21 September

10⁰⁰, Assembly hall in the 1st building

FOURTH WORLD AVIATION CONGRESS Opening Ceremony and Plenary Session

13⁰⁰, Dining hall

Lunch

14⁰⁰, bus at the Dining hall

Social event (supposedly, boat tour along Dnieper river with a stand-up meal)







22 September

08²⁰, room 1.001

RADAR METHODS AND SYSTEMS WORKSHOP (RMSW 2010)

RMSW 2010 Chairman – Felix Yanovsky RMSW 2010 Coordinator – Yuliya Averyanova

SESSION B1

Radar Waveforms and Signal Processing

Chairpersons - Krzysztof Kulpa (Poland), Igor Ivanchenko (Ukraine)

22 September, 08³⁰-10³⁰, room 1.001

08³⁰ – 09⁰⁰ 1. Radar Waveforms with Communication Ability *P.van Genderen, Delft University of Technology, Delft, The Netherlands* (Invited)

09⁰⁰ – 09³⁰ 2. Wind Turbines and Radar - Simulations of Effects and Conditions for Coexistance *Gerhard Greving, NAVCOM Consult, Germany* (Invited)

3. Radar Detection Via Compressive Sensing Using Partial Fourier Coefficients

<u>L. Anitori</u>, M. Otten, P. Hoogeboom, TNO Defence, Security and Safety,

The Netherlands

09⁵⁰ – 10¹⁰
4. Analysis of the Multiple Assignment Detection Method in Radar Tracking *Jacek Karwatka, Telecommunications Research Institute, Warszawa, Poland*

10¹⁰ – 10³⁰ 5. Monitoring of Biological Organisms in Environment Using Modern Technical Means *Elena Klyuchko, National Aviation University, Ukraine*

SESSION B2

Miniature Antenna Design and Field Effect Modeling

Chairpersons – Georgi Georgiev (Bulgaria), Sergey Kolomiets (Russia)

22 September, 10⁵⁰, room 1.001

- 10⁵⁰ 10²⁰
 1. A Novel Reconfigurable Dual Band Microstrip Circular Patch Antenna using Coaxial Feed *Pradeep Chhawchharia, Geetanjali Institute of Technical Studies, India* (Invited)
- 11²⁰ 11⁴⁰ 2. Small Size Axial-Symmetrical Antennas for WiMax Applications
 I. Ivanchenko, D. Ivanchenko, M. Khruslov, N. Popenko, Usikov Institute for Radiophysics and Electronics of NAS of Ukraine, Ukraine
- 11⁴⁰ 12⁰⁰ 3. Beamforming Regularities of the Axial-Symmetric Antennas for WiMax Applications *I. Ivanchenko, N. Popenko, Usikov Institute for Radiophysics and Electronics of NAS of*

Ukraine, Ukraine
L.Lighard, Delft University of Technology, Delft, The Netherlands

- 4. The Development of Norms of Frequency and Distance Separation of Digital Broadcasting and Television of Standard T-DAB and DVB-T with Thin-Route Radio Relay Stations *I.V. Sibruk*, *D.P. Bondarenko*, *National Aviation University*, *Ukraine*
- 12²⁰ 12⁴⁰ 5. Blood Flow Modeling in Narrow Capillaries and Electric Field Effect *E. Aznakayev, V. Kalion, National Aviation University, Ukraine*
- $12^{50} 13^{50}$ Dining hall Lunch

SESSION B3

Microwaves and Antenna Techniques

Chairpersons - Pradeep Chhawchharia (India), Oleg Drobahin (Ukraine)

22 September, 14⁰⁰,

room 1.001

 $14^{00} - 14^{30}$ 1. The Tricomi Theory of Confluent Hypergeometric Functions and its application to waveguide propagation

<u>G. Georgiev</u>, M. Georgieva-Grosse, University of Veliko Tirnovo ''St. St. Cyril and Methodius'', Bulgaria (Invited)

- 2. Multiband Resonance Generation by Feed Manipulation in Microstrip Antenna

 K.S. Alimgeer, S. Muzahir Abbas, H. Zahra, Z. Qamar, Shahid A. Khan, COMSATS

 Institute of Information Technology, Islamabad, Pakistan

 Raheel Maqsood Hashmi, Politechnico di Milano, Milan, Italy
- 14⁵⁰ 15¹⁰ 3. Cosecant-Squared Parabolic Reflector Antenna Design for Air and Coastal Surveillance Radars

Okan Yurduseven, Marmara University, Turkey

Okan Mert Yucedag, Tubitak National Research Institute Of Electronics And Cryptology (Uekae), Turkey

Ahmet Serdar Turk, Yildiz Technical University, Turkey

RMSW-2010 Preliminary program

- 4. Tem Horn Fed Parabolic Reflector Antenna Design for Hyper Wide Band Impulse Radar Systems <u>M. Dagcan Senturk</u>, Ahmet S. Turk, Yildiz Technical University, Turkey
- 5. Polarization Selective Antennas for Radar Application
 Yu. Averyanova, F. Yanovsky, National Aviation University, Ukraine

Coffee-break

SESSION B4

Passive and Semi Active Radar Applications

Chairpersons – Gerhard Greving (Germany), Victor Sterlyadkin (Russia)

22 September, 16⁴⁰, room 1.001

- 16¹⁰ 16⁴⁰ 1. Passive Radar for ATC *Krzysztof Kulpa, Warsaw University of Technology, Poland (Invited)*
- 2. Active Microwave and Millimeterwave ISAR Imagine and Millimeterwave Passive Radar Receiver Design
 Harun Cetinkaya, Mustafa Tekbas, Ahmet Kizilhan, Alexey Vertiy, TUBITAK-MRC, Material Institute, International Laboratory for High Technologies (ILHT), Gebze-Kocaeli, Turkey
- 17⁰⁰ 17²⁰
 3. Multifrequency Measurements in Millimeter Wave Range as a tool of Artificial Structures Research

 O. Drobakhin, V. V. Alekseev, D. Yu. Saltykov, A. D. Saltykov, Dnepropetrovsk National University, Ukraine
- 17²⁰ 17⁴⁰ 4. Comparison of Using SAR Processing and Hough Transform as a Methods for GPR Radar Image Creation

 Mariusz Zych, Warsaw University of Technology, Poland
- 5. The Radio Sources Coordinates Estimation by the Range-Difference Method Using Low-Orbit Constellation of Small Satellites

 Voroshilin Eugene, Mikhail Mironov, Tomsk State University of Control Systems and Radioelectronics, Russia

23 September

SESSION B5

Advanced Radar Methods in Meteorology

Chairpersons – Piet van Genderen (The Netherlands), Alexey Vertiy (Turkey)

23 September, 10⁰⁰ - 11⁵⁰,

room 1.001

 $10^{00} - 10^{30}$ 1. Methods of Doppler Tomography in Radar Meteorology

A.G. Gorelik, <u>V.V. Sterlyadkin</u>, Moscow Institute of Physics and Technology, Dolgoprudniy, Russia

RMSW-2010 Preliminary program

$10^{30} - 10^{50}$	2. Application of Differential RCS for Measurements of Rain Parameters Yu. Belov, A. Linkova, G. Khlopov, S. Khomenko, O. Vojtovich, Institute of Radiophysics and Electronics of NAS of Ukraine, Ukraine
$10^{50} - 11^{10}$	3. Generalized Multiplicative Coefficient in Rainfall Rate - Radar Reflectivity Factor Relationship under Assumption of Modified Gamma Drop Size Distribution and its Use Within Wide Range of Wavelength and Time Intervals Sergey F. Kolomiets , Moscow Institute of Physics and Technology, Dolgoprudniy, Russia
$11^{10} - 11^{30}$	4. Study of Dynamic Processes in Clouds During Rain and Rain Microstructure by Means of Multiwave Doppler Radars <u>Sergey F. Kolomiets</u> , Andrey G. Gorelik, Moscow Institute of Physics and Technology, Dolgoprudniy, Russia
$11^{30} - 11^{50}$	5. Doppler-Polarimetric Radar Meteorological Applications <u>F. Yanovsky</u> , Yu. Averyanova, National Aviation University, Ukraine
$11^{50} - 12^{00}$	Closing remarks on the RMSW-2010
$12^{00}-14^{00}$	Lunch time

 14^{00} , Assembly hall in the 1^{st} building

FOURTH WORLD AVIATION CONGRESS Closing Ceremony