

MONDAY SEPTEMBER 6, 2010		TUESDAY SEPTEMBER 7, 2010		WEDNESDAY SEPTEMBER 8, 2010	
8:00 – 8:45 REGISTRATION					
8:45 – 9:00 OPENING CEREMONY					
9:00 - 11:00 PLENARY SESSION		9:00 - 11:00 PLENARY SESSION		9:00 - 11:00 PLENARY SESSION	
11:00 – 11:30 COFFEE BREAK		11:00 – 11:30 COFFEE BREAK		11:00 – 11:30 COFFEE BREAK	
11:30 – 13:00 OPH	11:30 – 13:00 GRS	11:30 – 13:00 NME	11:30 – 13:00 NCE	11:30 – 13:00 SCD	11:30 – 13:00 INP
13:00 – 14:30 LUNCH		13:00 – 14:30 LUNCH		13:00 – 13:30 CLOSING CEREMONY	
14:30 – 16:00 WGC	14:30 – 16:00 ANT	14:30 – 16:15 AR	14:30 – 16:15 BMM	14:00 PIROGOVO (open-air museum of architecture and ethnography)	
16:00 – 16:30 COFFEE BREAK		16:15 – 16:30 COFFEE BREAK			
16:30 – 18:00 TDE	16:30 – 18:00 CT	16:30 – 18:15 EMT	16:30 – 18:15 IET		
18:30 WELCOME PARTY		19:00 BANQUET			

ANT	Antennas
AR	Analytical Regularization
BMM	Bandgap and Metamaterials
CT	Computational Techniques
EMT	Electromagnetic Theory
GRS	Geoscience and Remote Sensing
IET	Integral Equation Techniques
INP	Inverse and Nonlinear Problem
NCE	Nonclassical Electromagnetics
NME	Nano and Micro Electromagnetics
OPH	Optics and Photonics
SCD	Scattering and Diffraction
TDE	Time-Domain Electromagnetics
WGC	Waveguide Circuits

MONDAY, SEPTEMBER 6, 2010			
8:45 – 9:00		<i>room</i> OPENING CEREMONY	
9:00 – 11:00		<i>room</i> PLENARY SESSION Chairs: Alexander I. Nosich, Eldar I. Veliev	
9:00 – 9:30		Time-domain numerical techniques for the solution of Maxwell equations Ramesh K. Agarwal , <i>Washington, USA</i>	
9:30 – 10:00		Improved kernels for method-of-moments analyses of resonant circular arrays of cylindrical dipoles George Fikioris , <i>Athens, Greece</i>	
10:00 – 10:30		New exact solutions for cylindrical axisymmetric waves in a nonlinear nondispersive medium Alexander V. Kudrin , <i>Nizhny Novgorod, Russia</i>	
10:30 – 11:00		Discrete-ring vortex solitons Anton Desyatnikov , <i>Australia</i>	
11:00 – 11:30		COFFEE BREAK	
<i>room</i> OPTICS AND PHOTONICS Chairs: Francisco Medina, Tat'yana Zinenko		<i>room</i> GEOSCIENCE AND REMOTE SENSING Chairs: Vladimir Lukin, Yuliya Averyanova	
11:30 – 11:45	Trapped mode resonances in optical planar periodical structures with metal and dielectric elements, V. Khardikov, E. Iarko, S. Prosvirnin , <i>Kharkov, Ukraine</i>	11:30 – 11:45	Non-parametric detection scheme for isotropic image texture with normal increments, M. Uss, B. Vozel, V. Lukin, I. Baryshev, K. Chehdi , <i>Rennes, France</i>
11:45 – 12:00	Investigation of diffraction of optical range electromagnetic waves on dielectric nanovibrator, E.V. Golovacheva, A.M. Lerer, P.V. Makhno, N.G. Parkhomenko <i>Rostov-on-Don, Russia</i>	11:45 – 12:00	Statistical estimation of polarimetric method potential for dangerous turbulence detection in rain, Yu. Averyanova, A. Averyanov, F. Yanovsky , <i>Kiev, Ukraine</i>
12:00 – 12:15	Calculation of electric field lines of eigen waves of an open comb, V.I. Naidenko, N.V. Polehen'ka, A.S. Postul'ha <i>Kyiv, Ukraine</i>	12:00 – 12:15	Estimation of rough surface influence on the low-frequency electromagnetic response from the highly conductive object immersed in magnetic soil, D. Kakulia, F. Shubtidze , <i>Tbilisi, Georgia</i>
12:15 – 12:30	Iteration methods for analysis of dielectric waveguides and resonators, M. Davidovich, J. Stephuk , <i>Saratov, Russia</i>	12:15 – 12:30	Features of the gyrotropic wave propagation in the homogeneous ionosphere, I. Sergeev , <i>Troitsk, Russia</i>

12:30 – 12:45	Natural modes of weakly guiding optical fiber, A. Froloy, E. Karchevskiy, <i>Kazan, Russia</i>	12:30 – 12:45	Meridian estimator performance for samples of generalized Gaussian distribution D.A. Kurkin, V.V. Lukin, I. Djurovic, S. Stankovic, <i>Kharkov, Ukraine</i>
12:45 – 13:00	Angle selective properties of one-dimension anisotropic photonic crystals, A. Arkhipov, K. Vytovtov, <i>Dnipropetrovsk, Ukraine</i>	12:45 – 13:00	Statistical study of multimodal tweek-atmospherics, Y.V.Gorishnya, A.V. Shvets, <i>Kharkov, Ukraine</i>
13:00 – 14:30	LUNCH		
<i>room</i> WAVEGUIDE CIRCUITS Chairs: Eduard Gevorkyan, Pavel Zatsepin		<i>room</i> ANTENNAS Chairs: Sergey Bankov, Igor Ivanchenko	
14:30 – 14:45	About possibilities of scanning the beam from a set of transverse slots in rectangular waveguide with dielectric layer, L. Yatsuk, N. Blinova, A. Lyakhovsky, <i>Kharkov, Ukraine</i>	14:30 – 14:45	Radar cross-section calculation method for antenna of P-18 radar station, O. Sukharevsky, Ya. Belevshchuk, V. Vasilets, S. Nechitaylo, <i>Kharkov, Ukraine</i>
14:45 – 15:00	Eigen modes of a square waveguide with two inner diagonally-placed square ridges, L.A. Rud, K.S. Shpachenko, <i>Kharkov, Ukraine</i>	14:45 – 15:00	A flange surface impedance influence on radiation efficiency of finite planewaveguide array, V.V. Scherbinin, <i>Barnaul, Russia</i>
15:00 – 15:15	Interaction of counterpropagating electromagnetic waves in the absorbing plate placed in a waveguide, E.A. Gevorkyan, <i>Moscow, Russia</i>	15:00 – 15:15	Determining sources in the array of electric dipoles, V. Borulko, S. Vovk <i>Dnipropetrovsk, Ukraine</i>
15:15 – 15:30	Directional couplers on ridge waveguides with circular coupling apertures, G.F. Zargano, V.V. Zemlyakov, R.V. Peletskiy, <i>Rostov-on-Don, Russia</i>	15:15 – 15:30	Using conformal shape, separate and dynamical apodization to improve characteristics of multibeam active phased array, I. Sergeev, Yu. Ushakov, E. Demidenko, <i>Troitsk, Russia</i>
15:30 – 15:45	Finite differences variable grid evaluation of TE modes in metallic ridge waveguides A. Fanti, G. Mazzarella, <i>Cagliari, Italy</i>	15:30 – 15:45	External electromagnetic field of MWNT antennas, V. A. Ostapenko, <i>Dnepropetrovsk, Ukraine</i>
15:45 – 16:00	Calculation of TEM-modes in the waveguides having orthogon cross-section S.A. Prikolotin, D.Yu. Kulik, A.A. Kirilenko, <i>Kharkov, Ukraine</i>	15:45 – 16:00	Wave beam dispersion on semiinfinite rectangular waveguides phased-array antenna, A. Gribovsky, O. Yeliseyev, <i>Kharkov, Ukraine</i>
16:00 – 16:30	COFFEE BREAK		

<i>room</i> TIME-DOMAIN ELECTROMAGNETICS Chairs: Alexander G. Nerukh, Ramesh Agarwal		<i>room</i> COMPUTATIONAL TECHNIQUES Chairs: Stephan Shipman, Dozyslav Kurilyak	
16:30 – 16:45	Scattering of electromagnetic pulse on the impedance strip into the dielectric layer, <u>P. Zatsepin</u>, A. Rykshin, <i>Barnaul, Russia</i>	16:30 – 16:45	Eigenvalues and eigenfunctions of plane waveguide with differ walls impedances, <u>Yu.A. Baranchugov</u>, <u>V.V. Scherbinin</u>, <i>Barnaul, Russia</i>
16:45 – 17:00	Method of approximation functions for solution of 2D nonlinear Volterra integral equation, <u>D. Zolotariov</u>, A. Nerukh, <i>Kharkov, Ukraine</i>	16:45 – 17:00	Role of analytic continuation singularities in the null field method, <u>A.G. Kyurkchan</u>, N.I. Smirnova, <i>Moscow, Russia</i>
17:00 – 17:15	Solution of the general differential Maxwell system in vector form, A. Ivanitckiy, <u>I. Dmitrieva</u>, <i>Odessa, Ukraine</i>	17:00 – 17:15	Wave polarization at RF radiation sources direction estimation by regularization and nonlinear pseudoinversion methods, N. Parhomenko, <u>V. Shevchenko</u>, N. Ivanov, <i>Rostov-on-Don, Russia</i>
17:15 – 17:30	Estimation and analysis of thermal response of human tissue during EM exposure, <u>L. Bibilashvili</u>, M. Prishvin, R. Zaridze, <i>Tbilisi, Georgia</i>	17:15 – 17:30	Polarization transformation of electromagnetic waves on a reflector array of the short-circuited coaxial-sector waveguides, <u>J.V. Antonenko</u>, A.V. Gribovskiy <i>Kharkov, Ukraine</i>
17:30 – 17:45	Modeling pulse radiation of rod antenna by method of mode matching in time domain, <u>M. Legenkiy</u>, A. Butrym, <i>Kharkov, Ukraine</i>	17:30 – 17:45	Numerical algorithm for modeling the processes of establishing a normal regime of glow discharge in 2D geometry, <u>O.P. Ponomaryov</u>, I.O. Anisimov, <i>Kyiv, Ukraine</i>
17:45 – 18:00	Analysis of transient fields reflected from model of human body surface using convolutional neural network, <u>D. Shyrokorad</u>, O. Dumin, O. Dumina, V. Katrich, <i>Zaporizhzhja, Ukraine</i>	17:45 – 18:00	Investigation of tangential wave propagation under a stratified anisotropic structure, <u>K.A.Vytovtov</u>, S.A. Volkova, Yu.S. Tarasenko, <i>Dnipropetrovsk, Ukraine</i>
18:30	WELCOME PARTY		

TUESDAY, SEPTEMBER 7, 2010

9:00 – 11:00	<i>room</i> PLENARY SESSION Chairs: Zinoviy T. Nazarchuk, Felix J. Yanovsky	
9:00 – 9:30	Advances on circuit modeling of extraordinary transmission Francisco Medina, Seville, Spain	
9:30 – 10:00	Role of boundary in electromagnetic transients caused by medium time-variation Alexander G. Nerukh, Kharkov, Ukraine	
10:00 – 10:30	Resonance field analysis and electromagnetic coupling effects in metamaterial structures Elena Semouchkina, Michigan, USA	
10:30 – 11:00	Spectral-domain approach to electromagnetic scattering from imperfectly periodic structures Koki Watanabe, Fukuoka, Japan	
11:00 – 11:30	COFFEE BREAK	
<i>room</i> NANO AND MICRO ELECTROMAGNETICS Chairs: Natalya Sakhnenko, Alexander Lerer	<i>room</i> NONCLASSICAL ELECTROMAGNETICS Chairs: Hector Oviedo, Mykhaylo Andriychuk	
11:30 – 11:45	Numerical evaluation of the eigenexpansion of the electrostatic potential near a dielectric cone, C.A. Liondas, D.P. Chrissoulidis, Thessaloniki, Greece	11:30 – 11:45 Analysis of local Drude-Born-Fedorov constitutive relations for time-dependent waves in chiral media, H. Oviedo, V. Kravchenko, Mexico, Mexico
11:45 – 12:00	Electromagnetic field evolution in a linear chain of coupled resonators with time discontinuity in permittivity, N. Sakhnenko, A. Nerukh, Kharkov, Ukraine	11:45 – 12:00 Variation of large particle size for gas discharge particles-in-cells simulation, O. Kelnyk, O. Samchuk Kyiv, Ukraine
12:00 – 12:15	Diffraction of electromagnetic wave on finite carbon nanotube array perpendicular to interface of mediums, A.B. Kleschenkov, A.M. Lerer, V.V. Makhno, G.P. Synavskiy, Rostov-on-Don, Russia	12:00 – 12:15 2.5D relativistic electromagnetic PIC code for simulation of beam interaction with plasma in axial-symmetric geometry, T.E. Litoshenko, Yu.M. Tolochkevych, I.O. Anisimov Kyiv, Ukraine
12:15 – 12:30	Electromagnetic wave scattering by periodically structured chains of closely spaced sub-wavelength wires, D.M. Natarov, T.M. Benson, R. Sauleau, A.I. Nosich, Kharkov, Ukraine	12:15 – 12:30 Electromagnetic theory of sound and phonons in liquid, A.A. Stupka, Dnipropetrovsk, Ukraine

12:30 – 12:45	Three-dimensional Gaussian beam scattering from an anisotropic slab, V.V. Yachin, T.L.Zinenko, V.K.Kiseliov, <i>Kharkov, Ukraine</i>	12:30 – 12:45	Electromagnetic theory of sound in metal, A.A. Stupka, <i>Dnipropetrovsk, Ukraine</i>
12:45 – 13:00	The properties of carbon nanotube-vibrator parallel to the dielectric-dielectric interface, A.M. Lerer, V.V. Makhno, P.V. Makhno, O.S. Labunko, <i>Rostov-on-Don, Russia</i>	12:45 – 13:00	Kinetic equation for electron in polar crystal in the presence of strong electric field, S.A. Sokolovsky, <i>Dnipropetrovsk, Ukraine</i>
13:00 – 14:30	LUNCH		
<i>room</i> ANALYTICAL REGULARIZATION Chairs: George Fikioris, Sergiy Vorobyov		<i>room</i> BANDGAP AND METAMATERIALS Chairs: Elena Semouchkina, Valentin Borulko	
14:30 – 14:45	EM wave diffraction by semi-infinite strip grating, S.N. Vorobyov, L.M. Lytvynenko <i>Kharkov, Ukraine</i>	14:30 – 14:45	Numerical modeling and design of EBG waveguides and components, S. Bankov, M. Duplenkova, V. Kaloshin, <i>Moscow, Russia</i>
14:45 – 15:00	Numerical study of electromagnetic fields scattering by an electrically resistive disk, M.B. Balaban, R. Sauleau, A.I. Nosich, <i>Kharkov, Ukraine</i>	14:45 – 15:00	Application of fractional boundary conditions in diffraction by plane screens, M.V. Ivakhnychenko, T.M. Ahmedov, E.I. Veliev, <i>Kharkov, Ukraine</i>
15:00 – 15:15	Scattering of LSM modes in an E-plane two-port waveguide junction with triangular connecting cavity, V.V. Vashchenko, V.P. Chumachenko, <i>Zaporizhzhya, Ukraine</i>	15:00 – 15:15	Computer based algorithm to design metamaterials, C. Sabah, A. Yilmaz, H.G. Roskos, <i>Frankfurt am Main, Germany</i>
15:15 – 15:30	Electromagnetic waves diffraction on a system of open cones in time domain, V.A. Doroshenko, A.V. Artjukh, V.A. Parhomenko, <i>Kharkov, Ukraine</i>	15:15 – 15:30	External magnetic field influence on the transmission properties of the ferrite-dielectric periodic structure bounded with semiconductor layer, A.A. Bulgakov, O.V. Kostlyova, O.V. Shramkova, <i>Kharkov, Ukraine</i>
15:30 – 15:45	Application of integral equations to the simulation of diffraction grating based on chirped mirror, A.M. Lerer, G.A. Kalinchenko, <i>Rostov-on-Don, Russia</i>	15:30 – 15:45	Numerical modeling and design of EBG devices and antennas, S. Bankov, V. Kaloshin, L. Pagonis, E. Frolova, <i>Moscow, Russia</i>
15:45 – 16:00	Effect of the off-focus shift of the feed on the radiation characteristics of a 2-D parabolic reflector antenna, T. Oğuzer, A. Altintas, A. Nosich, <i>Izmir, Turkey</i>	15:45 – 16:00	Numerical results for the differential phase shift in the circular waveguide with azimuthally magnetized ferrite, M.N. Georgieva–Grosse, G.N. Georgiev, <i>Veliko Tirново, Bulgaria</i>

16:00 – 16:15	Electrodynamics analysis of multilayer multislots and multistrip periodical structures, I. Donets , <i>Rostov-on-Don, Russia</i>	16:00 – 16:15	Long wave layer-specific representation of metamaterial slabs in the microwave frequency range, O. Rybin, M. Raza , <i>Kharkov, Ukraine</i>
16:15 – 16:30	COFFEE BREAK		
<i>room</i> ELECTROMAGNETIC THEORY Chairs: Nina Popenko, Alexander Kudrin		<i>room</i> INTEGRAL EQUATION TECHNIQUES Chairs: Vladislav Kravchenko, Alexander Kyurkchan	
16:30 – 16:45	The second Lorentz theorem and operator form of the power conservation law, I. Petrusenko, Yu. Sirenko , <i>Dnipropetrovsk, Ukraine</i>	16:30 – 16:45	EM wave scattering by perfectly conducting disk of finite thickness, G.S. Zalevsky, S.V. Nechitaylo, O.I. Sukharevsky, I. O. Sukharevsky , <i>Kharkov, Ukraine</i>
16:45 – 17:00	Correlation between magnitudes of far and near field diffracted by metallic screen on the plane interface of dielectrics, D. Kuryliak, Z. Nazarchuk, M. Voytko, O. Trishchuk , <i>Lviv, Ukraine</i>	16:45 – 17:00	Schwinger–Lippman volume integral equation method for Green’s function evaluation in an inhomogeneous sphere by an inner source using Dini’s series expansion, G.P. Zouros , <i>Athens, Greece</i>
17:00 – 17:15	Bilateral approach for the dispersion characteristic of waves over the open comb, V.I. Naidenko, O.S. Postul’ha , <i>Kyiv, Ukraine</i>	17:00 – 17:15	Numerical algorithm for the scattering by imperfect strips using the Nystrom-type discretization, O. Shapoval, R. Sauleau, A. Nosich , <i>Kharkov, Ukraine</i>
17:15 – 17:30	Theoretical and experimental investigation of transient radiation excited by electron bunches in microwaves, A. Kuleshov, S. Ponomarenko, B.P. Yefimov, V.M. Yakovenko , <i>Kharkov, Ukraine</i>	17:15 – 17:30	Exact calculation of some singular integrals, Z. Nazarchuk, Ya. Kulynych, T. Senyk , <i>Lviv, Ukraine</i>
17:30 – 17:45	Electromagnetic field ellipticity in the case of reflection from fine-stratified structure located on a metal substrate, A.A. Bulgakov, I.V. Fedorin , <i>Kharkov, Ukraine</i>	17:30 – 17:45	Interpolation-type numerical method for electromagnetic wave diffraction by a perfectly conducting axially symmetric screen, V. Buligin , <i>Kharkov, Ukraine</i>
17:45 – 18:00	Modes of rectangular and plane-parallel waveguides with impedance walls, M. Davidovich, J. Stephuk , <i>Saratov, Russia</i>	17:45 – 18:00	Integral equation method for modeling the linear electromagnetic response of superconducting films in the mixed state, D.A. Luzhbin , <i>Kyiv, Ukraine</i>
18:00 – 18:15	Electromagnetic field state description with correlation functions of different nature, S.F. Lyagushyn, A.I. Sokolovsky , <i>Dnipropetrovsk, Ukraine</i>	18:00 – 18:15	Numerical investigation of screening properties of thin composite shells, V.T. Erofeenko, V.F. Bondarenko , <i>Minsk, Belarus</i>
19:00	BANQUET		

WEDNESDAY, SEPTEMBER 8, 2010

9:00 – 11:00		<i>room</i> PLENARY SESSION Chairs: David Kakulia, Anatoliy A. Kirilenko	
9:00 – 9:30		Power series for waves in micro-resonator arrays Stephan Shipman, Louisiana, USA	
9:30 – 10:00		Construction and use of reproducing kernels for boundary and eigenvalue problems in the plane using pseudoanalytic function theory Vladislav Kravchenko, Mexico, Mexico	
10:00 – 10:30		Denoising of single-look SAR images based on variance stabilization and nonlocal filters Alessandro Foi, Tampere, Finland	
10:30 – 11:00		Using apriory information about analytic properties of the solution on mathematical modeling in wave diffraction and propagation theory Alexander G. Kyurkchan, Moscow, Russia	
11:00 – 11:30		COFFEE BREAK	
<i>room</i> SCATTERING AND DIFFRACTION Chairs: Koki Watanabe, Oleg Sukharevsky		<i>room</i> INVERSE AND NONLINEAR PROBLEM Chairs: Anton Desyatnikov, Oksana Shramkova	
11:30 – 11:45	Near-field behavior in the method of auxiliary sources (MAS) for a simple scattering problem, P. Andrianesis, G. Fikioris, Athens, Greece	11:30 – 11:45	Lattice approach to the dynamics of the DPSK-encoded soliton trains, Y.E. Prylepkiy, S.A. Derevyanko, S.K. Turitsyn, Birmingham, UK
11:45 – 12:00	Asymptotic solution of EM field wave scattering problem by small bodies: single body case, M.I. Andriychuk, Lviv, Ukraine	11:45 – 12:00	Propagation of TM wave in a layer with Kerr law nonlinearity, D.V. Valovik, Penza, Russia
12:00 – 12:15	Calculation of radome-enclosed aperture antenna in 3-D, I. Sukharevsky, A. Altintas, Kharkov, Ukraine	12:00 – 12:15	Synthesis of antennas with specific pattern and polarization properties based on complex materials, V. Tabatadze, I. Petoev, R. Zaridze, Tbilisi, Georgia
12:15 – 12:30	Some features of the null field method and method of auxiliary sources, S.P. Skobelev, Moscow, Russia	12:15 – 12:30	Linear and nonlinear resonances in Bragg layered structures with lumped parallel reactive inhomogeneities, V. Borulko, D. Sidorov, Dnipropetrovsk, Ukraine
12:30 – 12:45	Dielectric-air structure as a component of electromechanically controled micromawe devices, Y. Prokopenko, Y. Poplavko, N. Ruda, Kiev, Ukraine	12:30 – 12:45	Vector boundary Riemann problems in soliton theory, I. Dmitrieva, Odessa, Ukraine

12:45 – 13:00	Diffraction by a curved arbitrary screen of finite thickness, S. Nechitaylo, I. Sukharevsky, D. Ivanchenko, P. Melezhik, <i>Kharkov, Ukraine</i>	12:45 – 13:00	Wave scattering by nonlinear semiconductor layers, O.V. Shramkova, A.Bulgakov, A. Schuchinsky, <i>Belfast, UK</i>
13:00 – 13:30	<i>room</i> CLOSING CEREMONY		
14:00	PIROGOVO (open-air museum of architecture and ethnography)		