VOLODYMYR ANDRIYOVYCH MIKHAILETS
(to 70th birthday anniversary)

Volodymyr Andriyovych Mikhailets, a prominent Ukrainian mathematician, was born on February 14, 1950 in city of Dnipro.

In 1972 V. A. Mikhailets graduated with honors from the Faculty of Mathematics and Mechanics, Kyiv Taras Shevchenko State University. His scientific interests were formed under the influence of excellent lectures by Yu. M. Berezansky, M. L. Gorbachuk, V. K. Dzyadyk, A. V. Roiter. In the same year V. A. Mikhailets entered post-graduate study at the Institute of Mathematics of NAS of Ukraine, where under supervision of M. L. Gorbachuk defended ahead of schedule his Candidate/PhD thesis "Spectral theory of boundary value problems for Sturm-Liouville equation with operator coefficient". From 1975 V. A. Mikhailets is working at the Institute of Mathematics, NAS of Ukraine. In 1989 V. A. Mikhailets defended Doctor of Science/Dr. Hab. thesis "Spectral problems with general boundary conditions". Opponents on this defense were professors Yu. M. Berezansky, M. G. Gasymov, A. G. Kostyuchenko. Since 1991 he held the position of leading researcher, and currently is the head of Laboratory of partial differential equations at the Institute of Mathematics, NAS of Ukraine. In 1994 he obtained the academic title of professor.

V. A. Mikhailets has a wide recognition as a specialist in the field of functional analysis and theory of differential equations. His research treats a wide range of problems in the theory of operators, ordinary differential equations, partial differential equations, spectral problems of modern mathematical physics, and the theory of functional spaces. His scientific results are complete, innovative in nature and feature new research methods. They have obtained appreciation from leading international experts and have made a basis for new profound results of his students, as well as Ukrainian and foreign scientists.

An important place in V. A. Mikhailets' scientific work is occupied by the study of spectral problems, where he obtained a number of outstanding scientific results. He created a theory of general self-adjoint boundary value problems for elliptic differential equations in bounded Euclidean domains. Among its central results, there are precise asymptotic formulas for eigenvalues of self-adjoint elliptic operators in bounded domains. These formulas significantly enhance the fundamental results of S. Agmon, F. E. Browder, Bruning and other well-known specialists.

V. A. Mikhailets has obtained a number of important results on the spectral theory of ordinary differential operators. He developed a new general approach to the analysis of one-dimensional differential operators with distributional coefficients, based on the theory

of quasi-differential Shin-Zettl operators. These results stimulated the development of new aspects of the theory of differential operators with singular coefficients and aroused keen interest from foreign mathematicians.

V. A. Mikhailets (together with his students O. O. Murach and V. M. Los) initiated two new fields in the theory of partial differential equations: the theory of elliptic boundary value problems in Hörmander spaces and the theory of parabolic initial-boundary value problems in anisotropic Hörmander spaces. These theories are complete and significantly supplement and refine the classical theorems on the character of the solvability of elliptic and parabolic problems in Sobolev spaces. V. A. Mikhailets has created a new approach to the analysis of multidimensional boundary value problems, which is based on the method of interpolation with the functional parameter of abstract and Sobolev Hilbert spaces. This approach is described in his monograph "Hörmander spaces, interpolation, and elliptic problem" (together with O. O. Murach), published by De Gruyter in 2014.

V. A. Mikhailets made a significant contribution to the theory of one-dimensional boundary value problems. He and his students obtained new fine sufficient conditions for parameter continuity of solutions of general boundary value problems for systems of ordinary linear differential equations that clarify and significantly generalize the known results of I. T. Kiguradze and M. Ashordia. In addition, for wide classes of linear one-dimensional boundary value problems, he and his students established constructive criteria for parameter continuity of solutions in different functional spaces.

V. A. Mikhailets is an author of more than 200 publications, including two monographs. For the series of works "New analytical methods for differential equations and function theory" V. A. Mikhailets was awarded M. G. Krein Prize of the NAS of Ukraine in 2016.

V. A. Mikhailets has established his own scientific school. Under his supervision 2 Doctor of Science/Dr. Hab. theses (O. O. Murach and V. M. Los) and 9 Candidate/PhD theses were defended. The Laboratory of partial differential equations headed by him consists of his students. In 2020 he was awarded the Distinction of the National Academy of Sciences of Ukraine for training new generations of scientists.

Professor V. A. Mikhailets is a skilled lecturer and an excellent teacher. For many years he worked at the Faculty of Mechanics and Mathematics of Taras Shevchenko National University of Kyiv, and recently at the Faculty of Physics and Mathematics of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", where he teaches courses in functional analysis and operator theory. In 1994–1998 he lectured at Warsaw University in Bialystok (Poland).

V. A. Mikhailets devotes a lot of energy and talent to organizational and editorial work in science. Since 2008 he has been a Vice-Chairman of the Expert Council on Mathematics of the High Attestation Commission of Ukraine, and since 2011 he is Vice-Chairman of the Expert Council on Mathematics and Mechanics of the Ministry of Education and Science of Ukraine. He participated in the evaluation of all doctoral and candidate dissertations in mathematics, which were defended at that time. V. A. Mikhailets is member of Editorial boards of Ukrainian Mathematical Journal, Methods of Functional Analysis and Topology, and Transactions of Institute of Mathematics, NAS of Ukraine, and a reviewer in leading foreign mathematical journals. His views on the evaluation of scientific results and the organization of mathematical research and activities are highly valued by colleagues.

We wish Volodymyr Andriyovych good health, happiness, inspiration, new creative achievements and gifted students.

Editorial Board