



Program of MRRS-2008 Symposium Sessions, September 22-24, 2008, Kiev, Ukraine



Monday, September 22, 2008

8:00-10:00	Registration			
	Assembly Hall	Congress Opening Ceremony and Plenary Session		
12:20-13:20	Lunch			
13:30-14:00	Room 1-001 Rector of NAU: M. Kulyk	MRRS 2008 Opening Ceremony	President of EuMA: R. Sorrentino IEEE Representative: A. Nosich	
14:00-16:00	Room 1-001 SESSION A2 - ADVANCES IN ANTENNA TECHNIQUES Chairpersons: G. Vandenbosch, N. Popenko	Room 1-002 SESSION B2 - SCATTERING AND ABSORPTION IN RADAR Chairpersons: P. Bezousek, O. Drobakhan		
	A2_1 Integrated Hardware Reduction Schemes for Retrodirective Array Architectures (invited) <i>Tatsuo Itoh, Darren Goshi, University of California, Los Angeles, USA</i> A2_2 Reconfigurable Reflectarrays based on RF MEMS Technology (invited) <i>Roberto Sorrentino, University of Perugia, ITALY</i> A2_3 Dual Band Reconfigurable Slot Antenna with High Frequency Ratio <i>T. Debogovic, A. Karabelj, J. Bartolic, University of Zagreb, Zagreb, Croatia</i> A2_4 Comparison of two configurations of a four-reflector beam-waveguide for a large space communication facility <i>Andrey A. Nosich, Kharkiv National University, Kharkiv, Ukraine</i> <i>Ronan Sauleau, Yuriy V. Gandel, Université de Rennes Rennes Cedex, France</i> A2_5 On realization of the transition radiation antenna <i>S.D. Prijmenko, L.A. Bondarenko, National Science Center. "Kharkov Institute of Physics and Technology", Kharkov, Ukraine</i>	B2_1 Coherent Scattering from Distributed Targets (invited) <i>Wasyl Wasylkiwskyj, The George Washington University, USA</i> <i>Jimmy Alatishe, US Naval Research Laboratory, Washington, DC, USA</i> B2_2 Status of Advanced Scattering Distortion System Analysis for Navaids and Radar - Examples of A380 and Wind Turbines (invited) <i>Gerhard Greving, Wolf-Dieter Biermann, Rolf Mundt, NAVCOM Consult, Marbach, Germany</i> B2_3 Material parameter measurements for Radar Absorbent Material developments (invited) <i>Lajos Nagy, Budapest University of Technology and Economics, Hungary</i> B2_4 Analysis of Generalized Polarimetric Measurement Equations for Stokes Polarimetry Techniques <i>Sergey N. Savenkov, Yevgeny A. Oberemok, Alexander S. Klimov, Kiev Taras Shevchenko University, Ukraine</i>		
16:00-16:20	Coffee Break			
16:20-18:40	Room 1-001 SESSION A3 - SEMI-ACTIVE AND PASSIVE SYSTEMS Chairpersons: W. Wasylkiwskyj, I. Ivanchenko	Room 1-002 SESSION B3 - ELECTROMAGNETIC FIELDS AND GUIDED WAVES Chairpersons: R. Sorrentino, S. Malyshev		
	A3_1 Coherent Multilateration Systems (invited) <i>Pavel Bezousek, Vladimir Schejbal, University of Pardubice, Czech Republic</i>	B3_1 Microwave Study of Ferroelectrics in Waveguide (invited) <i>Y. Poplavko, V. Molchanov, V. Pashkov, Y. Prokopenko, V. Kazmirenko, A. Yeremenko, National Technical University of Ukraine, Kiev, Ukraine</i>		

<p>A3_2 A Compact Highly Sensitive Radiometer for Thermal Sounding of Atmosphere in 5 mm Band (invited) <u>V.B.Khaikin</u>, Special Astrophysical Observatory of RAS/NRTT Lab, St.Petersburg, Russia <u>V.N.Radzikovsky, S.E.Kuzmin</u>, SRC "Iceberg" Kiev, Ukraine <u>S.V.Shlenzin</u>, The Special Astrophysical Observatory of RAS/NRTT Lab, St.Petersburg, Russia <u>A.V.Shaposhnikov</u>, Central Aerological Observatory, Dolgoprudny, Russia</p> <p>A3_3 Interactive-mode X-Band Direction-Finder <u>Sergey Radionov</u>, Igor Ivanchenko, Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine, Kharkov, Ukraine <u>Alexey Korolev</u>, Institute of Radioastronomy of the National Academy of Sciences of Ukraine , Kharkov, Ukraine <u>Nina Popenko</u>, Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine, Kharkov, Ukraine</p> <p>A3_4 PaRaDe – Passive Radar Demonstrator Family Development at Warsaw University of Technology <u>Mateusz Malanowski</u>, <u>Krzysztof Kulpa</u>, <u>Jacek Misurewicz</u> Warsaw University of Technology, Warsaw, Poland</p> <p>A3_5 Wide Range Time of flight Camera for outdoor surveillance <u>Falie Dragos</u>, <u>Vasile Buzuloiu</u>, University Polytechnica of Bucharest, Romania</p> <p>A3_6 Analysis of the Availabilities of Multilateration Surveillance System in Kyiv (Boryspil) Airport <u>Inna Konchenko</u>, National Aviation University, Ukraine</p>	<p>B3_2 Quasi-Optical Sapphire Resonators for Millimeter Wave Impedance Characterization of High-T_C Superconducting Thin Films (invited) <u>N.T.Cherpak</u>, <u>A.A.Barannik</u>, <u>S.A.Bunyaev</u>, A.Usikov Institute for Radiophysics and Electronics, National Academy of Sciences of Ukraine, Kharkiv, Ukraine</p> <p>B3_3 Amplification of Space Charge Waves of Millimeter Wave Range in Transversely Inhomogeneous n-GaN Films <u>V.Grimalsky</u>, <u>S.Koshevaya</u>, <u>F.Diaz-A.</u>, <u>J.A.Hernandez-P.</u>, Autonomous University of Morelos (UAEM), Mexico</p> <p>B3_4 Simulation of Electromagnetic Wave Propagation Through Dielectric Waveguide with P-I-N Control Element <u>I.Moroz</u>, Rivne Pedagogical University, Rivne, Ukraine <u>S.Koshevaya</u>, <u>V.Grimalsky</u>, Autonomous University of Morelos (UAEM), Mexico <u>A.Kotsarenko</u>, Centro de Geociencias en Juriquila (CGEO), Querétaro, México <u>J.Escobedo</u> –A., Autonomous University of Morelos (UAEM), Mexico</p> <p>B3_5 Microwave Oscillations in a Cavity with Dispersive Double Negative Medium <u>M. S. Antyufeyeva</u>, <u>A.Yu. Butrym</u>, V.N. Karazin Kharkov National University, Kharkov, Ukraine <u>O.A. Tretyakov</u>, Gebze Institute of Technology, Turkey</p> <p>B3_6 Hybrid Oscillations in Composite Resonators with Uniaxial Hexaferrites <u>T. G. Chamor</u>, <u>L. V. Chevnyuk</u>, <u>A. Yu. Gorpynyuk</u>, <u>V. I. Kostenko</u>, National Taras Shevchenko University of Kyiv, Kyiv, Ukraine</p>
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19:00	Welcome Party
Tuesday, SEPTEMBER 23, 2008	
9:00-10:50 Room 1-001 SESSION A4 - NEW TECHNOLOGIES IN ELECTRONICS <u>Chairpersons: A. Kawalec, P. Beasley</u>	Room 1-002 SESSION B4 - DATA AND IMAGE PROCESSING <u>Chairpersons: K. Kulpa, I. Prokopenko</u>
<p>A4_1 System-in-a-Package Technology for 3D Integration of Radar Modules (invited) <u>G. Vandenbosch</u>, Katholieke Universiteit Leuven, Leuven, Belgium <u>S. Brebels</u>, X. Sun, G. Carchon, G. Posada, IMEC, HRFP group, Leuven, Belgium</p>	<p>B4_1 Comparisons of 3 Dimensional Temperature Distributions of mm and IR Images (invited) <u>Jung-Young Son</u>, Daegu University Kyungsan, Kyungbuk, Korea <u>Vladimir P. Guschin</u>, <u>Alexander G. Denisov</u>, State Research Center of Superconductive Radioelectronics "Iceberg", Kiev, Ukraine</p>

	<p>L. Dussopt, CEA Grenoble, LETI/DCIS/SMOC, Grenoble, France</p> <p>M.-A. Dubois, CSEM, RF & piezo components, Microelectronics, Neuchâtel, Switzerland</p> <p>W. De Raedt, IMEC, HRFP group, Leuven, Belgium</p> <p>A4_2 High-speed Photodiodes for Microwave and Millimeter-wave Systems (invited)</p> <p>Sergei Malyshev, Alexander Chizh, Yury Vasilevski, B.I. Stepanov Institute of Physics of National Academy of Sciences of Belarus , Minsk, Republic of Belarus</p> <p>A4_3 High-Temperature Superconductor-Films Microstrip Band-Pass Filters for Extreme Working Conditions</p> <p>Igor V. Korotash, Eduard M. Rudenko, Institute of Metal Physics, NAS of Ukraine, Kyiv, Ukraine</p> <p>A4_4 Quantum Interference in Transistors</p> <p>Timur A. Shutenko, Odessa National Academy of Telecommunications, Odessa, Ukraine</p> <p>Igor L. Aleiner, Boris L. Altshuler, Columbia University, New York NY, USA</p>	<p>Seok-Won Yeom , Dae-Hyun Jung, Daegu University Kyungsan, Kyungbuk, Korea</p> <p>B4_2 Microwave Multifrequency Radar Images of Electrodynamics Objects</p> <p>O. O. Drobakhin, V. V. Alekseev, A. I. Chekh, Dnepropetrovsk National University, Dnepropetrovsk, Ukraine</p> <p>B4_3 An Automatic Approach to Lossy Compression of Images Corrupted by Poisson Noise</p> <p>V.V. Lukin, M.S. Zriakhov, N.N. Ponomarenko, National Aerospace University, Kharkov, Ukraine</p> <p>Arto Kaarna, Lappeenranta University of Technolog, Lappeenranta, Finland</p> <p>B4_4 Edge-Preserving Piecewise-Constant Image Restoration via Method of Minimum of Extension</p> <p>Oleg S. Antropov, Dnepropetrovsk National University, Dnepropetrovsk, Ukraine</p> <p>B4_5 Microwave Fourier-Holography Approach Improvement via Minimum Duration AmplitudeMultifrequency Data Extrapolation</p> <p>Oleg S. Antropov, Valentine F. Borulko, Oleg O. Drobakhin, Sergey M. Vovk, Dnepropetrovsk National University, Dnepropetrovsk, Ukraine</p>
10:50- 11:10	Coffee Break	
11:10- 13:00	Room 1-001 SESSION A5 - RADAR SIGNAL PROCESSING Chairpersons: L. Ferro-Famil, V. Lukin	Room 1-002 SESSION B5 - REMOTE SENSING OF THE ATMOSPHERE Chairpersons: I. Nicolaescu, D. Vavriv
	<p>A5_1 The CLEAN Type Algorithms for Radar Signal Processing (invited)</p> <p>Krzysztof Kulpa, Warsaw University of Technology, Warsaw, Poland</p> <p>A5_2 Modification of Newton-Kantorovich Iteration Procedure for Piecewise-Constant Real Permittivity Profile Reconstruction</p> <p>Sergey G. Alexin, Oleg O. Drobakhin, Vladimir O. Tkachenko, Dnepropetrovsk National University, Dnepropetrovsk, Ukraine</p> <p>A5_3 Spectral Estimation by the Model of Autoregressive Moving Average and its Resolution Power</p> <p>I. G. Prokopenko, A .J. Churina, National Aviation University, Kiev, Ukraine</p> <p>A5_4 Radar pulse trains classification</p> <p>Andrzej Pieniężny, Military University of Technology, Warsaw, Poland</p>	<p>B5_1 Weather Radar - Recent Developments and Trends (invited)</p> <p>Dusan Zrnic, NOAA/National Severe Storms Laboratory, USA</p> <p>B5_2 The Estimate of Instantaneous Power of Polarization Spectrum Components in Polarimetric Weather Radars</p> <p>Yu. Averyanova, A. Averyanov, F. Yanovsky, National Aviation University, Kiev, Ukraine</p> <p>B5_3 Use of Spectral Differential Reflectivity at Remote Sensing of Precipitation</p> <p>Vitaliy Marchuk, National Aviation University, Kiev, Ukraine</p> <p>B5_4 Multivariate Algorithm for Dangerous Turbulence Detection in Weather Formations</p> <p>Ya. Ostrovsky, National Aviation University, Kiev, Ukraine</p>

	<p>A5_5 Nonparametric method for estimating the spoken language sound multivariate probability function <u>Zhanna Bokal</u>, National Aviation University, Kiev, Ukraine <u>Rustem Sinitzin</u>, National Aviation University, Kiev, Ukraine</p>	<p>B5_5 Recent Researches in the in the Field of Weather Radar at the National Aviation University <u>Felix Yanovsky</u>, National Aviation University, Kiev, Ukraine</p>
13:10-14:10		Lunch
14:20-16:30	<p>Room 1-001 SESSION A6 - ANTENNA ANALYSIS AND MEASUREMENTS Chairpersons: T. Itoh, N. Cherpak</p> <p>A6_1 2-D Analysis and Synthesis of Dielectric Lens Antennas with Boundary Integral Equations (invited) <u>A.V. Boriskin, A.I. Nosich</u>, Institute of Radiophysics and Electronics NASU, Kharkiv, Ukraine <u>R. Saulieu</u>, University of Rennes, Rennes, France</p> <p>A6_2 Quasi-Loop Antenna for SAW RFID Device <u>Mateusz Pasternak, Jerzy Pietrasinski</u>, Military University of Technology, Warsaw, Poland</p> <p>A6_3 Test Results of a Compact Smooth-Walled Spline-Profile Horn at 30-38 GHz for Radio Astronomy Application <u>Roman Chernobrovkin, Nina Popenko</u>, Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine <u>Vladimir Khaikin</u>, Special Astrophysical Observatory of Russian Academy of Sciences/NRTT Lab, St.Petersburg, Russia <u>Christophe Granet</u>, BAE Systems Australia, Australia</p> <p>A6_4 Monopole Antenna with Plug-Shape Ground plane <u>M. Khruslov, I. Ivanchenko, N. Popenko</u>, Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine , Kharkov, Ukraine</p> <p>A6_5 Near-Field Measurements in the Microwave and Millimetre Ranges <u>I. Ivanchenko, D. Ivanchenko</u>, Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine, Kharkov, Ukraine <u>Alexey Korolev</u>, Institute of Radioastronomy of the National Academy of Sciences of Ukraine , Kharkov, Ukraine <u>M. Khruslov, Nina Popenko</u>, Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine, Kharkov,</p>	<p>Room 1-002 SESSION B6 - SYNTHETIC APERTURE RADAR Chairpersons: L. Nagy, G. Khlopov</p> <p>B6_1 Remote sensing of urban areas from polarimetric SAR data using Time-Frequency and spectral analysis methods (invited) <u>Laurent Ferro-Famil</u>, University of Rennes, France</p> <p>B6_2 High-Accuracy Doppler Measurements for Airborne SAR Imaging (invited) <u>D. M. Vavriv, O. O. Bezvesilniy, V. V. Vynogradov</u>, Institute of Radio Astronomy of NAS of Ukraine, Kharkov, Ukraine</p> <p>B6_3 Multilook Technique for Dominant Scatterer Removal in SAR Images <u>K. Kulpa, J. Misiurewicz</u>, Warsaw University of Technology, Warsaw, Poland <u>P. Samczynski, M. Smolarczyk</u>, Telecommunications Research Institute, Warsaw, Poland</p> <p>B6_4 New Difference Doppler Centroid Estimation Method with High Space Resolution <u>Ievgeniia V. Dukhopelnikova</u>, Institute of Radioastronomy NAS Ukraine, Kharkiv, Ukraine</p> <p>B6_5 The Coherent MapDrift Technique Robustness to Low SNR SAR Data <u>Piotr Samczynski</u>, Telecommunications Research Institute Warsaw, Poland</p>

	<p><i>Ukraine</i></p> <p>A6_6 Analysis of the Parameters of Asymmetrical Dual Feeding Full Wave Dipole Antenna <u><i>Yahya S. H. Khraisat</i></u>, Al-Balqa Applied University/ Al-Huson university College, Jordan <u><i>Khedher A. Hmood, A. Anwar</i></u>, Universiti Sains Malaysia Seri, Ampangan, Penang, Malaysia</p>	
16:30-16:50	Coffee Break	
16:50-18:50	<p>Room 1-001 SESSION A7 - ADVANCES IN RADAR SYSTEMS <u>Chairpersons: G. Greving, M. Pasternak</u></p> <p>A7_1 Advances in Millimetre Wave FMCW Radar (invited) <u><i>Patrick Beasley</i></u>, QinetiQ, UK</p> <p>A7_2 Procedures to improve the performances of SFCW radar used for landmine detection (invited) <u><i>Ioan Nicolaescu</i></u>, Military Technical Academy, Bucharest Romania <u><i>Piet van Genderen</i></u>, Delft University of Technology, Delft, The Netherlands</p> <p>A7_3 Target Tracking Using Radar and Direction Finder <u><i>Jacek Karwatka</i></u>, Telecommunications Research Institute, Warszawa Poland</p> <p>A7_4 An Adaptive Kalman Filter for Radar Tracking Application <u><i>Van Tho Dang</i></u>, National Aviation University, Kiev, Ukraine</p>	<p>Room 1-002 SESSION B7 - IMPROVEMENT OF SYSTEM CHARACTERISTICS <u>Chairpersons: I. Balajti, Yu. Poplavko</u></p> <p>B7_1 Global stability analysis and stabilization of power amplifiers (invited) <u><i>Almudena Suárez</i></u>, University of Cantabria, Santander</p> <p><u><i>Sanggeun Jeon, David Rutledge</i></u>, California Institute of Technology, Pasadena</p> <p>B7_2 More Efficient ATR System Using the Decision Fusion between HRR and Video Imaginary <u><i>Iulian-Constantin Vizitiiu, Ioan Nicolaescu</i></u>, Military Technical Academy, Bucharest, Romania</p> <p>B7_3 Bandwidth Suppression in mm-wave Photonic Structure with Magnetic "Defect" <u><i>M. V. Mozhyrovskyi, V.V. Oliynyk</i></u>, Taras Shevchenko Kiev National University, Kiev, Ukraine</p> <p>B7_4 Computation Method of Mutual Impact Coefficient of the Quarter-wave Wire Antennas Placed on Airplane Wire-grid Model <u><i>Alexander V. Vishnevsky</i></u>, National Aviation University, Kiev, Ukraine</p>
Social Events		
Wednesday, September 24, 2008		
9:00-11:00	<p>Room 1-001 SESSION A8 - REMOTE SENSING OF EARTH AND ATMOSPHERE <u>Chairpersons: D. Zrnic, Yu. Averyanova</u></p> <p>A8_1 An Airborne P-Band Ice Sounding Radar: RF Technologies and Novel Solutions (invited) <u><i>Viktor Krozer, Carlos Cilla Hernandez, Jens Vidkjar, Jorden Dall</i></u>, Technical University of Denmark, Kgs. Lyngby, Denmark</p> <p>A8_2 Remote Sensing for Systems of Active Impact on Clouds (invited) <u><i>G.I. Khlopov</i></u>, Institute of Radio-Physics and Electronics of National</p>	<p>Room 1-002 SESSION B8 - INFORMATION SYSTEMS AND SIGNALS <u>Chairpersons: J. Y. Son, A. Pieniezny</u></p> <p>B8_1 Measurement of Shifts in Bell Tower of Sophia Cathedral Using Ka-band Noise Waveform SAR <u><i>Konstantin Lukin, Anatoliy Mogyla, Vladimir Palamarchuk, Pavlo Vyplavin, Evgeniy Kozhan</i></u>, Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine</p> <p>B8_2 Noise Modeling for Global Satellite Aeronavigation Systems</p>

	<p><i>Academy of Science of Ukraine</i> N.V. Sirota, Crimean paramilitary service of active impact on hydrometeorological processes, Autonomous republic of Crimea, Simferopol, Ukraine S.I. Khomenko, V.E. Morozov, O.A. Vojtovich, Institute of Radio-Physics and Electronics of National Academy of Science of Ukraine A.L. Teplyuk, Technical University of Kiel, Germany</p> <p>A8_3 Radar Determination of Probable Icing-in-Flight Alexander Pitertsev, National Aviation University, Kiev, Ukraine</p> <p>A8_4 Regional Analytical Algorithm of Sea Chlorophyll Concentrations Retrieving from Sea Reflectance E.N. Korchemkina, E.B. Shybanov, M.E. Lee, Marine Hydrophysical Institute of NAS of Ukraine, Sevastopol, Ukraine</p> <p>A8_5 Massive Sulphide Deposites Exploration by used Remote Sensing Technique "ASTER IMAGERY" Ali Mohammed Ali Asiri, King Abdulaziz City for Science & Technology (KACST), Kingdom of Saudi Arabia</p>	<p>N. Kasperovych, V. Shvets, Y. Ostrovsky, National Aviation University, Kiev, Ukraine</p> <p>B8_3 Organization of Programmed Means for Dynamic Scenes Visualization and Analysis in Real-Time Geoinformation Complexes Viktor A. Borodin, National Aviation University of Ukraine, Kiev, Ukraine</p> <p>B8_4 Multi-Switch Satellite Digital System (MSDS) Yahya S.H. Khraisat, Al-Balqa Applied University/ Al-Huson university College, Jordan</p> <p>B8_5 Mathematical modeling of the cardiac electrical signals formation E. Aznakayev, E. Melnikov, National Aviation University of Ukraine, Kiev, Ukraine</p> <p>B8_6 The Effect of Amplitude Fades on a Forward Transmission System Using a DS CDMA Abdel-Rahman Al-Qawasmi, Communications and Electronics Department, Philadelphia University, Jordan</p> <p>Ayman Al-Iawama, Mutah University, Karak– Jordan</p>
10:40-11:00	Coffee Break	
11:00-11:50	<p>Room 1-001 SESSION A9 - NON-INFORMATION APPLICATIONS Chairpersons: V. Scheibal, E. Aznakaev</p> <p>A9_1 Application of Microwave Radiation in Incinerator V. I. Naidenko, D. S. Shumakov, National Technical University of Ukraine "Kiev Polytechnic Institute", Kiev, Ukraine</p> <p>A9_2 Electromagnetic energy application for soil infectious diseases sterilization V. Karpovich, A. Ermolovich, G. Volinets, I. Kostukevich, Belarussian State University, Minsk, Belarus</p>	<p>Room 1-002 SESSION B9 - LOGISTICS AND ORGANIZATION OF RADAR MEASUREMENTS Chairpersons: A. Suarez, J. Misiuriewicz</p> <p>B9_1 Performance Measurements of the Radar "In Situ" (invited) Istvan Balajti, NATO Maintenance and Supply Agency, Luxembourg</p> <p>B9_2 Organization of Computer Experiment for Radar Research S. S. Kostina, National Aviation University of Ukraine, Kiev, Ukraine</p>
12:00-13:00	MRRS_2008 Closing Ceremony – EuMA and IEEE Awards	
13:10-14:10	Lunch	
	Social Events	