

Acad. Prof. DSc. Valeriy Bondur

Vice President of the Russian Academy of Sciences, Moscow, Russia

General information

Acad. Prof. DSc. Valeriy Bondur (born October 28, 1947) is Doctor of Technical Sciences (1990), Academician of the Russian Academy of Sciences for the Department of Earth Sciences (2003), Vice President of the Russian Academy of Sciences, a foreign member of the Chinese Academy of Sciences.

Fields of Research

The main directions and results of his scientific activities are related to the development of the physical bases of remote sensing and system principles for the construction of complex aerospace systems for the study of the ocean, atmosphere, geological environment, environmental monitoring, environmental management, warning of dangerous natural and man-made processes.

Honours and Memberships

He is the Chief editor of the journal "Earth Exploration from Space" of the Russian Academy of Sciences, the deputy editor of the journal "Bulletin of the Earth Sciences Division of the Russian Academy of Sciences", a member of the editorial board of the Oceanology journal, member of the Bureau of the National Geophysical Committee, member of the working group on the development of the industry of supercomputers and a member of many specialized academic councils.

V. Bondur created the country's youngest leading scientific school in the field of aerospace research of the Earth. He does a great job by training highly qualified specialists. He prepared 24 candidates of science and 8 doctors of science. Under his leadership were defended more than one hundred and twenty theses. He is one of the founders of the Faculty of Applied Cosmonautics of the Moscow State University of Geodesy and Cartography, the founder of the Department of Space Monitoring at the Russian State University.

Awards

- Award from the Government of the Russian Federation in the field of science and technology (2003, 2011)
- Medal of the Order of Merit for the Fatherland, II degree
- Medal "For merits in space exploration"
- Award "S. P. Korolev" of the Federal Space Agency
- Medal "For Merits" of the Cosmonautics Federation of Russia
- Medal "In memory of the 850th anniversary of Moscow"
- Commemorative Medal "300th Anniversary of the Russian Navy"
- Medal "For loyalty to duty and fatherland"

Education and Qualifications

- In 1972 he graduated from the Moscow Energy Institute.
- In 1980 he defended his thesis for the degree of candidate of technical sciences.
- In 1990 he defended his thesis for the degree of Doctor of Technical Sciences.
- Since 1993 - Professor.
- Since May 26, 2000 - Corresponding Member of the Russian Academy of Sciences, Department of Oceanology, Atmospheric Physics and Geography of the Russian Academy of Sciences.
- Since May 22, 2003 - Academician of the Russian Academy of Sciences, Department of Earth Sciences of the Russian Academy of Sciences.

Professional experience

- 1999–2003 - Head of the Center for Environmental Monitoring and Information Technologies, Central Research Institute "Kometa".
- From 2004 - Director of the Research Institute for Aerospace Monitoring "AEROKOSMOS" of the Ministry of Education and Science of the Russian Federation and the Russian Academy of Sciences.
- 2013 - 2017 - Member of the Board of the Russian Academy of Sciences, Head of the Section of Oceanology of the Russian Academy of Sciences
- Since 2017 - Vice-President of the Russian Academy of Sciences

Research work

He made a decisive contribution to the solution of a number of remote sensing problems and the formation of new scientific directions in the field of aerospace research of the Earth, including:

- remote diagnostics of deep-seated processes in the seas and oceans by their manifestations on the surface and in the near-surface layer;
- space monitoring of global and local atmospheric processes;
- remote monitoring of seismic and volcanic territories;
- aerospace monitoring of anthropogenic impacts on various ecosystems;
- processing large streams of aerospace information;
- creation of models of electromagnetic radiation fields at the entrance of aerospace equipment;
- modeling of various processes occurring in the ocean, atmosphere, geological environment, etc.

Based on the results of unique theoretical and experimental studies, he identified a number of previously unknown phenomena and established new patterns in the interaction of deep hydrophysical fields with surface waves and the near-surface layer of the ocean.

He developed new methods of aerospace sensing, methods of continuous space monitoring of the atmosphere and the Earth's ionosphere, etc.

Bondur formed scientific foundations and he has about 600 scientific papers and numerous patents for inventions.