
TECHNICAL PROGRAM

Monday, September 21st**9⁰⁰-18⁰⁰: Registration**

Tuesday, September 22nd**9³⁰-10⁰⁰: Opening and Welcome****10⁰⁰-13⁰⁰: Plenary Session**

- Contributions of B. Z. Katzenelenbaum's theory into high power microwave electronics *M. I. Petelin*, Nizhniy Novgorod, Russia
- My teacher M. A. Leontovich *B. Z. Katsenelenbaum*, Naharia, Israel
- Many-body wave scattering and creating materials with a desired refraction coefficient *A. G. Ramm*, Manhattan, KS, USA
- Acoustic echo-signal from a thin cylindrical shell with a slit *O. Piddubniak*, Lodz, Poland, *N. Piddubniak*, Lviv, Ukraine, *K. Karnicki*, Lodz, Poland

13⁰⁰-14⁰⁰: Lunch**14⁰⁰-16⁰⁰: Electromagnetic Theory in Applications**

- Application of hybrid MoM/MTL method to simulation of interaction between cable harness and antennas *H. Chobanyan, I. Badzagua, T. Injgia, A. Gheonjian, R. Jobava*, Tbilisi, Georgia
- Accurate modeling of automotive DC-AC inverter systems for radiated emission problems *E. Yavolovskaya, I. Oganezova, T. Injgia, R. Jobava*, Tbilisi, Georgia
- Methodology for consideration of stochasticity effects in cable bundles on radiated emission problems *E. Yavolovskaya, S. Iosava, T. Injgia, Z. Sukhiashvili, R. Jobava*, Tbilisi, Georgia
- Investigation of EMI response for magnetically susceptible and conductive rough surfaces *G. Ghvedashvili, D. Kakulia, F. Shubitidze*, Tbilisi, Georgia
- Modified heat equation for thermal calculation on a realistic model *M. Prishvin, R. Zaridze*, Tbilisi, Georgia, *G. Bit-Babik, A. Faraone*, Motorola Inc, FL, USA
- Relationship between temperature rises with SAR in a head tissue in bandwidth exposure *L. Bibilashvili, M. Prishvin, R. Zaridze*, Tbilisi, Georgia, *Md. R. Islam, M. Ali*, Columbia, SC, USA

Wednesday, September 23rd

10⁰⁰-13⁰⁰: *Diffraction and Scattering*

- Exotic hypotheses *B. Z. Katsenelenbaum*, Naharia, Israel
- Leaky modes of nonlinear waveguides *A. B. Manenkov*, Moscow, Russia
- Numerical solution of electromagnetic wave diffraction by plane semi-infinite strip grating *S. N. Vorobyov*, Kharkiv, Ukraine
- Numerical solution of many-body wave scattering problem for small particles *M. I. Andriychuk*, Lviv, Ukraine, *A. G. Ramm*, Manhattan, KS, USA
- On the electrodynamics of space-time periodic anisotropic magnetodielectric mediums in the waveguide *E. A. Gevorkyan*, Moscow, Russia
- Investigation of the resonant properties of wires as a base for complex materials construction *V. Tabatadze*, *I. Petoev*, *M. Prishvin*, *D. Kakulia*, *R. Zaridze*, Tbilisi, Georgia
- Problem of diffraction on nonlinear dielectric layered structure. Generation of the third harmonic *V. V. Yatsyk*, Kharkiv, Ukraine
- The influence of permittivity of the crack-type defects to the scattered far field (TE-case) *Z. T. Nazarchuk*, *Ya. P. Kulynych*, *T. M. Stadnik*, Lviv, Ukraine
- Low-frequency electromagnetic scattering on the circular crack in a conductive body *Z. T. Nazarchuk*, *Ya. P. Kulynych*, *O. S. Koval*, Lviv, Ukraine
- About the correlation between magnitudes of far and near field diffracted by screen on plane interface of dielectric media *D. B. Kuryliak*, *Z. T. Nazarchuk*, *M. V. Voytko*, Lviv, Ukraine

13⁰⁰-14⁰⁰: *Lunch*

14⁰⁰-16⁰⁰: *Propagation in Complex Media*

- The three-mirror selective resonator with diffraction coupling-out of radiation *S. N. Vlasov*, *E. V. Kuposova*, Nizhniy Novgorod, Russia
- Electromagnetic waves of a planar layered metal-dielectric structure *M. J. Vidil*, *S. L. Prosvirnin*, *N. V. Sydoruk*, Kharkiv, Ukraine
- Light trapping by thin periodic planar structures *V. V. Khardikov*, *E. O. Iarko*, *S. L. Prosvirnin*, Kharkiv, Ukraine
- Bragg resonance in quasiperiodic layered structures *V. Borulko*, *D. Sidorov*, Dnipropetrovsk, Ukraine
- Eigenfrequencies of quasiperiodic layered structures *M. Andreev*, *V. Borulko*, *O. Drobakhin*, and *D. Sidorov*, Dnipropetrovsk, Ukraine
- Quasi-T-waves in pre-fractal system of MSL *G. I. Koshovy*, Kharkiv, Ukraine

- Three-dimensional Gaussian beam with circular cross section scattered from double-periodic magneto-dielectric slab at a small angle of incidence *V. V. Yachin, T. L. Zinenko*, Kharkiv, Ukraine
- Different effects of the extremely low frequency magnetic fields on neurons action potential and synaptic habituation *B. Partsvania, L. Shoshiashvili, Z. Modebadze, T. Surguladze*, Tbilisi, Georgia
- Surface waves on the interface of the periodic ferrite-dielectric structure bounded with the semiconductor media *O. V. Kostylyova, O. V. Shramkova, A. A. Bulgakov*, Kharkiv, Ukraine

16⁰⁰-16²⁰: *Coffee Break*

16²⁰-18⁰⁰: *Antenna Design*

- A novel compact, microstrip antenna with multifrequency operation *I. Sarkar, P. P. Sarkar, S. K. Chowdhury*, Nadia, India
- Design of array radiator with digital beamforming for radio monitoring applications *A. O. Kasyanov, M. S. Kitaiskiy*, Taganrog, Russia
- Phased array of coaxial-sector waveguides *A. V. Gribovskiy, J. V. Mangushina*, Kharkiv, Ukraine
- A monopole with raised feed point *B. Levin, M. Bank, M. Haridim*, Holon, Israel
- Dark spot shift along a vertical line *B. Levin, M. Haridim, M. Bank*, Holon, Israel
- Investigation of pear shape monopole antenna (PSMA) with matching device *T. Gogua, K. Tavzarashvili, L. Shoshiashvili*, Tbilisi, Georgia
- Microstrip patch antenna design for UMTS handsets *B. Gokce, C. Karakus, F. Akleman*, Istanbul, Turkey
- The cellphone antenna test results *A. I. Karpov, V. A. Katrych, E. A. Antonenko, S. A. Yarmolchuc*, Kharkiv, Ukraine

Thursday, September 24th

10⁰⁰-13⁰⁰: *Analytical and Numerical Methods*

- Generalized nonlinear integral equation of Hammerstein type *O. O. Bulatsyk, Y. P. Topolyuk, N. N. Voitovich*, Lviv, Ukraine
- New solutions of nonlinear integral equation arising in phase optimization problems *M. I. Andriychuk, N. N. Voitovich*, Lviv, Ukraine
- Nonlinear spectral problem in synthesis problems of plane antenna arrays *L. P. Protsakh, P. O. Savenko, M. D. Tkach*, Lviv, Ukraine
- Numerical algorithms of finding the branching lines and bifurcation points of solutions of nonlinear integral equation arising in the theory of antennas synthesis *B. M. Podlevskiy*, Lviv, Ukraine
- Boundary integral equations method in boundary problems for unbounded triangular system of elliptical equations *S. Litynskyy, Y. Muzychuk, A. Muzychuk*, Lviv, Ukraine
- Boundary elements method for some triangular system of boundary integral equations *S. Litynskyy, Y. Muzychuk*, Lviv, Ukraine
- Solution of double-sided problem with inclined derivative for the Laplacian in R^3 by means of simple and double layer potentials *A. D. Polishchuk*, Lviv, Ukraine

13⁰⁰-14⁰⁰: *Lunch*

14⁰⁰-16⁰⁰: *Inverse Problems and Optimization*

- Near-field shape reconstruction of a two-dimensional perfect conductor by multiple random excitations *A. Synyavskyy*, Lviv, Ukraine, *M. Shahin*, Dover, USA
- Investigation of the antenna arrays radiation by multiparametric method of regularization *O. N. Nosenko*, Kharkiv, Ukraine
- Inverse problem solving for layered dielectric structure using Newton-Kantorovich iterative scheme with increased accuracy *S. G. Alexin, O. O. Drobakhin*, Dnipropetrovsk, Ukraine
- A numerical approach for inverting an object's and its host medium's electromagnetic parameters simultaneously *D. Kakulia, K. Tavzarashvili, G. Chelidze*, Tbilisi, Georgia, *F. Shubitidze*, Hanover, NH, USA
- MAS-MBPE application for analysis of channel plasmon polaritons *K. Tavzarashvili, G. Ghvedashvili, D. Karkashadze, G. Sapparishvili*, Tbilisi, Georgia
- Sensor's arbitrarily location mapping to the computer in high resolution image reconstruction experimental devices *G. Sapparishvili, D. Kakulia*,

V. Tabatadze, M. Prishvin, R. Zaridze, Tbilisi, Georgia, N. Uzunoglou, Athens, Greece

- Microwave testing of exfoliation in a dielectric plate *V. R. Dzhala, L. I. Kapko, Lviv, Ukraine*
- Modelling time reliability characteristics of composite electromagnetic systems *A. R. Sydor, Lviv, Ukraine*

16⁰⁰-16²⁰: *Coffee Break*

16²⁰-18⁰⁰: *Acoustics and Applications*

- Radiation of roadway noise in windy conditions *O. Piddubniak, Lodz, Poland, N. Piddubniak, Lviv, Ukraine, T. Teodorczyk, J. Abramczyk, Lodz, Poland*
- Sound car radiation from city crossroad *O. Piddubniak, Lodz, Poland, N. Piddubniak, Lviv, Ukraine, L. Kurek, M. Dujka, Lodz, Poland*
- Acoustic wave scattering by the pre-fractal curvilinear rings system *G. I. Koshovy, A. G. Koshovy, Kharkiv, Ukraine*
- Impedance matching properties of electrorheological fluids with continuously changing acoustic impedance *L. Ding, Q. Huang, Wuhan, China*
- Scattering of longitudinal wave by partially unbounded elastic fiber *V. V. Matus, Ya. I. Kunets, V. V. Porochovs'kyj, V. O. Mishchenko, Lviv, Ukraine*
- Asymptotic solution for a low contrast piezoelectric inclusion under the dynamic antiplane loading *Ya. I. Kunets, R. V. Rabosh, Lviv, Ukraine*
- Photoelasticity ray integrals and problems for polarized-optical tomography of tensor fields in solids *V. Chekurin, Lviv, Ukraine*
- Finite-difference modeling of elastic pulse propagation in non-uniformly strained solid *O. Z. Kravchyshyn, Lviv, Ukraine*
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19⁰⁰-21⁰⁰: *Closing Session and Dinner*

DIPED-2009 Awards