

## **Prof. Oleksandr M. Trofymchuk**

Born 1955, Ukraine

### **Education:**

2012 - Corresponding Member of the National Academy of Sciences of Ukraine on the specialty "Space Research", Ukraine.

2005 – Professor, Certification of the Ministry of Education, Ukraine.

1999 - Doctor of Science Degree, Institute of Hydromechanics of NASU, Ukraine.

1982 - PhD of Science Degree, Institute of Applied Problems in Mechanics and Mathematics, Ukraine.

1977-1980 - Post-graduate, Institute of Hydromechanics of NAS of Ukraine, Kyiv, Mechanics of Fluids, Gas and Plasma

1972-1977 – higher, Ukrainian Institute of Water Economy Engineers, Rivne, Ukraine, engineer-hydrotechnician.

### **Professional Employment:**

2016 - current, Institute of Telecommunications and Global Information Space, National Academy of Sciences of Ukraine, Director.

2004-2016 - Institute of Telecommunications and Global Information Space, National Academy of Sciences of Ukraine, Vice-director.

2002 - current, Kyiv National University of Construction and Architecture of Ministry of Education and Science of Ukraine, Professor, Part time teaching activity.

1998-2004 - Ukrainian Institute of Environmental and Resources Research under the National Security and Defense Council of Ukraine, Vice-director.

1984-1998 - Institute of Hydromechanics, National Academy of Sciences of Ukraine, senior scientific researcher.

1980-1984 - Institute of Hydromechanics, National Academy of Sciences of Ukraine, junior scientific researcher.

### **Professional Memberships:**

Laureate of the State Prize of Ukraine in Science and Technology (2005),

Honored Worker of Science and Technology of Ukraine (2015),

Awarded the Honorary Diplomas of the Cabinet of Ministers and the Verkhovna Rada of Ukraine (2005).

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Award the Mikhalevich of the National Academy of Sciences of Ukraine for achievements in the field of informatics, theory of optimization and system analysis (2015),

Laureate of the State Prize of Ukraine in the field of education (2017).

Member of Canadian – Ukrainian committee of management of Canadian – Ukrainian program of ecological collaboration of Ministry of ecology and natural resources of Ukraine.

Member of Ecological Section on Environment protection of the State Premium of Ukraine in the field of science and engineering.

Member of the Board in the International Consortium on Landslide (ICL).  
Member of International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE).

### **Research Interests**

Mechanics of fluids, Gas and Plasma Mechanics of solids, Dynamics of elastic porous, fluid-saturated porous solids, Contact mechanics.

Dynamics of soils, ecological safety, global ecological problems, information systems of ecological management.

The introduction of geoinformation systems and Earth remote sensing data in Ukraine, during the conduction of research on environmental safety issues, the determination of Ukrainian natural resources potential, optimization of the analysis of pollution of surface water and soils, modeling of global biosphere processes, etc. The research was applied, in particular, in analysing the dynamics of the Shelter Object of the Chernobyl Nuclear Power Plant, the design of gravity marine platforms, optimizing the work of water facilities, compiling electronic environmental maps and atlases.

Under his leadership, a typical regional information system for environmental management (within the framework of the program of Ukrainian-Canadian cooperation "Development of Environmental Management in Ukraine") was created.

Author of more than 500 scientific works including 20 monographs and 2 educational books.

GoogI Scholar: h-18

<https://scholar.google.com.ua/citations?user=QLU4-3UAAAAJ&hl=uk>

### **Monographs**

- Dovgy S.O., Lyalko V.I., Trofymchuk O.M., Fedorovsky O.D. and others. Informatization of aerospace geography. — K.: Naukova dumka. — 2001 — P 607.

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- Bichenok M. M., Trofymchuk O.M. Problems of natural-technogenic safety in Ukraine. — K.: YHCiP. — 2002 — P 153 c.
  - Raptun M. V., Trofymchuk O.M., Surnin S. B. and others. Sources of greenhouse gas emissions and climate change mitigation measures in Ukrainian cities' infrastructure / Ed. M. V. Raptun, O. M. Trofymchuk. — K.: Aspect-Polygraph. — 2003. — P 148.
  - Grekov L. D., Krasovsky G. Y., Trofymchuk O.M. Space monitoring of land pollution by man-made dust. — K.: Naukova dumka. — 2007. — P 123.
  - Korzhnev M. M., Shelyag-Sosonko Yu. R., Kurilo M. M., Trofymchuk O.M., Yakovlev Ye. O. and others. Development of Ukraine in the conditions of globalization and reduction of natural resource potential. — K.: Logos. — 2009. — P 195.
  - Dovgy S.O., Yevdoschuk M. I., Korzhnev M. M., Куліш Є. О., Kurilo M. M., Malakhov I. M., Trofymchuk O.M., Yakovlev Ye. O. Energy and resource component of Ukraine's development. — K.: Nika-Center. — 2010. — P 264.
  - Dovgy S.O., Krasovsky G. Y., Radchuk V. V., Trofymchuk O.M., Andreev S. M. and others. Modern information technologies of ecological monitoring of the Black Sea. — K.: Information systems. — 2010. — P 260.
  - Dovgy S.O., Bidyuk P. I., Trofymchuk O.M., Savenkov O. I. Forecasting methods in decision support systems. — K.: Azimut-Ukraine. — 2011. — P 608.
  - S.O.Dovgy, P.I. Bidyuk, O.M.Trofymchuk. Decision support systems based on statistical probabilistic methods. - Kyiv: Logos, 2014. – 419p.
  - Geomodels in the tasks of ecological and economic land valuation: Monograph / S.O.Dovgy, G.Y. Krasovsky, V.V. Radchuk, O.M. Trofymchuk and others. // Ed. S.O.Dovgy. — K. Publishing House "Juston". - 2018. — P 256.
  - O. M. Trofymchuk, P.I. Bidyuk. Decision support systems, modeling, forecasting, risk estimation. - LAP LAMBERT Academic Publishing - 2019. - 179 p.