# To the Memories of A. Kordzadze (1944-2018)

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#### ABSTRACT

The biographical information about the head of Department of Mathematical Modeling of Geophysical Processes in the Sea and Atmosphere of Mikheil Nodia Institute of Geophysics of Ivane Javakhishvili Tbilisi State University, Doctor of Sciences in Physics and Mathematics, professor Avtandil Kordzadze is presented.

Key words: Atmosphere, Black Sea, mathematical modeling, forecasting system



On March 6, 2018 prominent representative of geophysical science, head of Department of Mathematical Modeling of Geophysical Processes in the Sea and Atmosphere of Mikheil Nodia Institute of Geophysics of Ivane Javakhishvili Tbilisi State University, Vice-president of the Georgian Academy of Ecological Sciences, Laureate of Academician Merab Aleksidze and Mikheil Nodia Awards, Doctor of Sciences in Physics and Mathematics, professor Avtandil Kordzadze died at the age of 73.

A. Kordzadze was born on November 7, 1944 in Kutaisi, in the family of mathematician, associate professor of Kutaisi teachers' training institute Aleksandre Kordzadze. Since the third year of the Faculty of Mechanics and Mathematics of Novosibirsk State University, his scientific activity was closely connected with the name of the last President of the Academy of Sciences of the USSR, Academician G. I. Marchuk. Under his scientific

supervision, A. Kordzadze passed a glorious path from a university student to a Doctor of Physical and Mathematical Sciences.

In 1967-1984 Avtandil Kordzadze worked in the Computing Center of the Siberian Branch of the Academy of Sciences of the USSR, and in 1985 by invitation of Academician Marchuk moved to Moscow, in the Department of Computational Mathematics of the Presidium of the Academy of Sciences of the USSR (now, Institute of Numerical Mathematics of the Academy of Sciences RAN) as a Senior Researcher.

The scientific works of prof. Avtandil Kordzadze in the field of mathematical modeling the hydrodynamic processes of the Black Sea have been widely recognized. In his works both purely theoretical and applied aspects are considered. He proved existence and uniqueness theorems of solution for linear and nonlinear problems of a baroclinic ocean dynamics. From the point of view of practical use, the first non-stationary model of the Black Sea dynamics, based on the complete system of ocean hydrothermodynamics equations developed by his active participation, is very actual and important.

Since 1989 Avtandil Kordzasdze's scientific activity was closely connected with Mikheil Nodia Institute of Geophysics. Here, till his last dayshe headed the Sector of Mathematical Modeling of Geophysical Processes in the Sea and Atmosphere founded by him. During this period the model of the Black Sea dynamics was improved and adapted to the Georgian Sector of the Black Sea and surrounding water area. Besides, on the basis of this model, the regional forecasting system for the easternmost part of the Black Sea have been developed in the framework of EU scientific and technical projects. This forecasting system is one of the parts of the Black Sea basin-scale nowcasting/forecasting system.

In 2012 for the cycle of works related to the regional forecasting system prof. Avtandil Kordzadze was awarded with Mikheil Nodia Academic prize.

Since 1997 he was a chief editor of the Journal of Georgian Geophysical Society "Issue B. Physics of Atmosphere, Ocean and Cosmic Rays", and since 2004 he was a member of Editorial Board of the international scientific and technical Journal "Ecology of Environment and Life Safety" (Kiev, Ukraine). Since 2014 he was a member of European Geosciences Union.

Prof. Avtandil Kordzadze is the author of 170 scientific articles, including 5 monographs (3 with coauthors). List of the main articles is presented below [1-45]. 3 candidate and 4 doctoral dissertations were defended under his scientific supervision. In addition to scientific work, for many years prof. Avtandil Kordzadze conducted pedagogical activities at the Ivane Javakhishvili Tbilisi State University.

In 2016 he was awarded the medal of Ivane Javakhishvili Tbilisi State University.

Unfortunately, Mr. Avtandil Kordzadzes' life stopped when he was still full of great energy and ability to work. He was a very loving and caring father and grandfather, a defender and reliable supporter of people who are in need of life problems.

The bright memory about prof. Avtandil Kordzadze will always remain among his friends, colleagues and those, who knew him.

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# ა. კორძამის ხსოვნისათვის (1944-2018)

# დ.დემეტრაშვილი

## რეზიუმე

წარმოდგენილია ბიოგრაფიული ინფორმაცია ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტის მიხეილ ნოდიას სახელობის გეოფიზიკის ინსტიტუტის ზღვისა და ატმოსფეროს გეოფიზიკური პროცესების მათემატიკური მოდელირების სექტორის ხელმძღვანელის, ფიზიკა-მათემატიკის მეცნიერებათა დოქტორის, პროფესორ ავთანდილ კორმამის შესახებ.

## ПамятиА. Кордзадзе (1944-2018)

#### Д.И. Деметрашвили

#### Резюме

Представлена биографическая информация о руководителе сектора математического моделирования геофизических процессов в море и атмосфере Института геофизики им. Михаила Нодиа Тбилисского государственного университета им. Иване Джавахишвили, докторе физико-математических наук, профессоре Автандиле Кордзадзе.