was shown that water anthropogenic pollution increase can lead to a change from the first to zero order of the metabolic rate of pollutant exchange by marine organisms, as well as to saturation of the sorbing surfaces of inert and bioinert substances. At the same time, the system of complex biogeochemical self-purification of waters can lose stability, which results in an increase in the content of pollutants in the aquatic environment up to levels leading to toxic effects on marine organisms.

The results of V. Egorov's scientific research are recognized worldwide. He is the author of 365 articles (more than 70 of them are published abroad) and 6 monographs highly valued and regularly cited by colleagues. Under his supervision, the students defended seven PhD dissertations on biogeochemistry of pollutants of different nature in marine ecosystems, as well as the methane problem. In the arsenal of pedagogical influences of Viktor Egorov, a talented teacher and a delicate person, there are no methods of coercion. He involves in work, sets a personal example, conveys not only his knowledge, but also his life experience, skills and abilities, shows interest in the work of students on all the stages, and contributes to their professional growth.

V. Egorov is an unrivalled storyteller. His memories of sea expeditions always cause genuine interest and amaze with lots of vivid details. He participated in 45 research cruises, of which he headed 22 (16 international). During scientific expeditions and business trips, he visited 53 countries of the world, was in 24 seas of the Atlantic, Indian and Pacific oceans, and completed a circumnavigation.

Since his childhood, Viktor Egorov was fond of fishing, and years later he became the owner of a boat, on which, for many years, together with colleagues from RCBD and other departments of IBSS, he took samples of water, hydrobionts, and benthic sediments in Sevastopol coastal areas from Cape Lucullus to Cape Fiolent. In one of “Antares” expeditions, jet methane gas emissions in Sevastopol coastal waters were discovered by the hydroacoustic method.



“Antares” boat crew after an expedition to Sevastopol coastal waters. Left to right: V. Popovichev, S. Gulin, N. Stokozov, “Antares” skipper V. Egorov, L. Malakhova, I. Moseychenko

We are pleased to have the opportunity to study Viktor Nikolaevich’s colossal capacity for work, scientific intuition, and his brilliant human qualities – steadfast optimism and amazing sense of humor. With all our hearts, we wish good health to the hero of the day and his loved people, prosperity, happiness, new achievements in scientific work, and worthy students and followers!

Staff of IBSS radiation and chemical biology department

К ЮБИЛЕЮ АКАДЕМИКА РАН ВИКТОРА НИКОЛАЕВИЧА ЕГОРОВА

В мае 2020 г. исполнилось 80 лет Виктору Николаевичу Егорову — и. о. научного руководителя ФИЦ ИнБЮМ, академику Российской академии наук, доктору биологических наук, профессору, главному редактору «Морского биологического журнала». В. Н. Егоров разработал теорию минерального обмена между морскими организмами и водной средой, открыл струйные метановые газы выделения со дна Чёрного моря, создал основы биофизической теории экологической ёмкости морской среды в отношении загрязняющих веществ. Виктор Николаевич — автор более чем 360 статей и 6 монографий.