

75th Anniversary of Dr.Habilitat Valentin Oleschuk



Valentin Oleschuk was born in Balti, Moldova, USSR, on 7 May, 1947. He received the M.Sc. degree from Kishinev Polytechnic Institute in 1969, Candidate of Sc. degree from Leningrad Institute of Fine Mechanics and Optics in 1980, Dr.Sc. degree from Institute of Electrodynamics of the National Academy of Sc. of Ukraine (Kiev) in 1999, and Dr. Habilitat of Sc. degree from the Supreme Sc. Qualification Board of Moldova in 2000, all in electrical engineering.

From April 1971 his engineering and research activity is connected with the Institute of Power Engineering of Moldova, there he consequently held positions of Engineer, Senior Engineer, Post-Graduate Student, Junior Scientist, Senior Scientist; and Head of the Laboratory. And from 2010 Dr. V. Oleschuk is Chief (Principal) Scientist of the Institute of Power Engineering.

Research interests of Dr. Oleschuk include control and modulation strategies for power electronic converters, controlled electric drives, and renewable energy systems. His basic contribution includes elaboration of fundamentals of a novel alternative method (methodology) of synchronized space-vector modulation for power electronic converters, as a new direction of research in the field of control in power electronics, which is focused on improvement of effectiveness of these systems.

Dr. Oleschuk authored and co-authored two monograph-books, two chapters of books (Cambridge Scholars Publ., 2016; Springer, 2018), and more than 300 papers, including more than 100 IEEE publications, more than 120 papers published in Scopus-related journals and proceedings, and more than 150 papers published in ScholarGoogle-related journals. V. Oleschuk is also author of 89 patents and inventor's certificates, and has been awarded by the "Inventor of the USSR" honour title. And it is necessary to mention, that Dr. Valentin Oleschuk is the first (main) author at more than 90% of all these publications and patents.

Results of research of Dr. V. Oleschuk have been recognized internationally. During last years, he was Principal Investigator and Head (from the Moldovan side):

- of four NATO Research Projects on High Technology (1994-96, 1997-99, 2000-02, 2005-08);
- of four USA-funded Projects (National Research Council (1997-98), MRDA/CRDF (2001-03), CRDF (2006-08), STCU (2014-16);
- of five European Research Projects (EPE (1997), Marie Curie IIF of FP7 (2004-07), Regional Project of EU (2008-10), STCU (2014-16, 2018-20);
- of two Programs of Inter-Academies Sc. Collaboration (Hungary-Moldova, 1994-96, 1997-2003).

Also, Dr. Oleschuk has been twice Grantee of the "Soros-Moldova" foundation, and was Grantee of the Ministries of Education and Research of Italy and Spain.

For a total period of more than eight years, he held senior visiting positions in several leading universities in the field: Aalborg University (Denmark), The University of Tennessee at Knoxville (USA), Budapest University of Technology and Economics (Hungary), University of Bologna (Italy), University of Quebec at Trois-Rivieres (Canada), Northeastern University (Boston, USA), Politecnico di Torino (Italy), University of Seville (Spain).

List of Invited Talks of Dr. V. Oleschuk (with presentation of lectures, seminars, and teaching courses at famous foreign universities) includes:

University of Florence (Italy), 1991; Concordia University (Montreal, Canada), 1994; Technical University of Budapest (Hungary), 1996; The University of Tennessee at Knoxville (USA), 1998; Kielce University of Technology (Poland), 2000; Aalborg University (Denmark), 2001; University of Turabo (Puerto-Rico), 2003; Politecnico di Torino (Italy), 2007; University of Bologna (Italy), 2011; University of Seville (Spain), 2012; University of Zilina (Slovakia), 2014, 2015.

In particular, in 2011 Dr. V. Oleschuk, in the range of Professorship Program of the Institute of Advanced Study of the University of Bologna (Italy), presented Jubilee Lecture "50 Years of Power Electronics: Its Importance and New Dimensions" for students, collaborators, and faculty of the University of Bologna, underlining in it an important role of power electronics for sustainable technological and environmental progress.

Also, basic book on the topic, by D.G. Holmes and T.A. Lipo, „Pulse Width Modulation for Power Converters“ (John Wiley & Sons, 2003) includes many references on publications of V. Oleschuk.

Basic results of research of Dr. Oleschuk have been presented at the representative scientific forums in more than 40 countries of all continents: in Africa (Republic of South Africa); in Asia (China, India, Japan, Korea, Malaysia, Turkey, United Arabian Emirates); in Australia; in Europe (in 28 European countries); in North America (Canada, Mexico, USA); and in South America (Brazil, Chile).

Dr. Oleschuk is Independent Expert of "Horizon Europe" Program of the European Union, executing evaluation of European research projects in the "Energy" and "Transport" fields. During 2013-2020 Dr. V. Oleschuk was Official Representative of Moldova at Program Committee of "Horizon'2020" Program, and from 2022 he is National Expert at the "Horizon Europe" Program.

Dr. V. Oleschuk has been included two years in a row (2020, 2021) in Stanford List of Top 2% of the World Scientists, in 2021 he became Laureate of the Premium "Boris Lazarenko" of the Academy of Sc. of Moldova in Engineering, and also in 2021 he has been awarded by the Honour Diploma of the Ministry of Education and Research of Moldova.

Colleagues from the Institute of Power Engineering of Moldova wish to Dr.Habilitat V. Oleschuk good health and further successes in his scientific and technical activity!