TECHNICAL PROGRAM

Monday, September 22nd

9:00-18:00: Registration

Tuesday, September 23rd

9:00-10:00: Registration

10:00-10:20: Opening and Welcome

10:20-18:30: Plenary Session

- 10:20-11:20: Electromagnetic Wave Scattering by a Small Impedance Body of an Arbitrary Shape A. Ramm, Manhattan, USA
- 11:20-11:45: Base Station Antenna’s EM Field Distribution in the Room with a Human Model Inside V. Jeladze, V. Tabatadze, M. Prishvin, I. Petoev, M. Tsverava, R. Zaridze, Tbilisi, Georgia
- 11:45-12:10: Comparing Different Approaches to Linear Antenna Synthesis Problems according to Power Radiation Pattern M. I. Andriychuk, O. O. Bulatsyk, N. N. Voitovich, Lviv, Ukraine
- 12:35-13:00: Reflection of Wave Beams, Pulses, and Packets from Apodized and Chirped Bragg Layered Structures D. V. Sidorov, V. F. Borulko, O. O. Drobakhin, Dnipropetrovsk, Ukraine

13:00-14:00: Lunch

14:00-16:20: Diffraction and Scattering

- On the Radiation of Charged Particle in a Waveguide Filled with Anisotropic Magneto Dielectric Medium E. A. Gevorkyan, Moscow, Russia
- Recognition of Wire Structure Characterization on its Backscatter D. V. Lyasota, V. M. Morozov, V. I. Magro, Dnipropetrovsk, Ukraine
- Axially-Symmetric Excitation of the Biconical Scatterers D. Kuryliak, O. Sharabura, Lviv, Ukraine
- Axially Symmetric TM-Wave Radiation through the Ring Slot in the Sphere-Conical Resonator D. Kuryliak, O. Trishchuk, Lviv, Ukraine
- Multifunctional Nonlinear Layered Media by Resonant Scattering and Generation of Waves \textit{L. Angermann}, Clausthal, Germany, \textit{V. V. Yatsyk}, \textit{M. V. Yatsyk}, Kharkiv, Ukraine

- Dielectric Properties of Foam Specimens Calculated on the Base of VSWR and Attenuation Characteristics \textit{L. A. Filins'kyi}, Dnipropetrovsk, Ukraine

- Electromagnetic Focusing of E-Cross Resolver of Analyzer of Complex Reflection Coefficient \textit{V. A. Karlov}, Dnipropetrovsk, Ukraine

\textbf{16^{20}-16^{40}: Coffee Break}

\textbf{16^{40}-18^{20} Antenna Synthesis and Inverse Problems}


- New Solutions to Synthesis Problem of Plane Array with Hexagonal Geometry \textit{M. I. Andriychuk}, \textit{V. P. Tkachuk}, Lviv, Ukraine


- Dual Method of Minimum Spatial Extent for Processing of Antenna Measurements \textit{S. M. Vovk}, \textit{V. F. Borulko}, Dnipropetrovsk, Ukraine

\textbf{Wednesday, September 24\textsuperscript{th}}

\textbf{10^{00}-13^{00}: Novel Methods in Electrodynamics}

- Extension of the Method of Auxiliary Sources for the Eigenvalue Problem of the Laplace Operator in Case of Space Periodic Boundaries \textit{D. Kakulia}, \textit{V. Ghoghoberidze}, \textit{G. Ghvedashvili}, Tbilisi, Georgia


- Hybridization of Mitzner Approach for Adaptive EM Treating of Combined Geometries including Arbitrary Shape Thin 3D Material Sheets \textit{F. Bogdanov}, \textit{R. Jobava}, Tbilisi, Georgia


• The Possibility of Using the Fractional-Rational Approximation to Determine the Parameters of Closely Spaced Resonances  
M. V. Andreev, O. O. Drobakhin, D. Yu. Saltykov, Dnipropetrovsk, Ukraine

• Semi-asymptotic Analysis of Bragg Coupling on Quasiperiodic Impedance Rod  
V. F. Borulko, Dnipropetrovsk, Ukraine

• Properties of Complex Parameters of Five-port Reflectometer with E-plane T-junctions  
M. V. Andreev, V. F. Borulko, V. A. Karlov, Dnipropetrovsk, Ukraine

13:00-14:00: Lunch

14:00-16:00: Antenna Design

• Antennas with Rotational Symmetry  
B. M. Levin, Holon, Israel

• Antenna on the Pyramid Sides  
B. M. Levin, V. L. Specktor, Holon, Israel

• Variants of Volume Self-Complementary Antennas  
B. M. Levin, Holon, Israel

• Miniaturization of Microstrip Patch Antenna by Using Various Shaped Slots for Wireless Communication Systems  
S. I. Hussain Shah, S. Bashir, Peshawar, Pakistan, A. Altaf, Seoul, South Korea

• Compact Multiband Microstrip Patch Antenna using Defected Ground Structure (DGS)  
S. I. Hussain Shah, S. Bashir, S. D. Hussain Shah, Peshawar, Pakistan, A. Altaf, Seoul, South Korea

• Experimental Localization of a Dielectric Object Near a Two-way Line  
A. Kochlashvili, M. Prishvin, D. Kakulia, D. Kvavadze, G. Jambazishvili, R. Zaridze, Tbilisi, Georgia

16:00-16:20: Coffee Break

16:20-18:00: Analytical and Numerical Methods

• Generalization of an Integro-Transcendental Equation System with Vanishing Solutions in Free Phase Problem  
O. O. Bulatsyk, Yu. P. Topolyuk, Lviv, Ukraine

• Nonlinear Three-parametric Spectral Problems in the Synthesis Theory of Radiating Systems with a Flat Aperture  
G. Y. Karpushyna, P. O. Savenko, M. D. Tkach, Lviv, Ukraine

• Solution of the Jump Boundary Value Problems with Additional Internal and External Conditions for the Laplacian in $\mathbb{R}^3$  
A. D. Polishchuk, Lviv, Ukraine

• Solution of Double-Sided Boundary Value Problems for the Laplacian in $\mathbb{R}^3$ by Means of Potential Theory Methods  
A. D. Polishchuk, Lviv, Ukraine

• Recurrent Expressions for Valuing Reliability Indicators of Complicated Electromagnetic Systems  
A. R. Sydor, Lviv, Ukraine
Thursday, September 25th

10:00-13:00: Acoustics and Remote Sensing

- SH-wave Scattering by Elastic Inclusion with a Thin Interface Layer of Low Rigidity  
  Ya. I. Kunets, V. V. Matus, V. O. Mishchenko, V. V. Porochovs’kyj, Lviv, Ukraine
- Diffraction of the Sound Wave by a Finite Soft (Rigid) Cone  
  D. Kuryliak, V. Lysechko, Lviv, Ukraine
- Analysis of sound field on the autotravelling viaduct  
  O. Piddubniak, Lodz, Poland, N. Piddubniak, Lviv, Ukraine, W. Pietrzak, Lodz, Poland
- Mathematical modeling of sound generation from Y junction of sity roads  
  O. Piddubniak, Lodz, Poland, N. Piddubniak, Lviv, Ukraine, K. Kusiak, Lodz, Poland
- The Improvement of Traffic Noise Prediction Methods by Taking into Consideration the Amendments on Acoustic Waves Reflection at Small Distances to Buildings  
  M. Melnyk, V. Teslyuk, P. Denisyuk, Lviv, Ukraine
- West Messa Metal Mapper data inversion and classification  
  I. Shamatava, B. Barrowes, J. Sigman, F. Shubitidze, NH, USA
- High frequency Electromagnetic Induction Sensing for non-Metallic Ordnances detection  
  F. Shubitidze, B. Barrowes, J. Sigman, I. Shamatava, K. O’Neill, NH, USA
- Software Model to MEMS Data Access based upon MongoDB  
  I. Vasyliuk, V. Teslyuk, Lviv, Ukraine

13:00-14:00: Lunch

18:00-21:00: Closing Session and Dinner

DIPED-2014 Awards