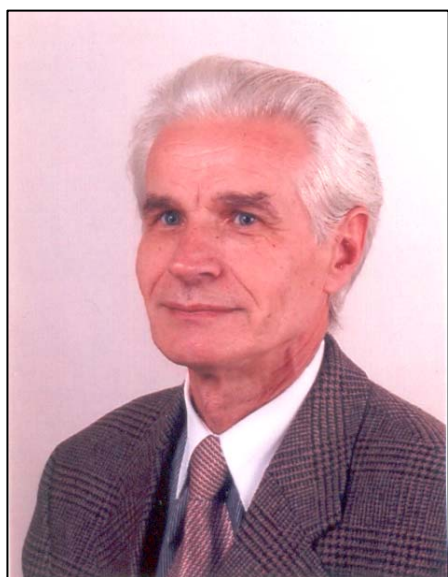


## DIPED-2020 Seminar/Workshop dedicated to the memory of Prof. Nikolai Voitovich

On September 15-18, 2020, the 2020 IEEE XXVth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2020) took place in Tbilisi, Georgia. The event has been co-organized by the IEEE MTT/ED/AP Georgia Chapter, Tbilisi State University, Ukraine Section (West) MTT/ED/AP/EP/SSC Joint Chapter, and Pidstryhach Institute for Applied Problems of Mechanics and Mathematics, NASU, with the support of the IEEE Electron Devices, Microwave Theory & Techniques, and Antennas & Propagation Societies as the technical co-sponsors. The DIPED-2020 was dedicated to the memory of Prof. Nikolai N. Voitovich, the founder of the first IEEE EDS Chapter in Ukraine and co-organizer of the DIPED Seminar/Workshop series. This year's technical program consists of 32 papers submitted by scientists from Georgia, Germany, Greece, Israel, Turkey, Russia, USA, and Ukraine, and covers the following sections: Diffraction and Scattering, Propagation in Complex Media, Numerical and Optimization Techniques, Antenna Design, Fabrication and Testing, Acoustics.

At the Opening Ceremony, Dr. Mykhaylo Andriyчук, Program Committee Secretary, presented the memory talk about the life stages and scientific achievements of Prof. Voitovich, a famous scientist in the area of the EM field propagation and antenna theory, and a multitiered respected person, who passed away this year at the age of 80.



*Prof. Nikolai Voitovich (1940-2020)*

Nikolai Viotovich graduated from Lviv State University in 1961 with Master Degree in Computational Mathematics, earned his Ph.D. in Radio Physics from the Institute of Radio Engineering and Electronics (IRE), Moscow, Russia, in 1968, and received his D.Sc. in Radio Physics from Kharkiv State University in 1982. His D.Sc. contribution “Investigation of high-quality resonators and dielectric waveguides by means of generalized eigenvalue problems” was considerable complement to the well-known generalized method of eigenoscillations (GMEO), which is successfully applied to solving the series of internal and external problems of Electrodynamics.

Prof. Voitovich contributed significantly to international scientific cooperation. Thus, starting in 1982, the scientific forum in the field of high frequency Electrodynamics with participants from Georgia, Poland, Russia, and Ukraine, was originated. Due to his enthusiasms, the forum took the title “Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED)” and became the annual IEEE International Seminar/Workshop afterwards.

In 1995, owing to the IEEE initiative for involving scientists of the Eastern Europe and the Former Soviet Union (FSU) countries in the worldwide scientific community, as well as due to the efforts of Prof.

Voitovich, the IEEE West Ukraine Joint Chapter was established. It was one of the first IEEE Chapters in Ukraine and in the FSU countries. Initially, the Chapter joined the IEEE Electron Devices and Microwave Theory & Techniques Societies, and one year later the IEEE Antennas & Propagation Society. The next development of the Chapter was joining the IEEE CPMT (now Electronic Packaging) and SSC Societies in 1997 and 1999, respectively.

The first years of being the West Ukraine Chapter wherein Prof. Voitovich served as a Chapter Chair were filled with a fruitful and impressive work. In 2000, Chapter won the IEEE CPMT 1999 Chapter of the Year Award being one of the first among the IEEE Chapters from Eastern Europe and FSU countries earning such recognition. Those years boosted further development of the Chapter's activity and improved its activity both scientifically and technically, especially in the areas related to the parent IEEE Societies. So the next awards were not long in coming. In 2001, the Chapter was recognized by the 2001 IEEE Region 8 Chapter of the Year; in the second decade of 2000s, the Chapter won the IEEE Antennas and Propagation Society 2017 Outstanding Chapter Award, IEEE Electron Devices 2017 Region 8 Chapter of the Year Award, and IEEE Microwave Theory and Techniques Society 2017 MTT-S Outstanding Chapter Award. And it is impossible to overestimate the role, efforts, and eagerness of Prof. Voitovich, permanent honorary Chapter Chairman, which always were crucial factors in winning the above mentioned awards.

The cooperation with the IEEE helped to renew the DIPED and make it the annual Seminar/Workshop became a joint event of both the MTT/ED/AP/EP/SSC West Ukraine and MTT/ED/AP/EMC Georgian Chapters since 1995. In 1997, the DIPED received Charter of the IEEE AP, ED, and MTT Societies technically co-sponsored event that enables to include the DIPED Proceedings into the IEEE Xplore Digital Library. The successful holding all DIPEDs in many aspects indebted to Prof. Voitovich, his enthusiasms, organization efforts, and permanent care.

The scientific results of Prof. Voitovich are very impressive. He is the author of 9 monographs, more than 190 papers in the international scientific journals and conference proceedings. His research works gained recognition world-wide. In 1989, Prof. Voitovich together with his teacher, Prof. Katsenelenbaum and other authors of the GMEO, were recognized by the Ukrainian State Award in the Area of Science and Technique for the series of scientific papers “The Theory of Resonant Scattering and its Application in Radiophysics”. The memory paper of Prof. Voitovich prepared by his Georgian friends and followers from Ukraine was included into the DIPED-2020 Proceedings. The scientific results of his research over the last year’s period were presented in two research papers of the above Proceedings. Thus, the improving the Chapter activity and carrying on the traditions of the DIPED Seminar/Workshop would be a good memory for Prof. Voitovich who was the founder of both these projects.



*Dr. Tamar Nozadze, Organizing Committee Secretary, serving the DIPED-2020 online sessions*

This year, the DIPED Seminar/Workshop was arranged online. Prof. Revaz Zaridze, Organizing Committee Chairman, Dr. Tamar Nozadze, Organizing Committee Secretary, Dr. Tamar Gogua, responsible person of the Tbilisi State University, and whole team of our Georgian colleagues did their best to make the DIPED-2020 successful.