

## The XI<sup>th</sup> International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2005)

The XI<sup>th</sup> International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED-2005) was organized together with Republic of Georgia Chapter on September 12-15, 2005, at the Pidstryhach Institute of Applied Problems of Mechanics and Mathematics, NASU, Lviv, Ukraine. The Electron Devices Society provided technical co-sponsorship and inclusion of the Seminar Proceedings into the IEEE Book Broker Program. The SSC, ED, and MTT Societies, as well as the Section Ukraine were among the supporting IEEE institutions.

50 papers of participants from Algeria, China, France, Georgia, Germany, India, Israel, Poland, Russia, Switzerland, UK, USA, and Ukraine were presented at 8 oral sessions:

Theoretical Aspects of Electrodynamics,  
FDTD and Operator Methods,  
Non-homogeneous Media,  
Propagation of Electromagnetic Waves,  
Analytical and Numerical Methods,  
Application of Electromagnetic Fields,  
Antenna Synthesis,  
Acoustics.

The papers concerning the ED modeling and IC development were presented alongside with the traditional electrodynamic and acoustic topics. They were discussed at the Non-homogeneous Media Session. The presentations “Metallic photonic crystal filters design with MMP methods” (Cui Xudong, Christian Hafner, Kakhaber Tavzarashvili, Ruediger Vahldieck, ETH, Zurich, Switzerland), “Qualitative analysis of precise frequency multiplier of harmonic oscillations “ (P. Tymoshchuk, M. Lobur, NULP, Lviv, Ukraine), “Special ditch for solid-state waveguide multielement laser (SWMEL)” (L. E. Berdzenishvili, Tbilisi State University, Tbilisi, Georgia), “Electromagnetic waves in isotropic waveguide filled by radially non-uniform dissipative plasma” (V. K. Galaydych, V. P. Olefir, A. E. Sporov, Kharkiv National University, Ukraine), and “Development of simulation model for shielded twisted pair cables in EMC immunity problems” (R. Jobava, L. Diaz, D. Karkashadze,

F. Bogdanov,

E. Yavolovskaya,

A. Gheonjian, I. Badzagua, S. Iosava, Tbilisi State University, Georgia and Volkswagen AG, Germany) were the most discussed by the

Seminar/Workshop participants.

Young scientists, students, and Ph.D. students participated also at the DIPED-2005. The Organizing Committee traditionally awarded the young speakers for the best papers. This year the prize winners were: Mrs. Oksana Trishchuk (Lviv, Ukraine) for presentation “Axial



*Mrs. Oksana Trishchuk is presenting her paper granted by the best young speaker award*

symmetric electromagnetic excitation of a finite conical screen by the ring sources (Comparison of TE- and TM- wave scattering characteristics)”, and Dr. Olexandr Dumin (Kharkiv, Ukraine) for presentation “Dielectric heating with electromagnetic field”.



*The DIPED-2005 Seminar/Workshop participants with the IAPMM building at the background*

The next annual Seminar/Workshop DIPED will be held on October 12-13, 2006, at the Tbilisi State University, Tbilisi, Georgia. For more information, please contact Dr. Mykhaylo I. Andriychuk via e-mail [andr@iapmm.lviv.ua](mailto:andr@iapmm.lviv.ua), and Dr. David D. Karkashadze via e-mail [David.Karkashadze@lae.icts.tsu.edu.ge](mailto:David.Karkashadze@lae.icts.tsu.edu.ge), or visit the West Ukraine Chapter Web Site at <http://www.ewh.ieee.org/soc/cpmt/ukraine>.