



Programme for Research-Development-Innovation for Space Technology and Advanced Research - STAR

Romanian Space Week 2015

27-29 May 2015

**Conference Centre of the INCAS "Elie Carafoli"
220, Iuliu Maniu Blvd., District 6, Bucharest, Romania**

Agenda

Wednesday, 27 May 2015

09:00-10:00						Registration and Welcome coffee											
10:00-10:30			Opening session - Romanian Space Agency (ROSA)			Room: "Elie Carafoli" Aula											
10:30-13:30			Session 1 - RDI Projects (C1-2012)			Room: "Elie Carafoli" Aula			10:30-13:30			Side events/ Meetings			Room: "Nicolae Tîpei" Conference Room		
10:30-10:40	Correlational Study of Space Missions Related to Fundamental Physics. Opportunities for Romanian Space Projects	COSMOS-RO	Institute of Space Science (ISS)	10:30-11:00	Horizon 2020 - "Secure societies 2015 calls"			contact person: Letiția PAVELESCU , H2020 Security NCP e-mail: letitia.pavelescu@ancs.ro									
10:40-10:50	Cluster Flux Gate Magnetometer Daily Calibration and Scientific Data Exploitation	TUNED	Institute of Space Science (ISS)														
10:50-11:00	Radio Dichotomy in Active Galactic Nuclei and Black Hole X-ray Binaries	RDAGN	Institute of Space Science (ISS)														
11:00-11:10	Auroral Electrodynamics with Swarm	ALEOS	Institute of Space Science (ISS)														
11:10-11:20	Contributions to the Euclid Mission	CEM	Institute of Space Science (ISS)														
11:20-11:30	Satellite detection of faint fluorescence phenomena	SADET	Institute of Space Science (ISS)														
11:30-11:40	Software development and integration for access to large-scale atomic databases and analysis applications	DATOM	National Institute for Laser, Plasma and Radiation Physics (INFLPR)														
11:40-11:50	GPU in GRID for space science and technology	GUIDE	Institute of Space Science (ISS)														
11:50-12:00	Validation of Swarm L-1b data using multi-point gradient estimation techniques	VALS	Institute of Space Science (ISS)														
12:00-12:10	Bistatic SAR Demonstrator for PS Interferometry using a Fixed-Receiver Configuration	BISTATIC PSI	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)														
12:10-12:20	Development and validation of PSInSAR processing chain for certification as Operational Service Provider	PSInSAR	TERRASIGNA S.R.L. (former S.C. Advanced Studies and Research Center S.R.L.)														
12:20-12:30	Content Based Query Concept for Exploration and Discovery of Information in Earth Observation and Medical Libraries	CONCEDE	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)														
12:30-12:40	Clouds and Aerosols Profiling in support of ESA's Sentinel 4 and 5 missions	CAPESA	National Institute for Research and Development in Optoelectronics - INOE 2000														
12:40-12:50	Drought monitoring based on space and in-situ data	DROMOSIS	TERRASIGNA S.R.L. (former Advanced Studies and Research Center S.R.L.)														
12:50-13:00	Integrated landslide detection system using ground and space-borne monitoring techniques in Romania	ILUSTRO	Technical University of Civil Engineering Bucharest														
13:00-13:10	Satellite Images Analysis for Fire Monitoring	SIAFIM	Intergraph Computer Services S.R.L.														

13:10-13:20	RESEARCH FOR DEVELOPMENT A TELEMEDICINE EXPERT SYSTEM FOR PROVIDING OPTIMAL MEDICAL ON SITE RESPONSE IN DISASTERS AND EMERGENCY SITUATIONS MANAGEMENT (using the latest technology in biosensors, satellite communications, satellite navigations, IT etc.)	TELEDIM	IAROM S.A., Bucharest			
13:20-13:30	ADVANCED MONITORING SYSTEM OF URBAN VEGETATION DYNAMICS AND PREDICTIVE ASSESSMENT OF CLIMATIC AND ANTHROPOGENIC STRESSORS IMPACTS ON BUCHAREST METROPOLITAN AREA FROM SATELLITE AND IN-SITU BIOGEOPHYSICAL DATA	BUGREEN	National Institute for Research and Development in Optoelectronics - INOE 2000			
13:30-14:30	Lunch break					
14:30-17:30	Session 2 - RDI Projects (C1-2012)	Room: "Elie Carafoli" Aula		14:30-17:30	Side events/ Meetings	
14:30-14:40	Advanced X-Ray Imaging System for AeroSpace Components Structural Integrity Investigation	DualXScan	ACCENT PRO 2000 S.R.L.	14:30-16:00	Round table on "Space Surveillance and Tracking National Capabilities"	participation by invitation only contact person: Dr. eng. Mircea CERNAT e-mail: mircea.cernat@rosa.ro
14:40-14:50	Experimental Weak Radio Signals Monitor for Ionospheric Disturbances Analysis	RAMA	BITNET - Research Center on Sensors & Systems (BITNET-CCSS)			
14:50-15:00	Long term data exploitation for Satellite Image Time Series - Extraction of Classes for Scene Dynamics	LEO-SITS	University "POLITEHNICA" of Bucharest			
15:00-15:10	Suborbital Launcher for Testing, Unconventional Subsystems Development	SLT-USD	University "POLITEHNICA" of Bucharest - Research Center for Aeronautics and Space (UPB-CCAS)			
15:10-15:20	Technologies for Testing and Validation of the Structure, and Modified Hybrid Rocket Motor for Suborbital Launcher - STRAC	STRAC	University "POLITEHNICA" of Bucharest - Research Center for Aeronautics and Space (UPB-CCAS)			
15:20-15:30	Advanced strategic planning to develop a turbopump system for a liquid propellant rocket engine	DevPump	Romanian Research and Development Institute for Gas Turbines (COMOTI)			
15:30-15:40	Low Altitude Launching Systems: Analysis and Tests of Atmospheric Flight Phases	LALAFP	National Institute for Aerospace Research "Elie Carafoli" (INCAS)			
15:40-15:50	Inverse aero-thermodynamic analysis for supersonic/hypersonic flows	IATASH	University "POLITEHNICA" of Bucharest - Research Center for Aeronautics and Space (UPB-CCAS)			
15:50-16:00	Compositional and dynamical modeling of near-Earth asteroids	COD-NEA	Astronomical Institute of Romanian Academy			
16:00-16:10	Subsystems for Nanosatellites - SuNs	SuNs	Institute of Space Science (ISS)			
16:10-16:20	Romanian Dual CubeSat Mission. Development of the RoBiSat-1 spacecraft	RoBiSat-1	Institute of Space Science (ISS)			
16:20-16:30	ADvanced COmposite Structure for SPacecraft Applications	ADCOSSPA	Romanian Research and Development Institute for Gas Turbines (COMOTI)			
16:30-16:40	Structural health monitoring in spacecraft structures using piezoelectric wafer active sensors and multimodal guided waves	Space SHM	National Institute for Aerospace Research "Elie Carafoli" (INCAS)			
16:40-16:50	New Haptic Arm Exoskeletons for Robotics and Automation in Space	EXORAS	Technical University of Cluj-Napoca			
16:50-17:00	Thin film photodetectors - new concepts and studies for aerospace applications	CONDAS	National Institute for Research and Development in Microtechnologies (IMT Bucharest)			
17:00-17:10	Research Project on the Development of an Original Fuel Cell Technology Dedicated to Long-Distance Outer Space Manned Missions	FCtoOutSpace	ET Innovative Solutions S.R.L.			
17:10-17:20	Compressive THz Imaging and Hadamard Spectroscopy for Space Applications	THh Imaging	National Institute for Laser, Plasma and Radiation Physics (INFLPR)			
17:20-17:30	Distributed Coding Algorithms for Energy Saving in Wireless Sensor Networks Applications	DCA-WSN	University "POLITEHNICA" of Bucharest			

Thursday, 28 May 2015

09:00-10:00 Welcome coffee							
10:00-13:30 Session 3 - RDI Projects (C1-2012/C2-2013)		Room:"Elie Carafoli" Aula		10:00-13:30 Centres of Competence in Space Technologies		Room:"Nicolae Tipei" Conference Room	
10:00-10:10	Dynamic Launching and Recovery Procedures from High Altitudes	DYLARPHA	National Institute for Aerospace Research "Elie Carafoli" (INCAS)	10:00-10:20	Laser-Plasma Acceleration of Particles for Radiation Hardness Testing	LEOPARD	National Institute for Laser, Plasma and Radiation Physics (INFLPR)
10:10-10:20	Integrated Evaluation System for Advanced Multilayered Materials in Aerospace and Related Fields	ATLAS	National Institute of Materials Physics (INFM)				
10:20-10:30	High efficiency thermoelectric generator with non-steady state operation	TEGSPACE	ICPE S.A.	10:20-10:40	Competence Centre for Smart Sensors and Big Data Technology for Space Applications	SpaceTech	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)
10:30-10:40	Computational Methods in Scientific Investigation of Space	COMISIS	West University of Timisoara				
10:40-10:50	High-precision micro and nano smart sensors for space inertial navigation applications	SMARTSENSE	University of Craiova	10:40-11:00	Centre for Atmospheric REmote Sensing and Space Earth observation	CARESSSE	National Institute of Research and Development for Optoelectronics INOE 2000
10:50-11:00	Reliability design of RF-MEMS switches for space applications	REDEMS	Technical University of Cluj-Napoca				
11:00-11:10	Bolometers for space applications in middle and long infrared	BOLOSPACE	National Institute for Research and Development in Microtechnologies (IMT Bucharest)	11:00-11:20	Computer Assisted and Information Feedback Training for Human Spaceflight Support	STARWALKER	Institute of Space Science (ISS)
11:10-11:20	HYPER SPECTRAL IMAGE FEATURE EXTRACTION TOOLS	HIFET	National Institute for Aerospace Research "Elie Carafoli" (INCAS)				
11:20-11:30	ACTIVE MICRO-SHIELDS SYSTEMS FOR PROTECTION OF SPACE INFRASTRUCTURES	MICRO-SHIELDS	National Institute for Research and Development in Microtechnologies (IMT Bucharest)	11:20-11:40	INCAS Launchers and Space Vehicles Center of Competence	INCAS LASVEC	National Institute for Aerospace Research "Elie Carafoli" (INCAS)
11:30-11:40	ADVANCED ELECTROMAGNETIC EMISSIONS SECURITY SYSTEM FOR EARTH SATELLITE STATION NETWORKS DATA PROTECTION	SPEC	Military Equipment and Technologies Research Agency				
11:40-11:50	Pilot study of ultra-high energy COsmic rays through their Space-ATmospheric interactions	COSAT	Institute of Space Science (ISS)	11:40-12:00	Constanta Space Technologies Competence Centre Dedicated to the Romanian Marine and Coastal Regions Sustainable Development	COSMOMAR	National Institute for Marine Research and Development "Grigore Antipa", Constanta
11:50-12:00	On-Board Data Flow Simulator	ODAS	Institute of Space Science (ISS)				
12:00-12:10	Cluster/HIA in-flight calibration and data quality improvement for scientific exploitation	CALYPSO	Institute of Space Science (ISS)	12:00-12:20	ROmanian nanoSatellite Technology - Competence Centre	ROST - CC	Institute of Space Science (ISS)
12:10-12:20	Radiation effects on amorphous semiconductor oxides used for flexible and transparent microelectronics	REASOX	National Institute for Laser, Plasma and Radiation Physics (INFLPR)				
12:20-12:30	Synthesis of transient complex molecular systems in laboratory plasmas with relevance for molecular astrophysics of hot cores	PLASMAHOTC ORE	"Alexandru Ioan Cuza" University of Iasi	12:20-13:30	Q&A		
12:30-12:40	Instructor Operation Station designed for space applications	IOS	Technical University of Cluj-Napoca				
12:40-12:50	Urban Heat Island Monitoring under Present and Future Climate	UCLIMESA	National Meteorological Administration (NMA)				
12:50-13:00	Assessment of Satellite Derived Soil Moisture Products over Romania	ASSIMO	National Meteorological Administration (NMA)				
13:00-13:10	Space applications for Black Sea and Lower Danube in support of the Danube Strategy	DSSA	Romanian Association for Space Technology and Industry (ROMSPACE)				
13:10-13:20	Earth observation satellite for smart farming applications. Mission Analysis, needs and requirements identification.	FARMSAT	Institute of Space Science (ISS)				
13:20-13:30	Data Mining in Satellite Image Time Series using Constrained Sequential Pattern Extraction	COSEPE	Institute of Space Science (ISS)				
13:30-14:30	Lunch break						

14:30-17:30	Session 4 - RDI Projects (C2-2013)	Room: "Elie Carafoli" Aula		14:30-17:00	Strategic Projects	Room:"Nicolae Tipei" Conference Room
14:20-14:30	Multidisciplinary complex system for monitoring clouds, aerosols and solar radiation in correlation with Vrancea seismic activity	AeroSolSys	National Institute for Earth Physics	14:30-14:50	National strategy for space and related fields	S.C. IAROM S.A., Bucharest
14:30-14:40	GEOSPATIAL INTEGRATED TECHNIQUES FOR SEISMIC FORECASTING IN VRANCEA AREA	VRFORECAST	National Institute of Research and Development for Optoelectronics INOE 2000			
14:40-14:50	Advanced system for monitoring of mosquito-borne diseases in Romania by integration of space and in-situ data	MONDISROM	National Institute of Research and Development for Microbiology and Immunology "Cantacuzino", Bucharest	14:50-15:10	Participation to the scientific ESA Programmes	Institute of Atomic Physics (IFA)
14:50-15:00	Online service model for agriculture business management	AGRI-BIS	TERRASIGNA S.R.L. (former Advanced Studies and Research Center S.R.L.)			
15:00-15:10	Identifying linearity /non-linearity in landscape evolution by integrating satellite-based radar interferometry and ground-based monitoring data. Study area: Bucharest	SPACE	University of Bucharest	15:10-15:30	Scientific, Technical and Legal Support for Romania's Participation in ESA Committees on Earth Observation, Satellite Navigation and Communication Satellite (EONAVCOM)	University of Agronomic Science and Veterinary Medicine - Bucharest
15:10-15:20	Low Cost REFLECTing Targets Array for Spaceborne Monitoring of Natural Slopes and Embankments	REFLECT	Technical University of Civil Engineering Bucharest			
15:20-15:30	FLEXIBLE PROCESSING OF BIG EARTH DATA OVER HIGH PERFORMANCE COMPUTING ARCHITECTURES	BIGEARTH	Technical University of Cluj-Napoca	15:30-15:50	STAR Technology	National Institute for Aerospace Research "Elie Carafoli" (INCAS)
15:30-15:40	Advanced antennas for space communications	ADANSAPCE	National Institute of Materials Physics (INFM)			
15:40-15:50	Advanced dielectric materials for therahertz space applications and technology	DITERSAT	National Institute of Materials Physics (INFM)	15:50-16:10	STAR - Knowledge Management Infrastructure	Imtech ICT Romania
15:50-16:00	Millimetre and sub-millimetre wave GaAs Schottky diodes, detectors and mixers	M3GAAS	National Institute for Research and Development in Microtechnologies (IMT Bucharest)			
16:00-16:10	Quantum correlated photon triplets for telecommunications	3photons	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)	16:10-17:00	Q&A	
16:10-16:20	MIMO Techniques to Improve the Communication Performances in Ground and Space Applications	MIMO-Space	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)			
16:20-16:30	Subjective Video Quality Dependence on Transponder Broadcast Plan and Earth Station Parameters	SVIQUALTES	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)			
16:30-16:40	Optimized Flow Architectures for Fuel Cell Bipolar/Unipolar Plates Functioning in Outer Space Conditions	OptiFlowFC	S.C. ET Innovative Solutions S.R.L.			
16:40-17:00	New types of actuators specific to space applications	ACTOSPACE	National Institute for R&D for Electrical Engineering ICPE-CA			
17:00-17:10	Magnets made by nanocomposites materials used in high speed electric motors manufacturing	nMAT	National Institute for R&D in Electrical Engineering ICPE-CA			
17:10-17:20	Diamond Detectors for Particle Spectrometry Experiments in Space	DIADEMS	Institute of Space Science (ISS)	17:20-17:30		
17:20-17:30	Stability tests of new photovoltaic structures for space applications against the protons and alpha particles irradiation	NEWPVSPACE	Institute of Space Science (ISS)			

Friday, 29 May 2015

09:00-09:30					Welcome coffee	
09:30-12:30			Session 5 - RDI Projects (C2-2013)		Room: "Elie Carafoli" Aula	
09:30-09:40	Metallic Plasma Generator for Space Applications	MPG	Institute of Space Science (ISS)	09:30-12:30	Industrial Workshop on "Possibility to achieve a Small Orbital Launcher through zonal cooperation - SOL"	participation by invitation only contact person: Prof. dr. eng. Teodor Viorel CHELARU e-mail: teodor.chelaru@upb.ro
09:40-09:50	The science and technology of high emissivity coatings for outer space radiator applications	STECOSRA	National Institute for Laser, Plasma and Radiation Physics (INFLPR)			
09:50-10:00	Evaluation of Components for Space Applications	ECSA	National Institute for Laser, Plasma and Radiation Physics (INFLPR)			
10:00-10:10	Technology for manipulation and removal of dust for Mars missions	TechDustMars	National Institute for Laser, Plasma and Radiation Physics (INFLPR)			
10:10-10:20	MICROSENSORS MATRIX FOR AIR QUALITY CONTROL IN HUMAN SPACE MISSIONS HABITABLE AREAS	SAFEAIR	National Institute for Research and Development in Microtechnologies (IMT Bucharest)			
10:20-10:30	MICRO-CPVS SPACE SYSTEMS AND TECHNOLOGY	MICRO-CPVS	National Institute for Research and Development in Microtechnologies (IMT Bucharest)			
10:30-10:40	Investigation of semiconductor oxide materials performance for space environment applications	MATSPACE	National Institute for Research and Development in Microtechnologies (IMT Bucharest)			
10:40-10:50	Concept development and technology evaluation for a PEM fuel cells based auxiliary power unit for space applications	PEMSAPU	National R&D Institute for Cryogenic and Isotopes Technologies (ICSI Rm. Valcea)			
10:50-11:00	Advanced Composite metallic coated systems for space packaging applications	ADCOTMAT	Romanian Research and Development Institute for Gas Turbines (COMOTI)			
11:00-11:10	Terrestrial P-band synthetic aperture radar for biomass mapping	BIO-SAR	TERRASIGNA S.R.L. (former Advanced Studies and Research Center S.R.L.)			
11:10-11:20	Multilayer inorganic/organic tribological coatings for space applications	SpaceCoat	AEG PROGRESIV S.R.L.			
11:20-11:30	FAST LASER IMAGING, DETECTION AND RANGING OF AEROSOL EMISSIONS IN AIRCRAFT PLUMES	DARLIOES	"Alexandru Ioan Cuza" University of Iasi			
11:30-11:40	Multisensory robotic system for aerial monitoring of critical infrastructure systems	MUROS	University "POLITEHNICA" of Bucharest			
11:40-11:50	Efficient Power Management Systems for Autonomous Space Entities	EPMSASE	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)			
11:50-12:00	Remote controlled robotic hand with intelligent sensory feedback for outside Earth interventions in hazardous environments	STARHAND	University "POLITEHNICA" of Bucharest			
12:00-12:10	Modelling hybrid communication-navigation systems for formation flying satellites	Hybrid NAVCOM	University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech)			
12:10-12:20	Astro-geodetic platform for high accuracy geoid determination	AGEO	Technical University of Civil Engineering Bucharest			
12:20-12:30	Tribomechanical Characterization of MEMS Materials for Space Applications under harsh environments	MEMSMAT	Technical University of Cluj-Napoca			
12:30-13:00			Closing session		Room: "Elie Carafoli" Aula	