Autobiography Zaiats M. Vasyl DSc, Professor,

Academician of the Academy of Sciences of Applied Radio Electronics



Born August 3, 1957, the village Kozivka, Kozova district, Ternopil region (Ukraine). In 1978 he graduated from the Physics Department of the Lviv State University by Ivan Franko. From 1978 to 1982 a graduate student of Lviv State University by Ivan Franko.

From 1982 to 1990 working in the Physical-Mechanical Institute by G.V. Karpenko National Academy of Sciences of Ukraine (Lviv), junior researcher, researcher. In 1990, after successfully defending his doctoral dissertation at the Institute of Modeling in Energy Sciences of Ukraine (m. Kyiv, supervisor Professor Sinitsky L.A.), invited to teach to the Lviv Polytechnic Institute to participate in the creation and development of a new department - software of systems. In 1996 he was awarded the rank of associate professor, and in 2007 - awarded a DSc. after successfully defending his doctoral dissertation in KHNURE (m. Kharkiv, supervisor Professor Sinitsky L.A.). From 2006 to 2011 r.- Associate Professor, Head of ICT systems Lviv State Institute

of advanced technologies and management by V. Chornovil. Since 2011 Head of Department of Information and Computer Technologies and Systems National University "Lviv Polytechnic", and later the department of general ecology and eco systems, 2013 - Professor Department of Computer Engeeniring of NUWM as part (in Rivne). In 2011 received the title of professor in the department of computer information systems and technologies.

In 2015 after successful Habilitation (perezahystu) doctoral thesis in the Naval Academy (m. Szczecin, Poland) invited to work as professor of extraordinary in the University of Technology and Science (UTP) (m. Bydgoszcz, Poland). Responsible for the organization and preparation of engineering and master's theses, member of the Specialized Academic Council.

During the period work in the Lviv Polytechnic and LDINTU by V. Chornovil developed and created methodological support a number of courses in the specialty "Computer Science" and "Computer engineering", including: "Methods and means of computer information technologies", "Pattern Recognition Techniques," "Functional and logic programming "," Simulation systems "," probability and Mathematical statistics "," science and "programming", "CAD software", "methodology of scientific research ". Developed 28 scientific manuals and textbooks, some of which are labeled with MES of Ukraine for lectures, practical and laboratory classes with students of inginaring degree and magister. He has supervised a number of undergraduate and master's work in the field of "Computer Science" and "Computer Engineering". Two persons have successfully completed postgraduate studies at NU "Lviv Polytechnic" and prepared to defend master's work.

His research interests include numerical methods in applied applications, mathematical and computer modeling of dynamic systems with complex dynamics, recognition and identification of objects, processes and phenomena. He created a new class of numerical methods for analysis of nonlinear systems of second-order with long transient, developed approaches to the construction of discrete models of oscillatory systems, proposed analytical criteria for analysis of their sustainability and new methods to assess error, that allow to optimize the procedure of designing real wireless devices with desirable characteristics and increased reliability of recognition and identification of objects with complex dynamics. In particular, the creation of an information system recognizing computer users with their handwriting keyboard.

Author of over 220 scientific papers, including 6 manuals, three of which are labeled with MES of Ukraine, three books, three monographs on the modeling of objects with complex dynamic behavior and two scientific and bibliographic publications.

Major scientific and scientific-methodical works:

- 1. Zaiats V. M. Building a model and analysis system discreet vibration // Cybernetics and Systems Analyz. Number 4, 2000. P. 161-165
- 2. Zaiats V.M. The analysis of conditions stability of discrete models of oscillatory systems / V.M. Zaiats // Proceedings of the National University "Lviv Polytechnic", "Information Systems and Networks", 2004, № 519. P.132 -142.
- 3. Zaiats V.M. The approach to model building discrete vibrational system of the second order and its application to improve the efficiency of detection / V.M. Zaiats // Electronics and connectivity. 2005. Thematic issue "Problems of Electronics", t. 2. P. 93-97
- 4. Zayats V. M., Lobur M. V. Discrete models of oscillating systems and their applications. Proceedings International Conference MEMSTECH'2007, May 23-26, 2007, Lviv-Polyna, UKRAINE. P. 65-68.
- 5. V. Zaiats. Numerical methods for analysis of linear and nonlinear systems. Textbook / V. Zaiats, B. Durnyak, I. Jaworskiy // Lviv: Publishing UAH, 2009.- 302 p..
- 6. *V. Zaiats*. Discrete models of systems oscillation for analyzing their dynamics. Monograph / V. Zaiats // Lviv: Publishing Ukrainian Academy of Printing, 2011. 284 pp.
- 7. Zaiats V.M. Two approaches to constructing optimal numerical methods for second order and their application to the analysis of nonlinear vibrational nature / V.M. Zaiats // Reports of the National Academy of Sciences of Ukraine, 2014, № 1. P. 37-42.
- 8. Zaiats V.M. Combinational numerical methods with a minimum discretization error. / V.Zaiats // Cybernetics and Systems Analysis, 2013, No. 2. P. 115-120.
- 9. V. Zaiats. Methods and means of computer information technologies in applied applications. Textbook / V. Zaiats // Lviv: Publishing "Ukrainian technologies", 2017. 262 pp.