

**BULGARIAN ACADEMY OF SCIENCES
SPACE RESEARCH AND TECHNOLOGY INSTITUTE
BULGARIAN ASTRONAUTICAL SOCIETY
REPRESENTATIVE OFFICE OF ROSSOTRUDNICHESTVO
IN BULGARIA**

***THIRTEENTH INTERNATIONAL
SCIENTIFIC CONFERENCE***

DEDICATED TO

**THE 60-TH ANNIVERSARY OF THE FIRST ARTIFICIAL SATELLITE
OF THE EARTH
AND 45 YEARS OF BULGARIA IN SPACE**

**S P A C E
E C O L O G Y
S A F E T Y**

S E S 2017

P R O G R A M M E

**2 – 4 November 2017
Sofia**

Russian Culture and Information Centre

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in which they will be delivered/posted***

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Bulgarian Academy of Sciences**

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REGISTRATION

02.11.2017 15:00 – 17:00 *Russian Culture and Information Centre*
03.11.2017 09:00 – 11:00 *Russian Culture and Information Centre*

02.11.2017 (Thursday)

13:30 **Open Day “My meeting with the Earth from Space”, Exhibition and Awards ceremony** – organized within Education in Earth Observation for Bulgarian Secondary Schools (EEOBSS) Project.

16:00 **Official Opening**

Welcome Speech – Corr. Member Petar Getsov

Greeting words from the Bulgarian Academy of Sciences

Greeting Words and Addresses

16:30 **Plenary Session**

Udrivolf Pica – *Copernicus Support Office, Belgium*

THE COPERNICUS PROGRAMME: OVERVIEW AND USER UPTAKE INITIATIVES

Ioannis Manakos – *Centre for Research and Technology - Hellas (CERTH) - Information Technologies Institute (ITI)*

REMOTELY-SENSED BIODIVERSITY VARIABLES FOR TERRESTRIAL ECOSYSTEM MONITORING

17:30 **Awarding Prizes from IWIS – 2017, Warsaw**

17:45 **Opening of the Artistic Exhibition „Seasons” of Assoc. Prof. Dr. Petar Stoyanov**

18:00 **Welcome Party**

03.11.2017 (Friday)
Hall 1 („Малый зал”)

Session 1

Space Physics

Chairmen: Prof. Tsvetan Dachev,
Corr. Member Peter Velinov

Secretaries: Assoc. Prof. Maria Dimitrova,
Assoc. Prof. Daniela Boneva

- 09:00** ***Nikolay Erokhin*** – *Space Research Institute - Russian Academy of Sciences, Peoples' Friendship University of Russia, nerokhin@mx.iki.rssi.ru*
Nadezhda Zolnikova, Ludmila Mikhailovskaya – *Space Research Institute - Russian Academy of Sciences*
Rumen Shkevov – *Space Research and Technology Institute - Bulgarian Academy of Sciences, shkevov@space.bas.bg*
СЕРФОТРОННОЕ УСКОРЕНИЕ ПРОТОНОВ ПРИ
ВЗАИМОДЕЙСТВИИ С ДВУМЯ ЭЛЕКТРОМАГНИТНЫМИ ВОЛНАМИ,
ИМЕЮЩИМИ БЛИЗКИЕ ЧАСТОТЫ
- 09:15** ***Rumen Shkevov*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, shkevov@space.bas.bg*
Nikolay Erokhin – *Space Research Institute - Russian Academy of Sciences, Peoples' Friendship University of Russia*
Vladimir Loznikov, Nadezhda Zolnikova, Lyudmila Mikhailovskaya –
Space Research Institute - Russian Academy of Sciences
NUMERICAL INVESTIGATION OF ENERGY GAIN AT STRONG
ACCELERATION OF LOW RELATIVISTIC ELECTIONS
- 09:30** ***Sergey Svertilov, Vitaly Bogomolov, Michail Panasyuk*** –
M. V. Lomonosov Moscow State University, Physical Department,
D. V. Skobeltsyn Institute of Nuclear Physics, sis@coronas.ru
OBSERVATION OF TERRESTRIAL GAMMA RAY FLASHES, COSMIC
GAMMA RAY BURSTS AND ELECTRON PRECIPITATION IN VERNOV
AND LOMONOSOV SPACE MISSIONS
- 09:45** ***Andrey Bogomolov*** – *Skobeltsyn Institute of Nuclear Physics of Moscow State University (SINP MSU), Russia, aabboogg@sinp.msu.ru*
RESULTS OF OBSERVATIONS ONBOARD CORONAS-F IN THE
FRAMES OF RUSSIAN-BULGARIAN PROJECT “THE ORIGIN OF
SOLAR ENERGETIC PARTICLES: SOLAR FLARES VS. CORONAL
MASS EJECTIONS”

- 10:00** ***Irina Myagkova, Vladimir Kalegaev, Yuliya Shugai, Sergey Dolenko, Mikhail Panasyuk*** – Skobeltsyn Institute of Nuclear Physics of Moscow State University (SINP MSU), Russia, *irina@srd.sinp.msu.ru*
SPACE WEATHER ANALYSIS CENTRE OF SINP MSU: MONITORING AND FORECAST OF THE STATE OF NEAR-EARTH SPACE
- 10:15** **Coffee Break**
- 10:30** ***Igor Shibaev*** – IZMIRAN, Troitsk, Moscow, Russia, *ishib@izmiran.ru*
LONG-TERM FORECAST OF SOLAR ACTIVITY USING THE 150-YEAR HARMONIC AND CHARACTERISTICS OF RELIABLE SERIES OF WOLF NUMBERS
- 10:45** ***Alexander Shibaev*** – Lomonosov Moscow State University, Russia, *alexshibaev@yandex.ru*
CONNECTION BETWEEN PERIOD OF LOW-FREQUENCY COMPONENT WOLF'S NUMBERS (WNS) AND LENGTH OF WOLF'S NUMBERS SERIES
- 11:00** ***Jordanka Semkova, Tsvetan Dachev, Stephan Maltchev, Borislav Tomov, Yurii Matviichuk, Plamen Dimitrov, Rositza Koleva, Krasimir Krastev*** – Space Research and Technology Institute – Bulgarian Academy of Sciences, *jsemkova@stil.bas.bg*
Igor Mitrofanov, Alexey Malakhov, Maxim Mokrousov, Anton Sanin, Maxim Litvak, Alexander Kozyrev, Vladislav Tretyakov, Dmitry Golovin, Sergey Nikiforov, Andrey Vostrukhin, Fedor Fedosov, Natalia Grebennikova – Space Research Institute, Russian Academy of Sciences
Victor Benghin, Vyacheslav Shurshakov – State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences
LATEST RESULTS FROM RADIATION MEASUREMENTS ONBOARD EXOMARS TRACE GAS ORBITER DURING THE TRANSIT AND IN MARS ORBIT
- 11:15** ***Dimitrinka Tomova*** – Sofia University
Peter Velinov, Yordan Tassev – Space Research and Technology Institute – Bulgarian Academy of Sciences, *pvelinov@bas.bg*
COMPARISON BETWEEN TWO EXTREME SOLAR ACTIVITY PERIODS ON MARCH 17-19, 2015 AND SEPTEMBER 4-10, 2017 AT DIFFERENT PHASES OF SOLAR CYCLE 24
- 11:30** ***Peter Velinov, Lachezar Mateev*** – Space Research and Technology Institute – Bulgarian Academy of Sciences, *pvelinov@bas.bg*
ANISOTROPIC PENETRATION AND IONIZATION OF SOLAR COSMIC RAYS AND ENERGETIC PARTICLES IN THE EARTH ENVIRONMENT
- 11:45** ***Rositsa Miteva*** – Space Research and Technology Institute – Bulgarian Academy of Sciences, *rmiteva@space.bas.bg*
SOHO/ERNE PROTON EVENT CATALOG: DESCRIPTION AND FIRST RESULTS

- 12:00** **Tsvetan Tsvetkov, Nikola Petrov** – Institute of Astronomy and National Astronomical Observatory - BAS, tstsvetkov@astro.bas.bg
Rositsa Miteva – Space Research and Technology Institute - BAS
 RELATIONSHIP BETWEEN SOLAR ERUPTIVE EVENTS AND ENERGETIC PARTICLES
- 12:15** **Simeon Asenovski** – Space Research and Technology Institute – Bulgarian Academy of Sciences, asenovski@space.bas.bg
 HIGH SPEED SOLAR WIND STREAMS OVER THE LAST FOUR SOLAR CYCLES
- 12:30** **Krasimira Yankova** – Space Research and Technology Institute – Bulgarian Academy of Sciences, f7@space.bas.bg
 МЕЖДУКОМПОНЕНТНИ ВРЪЗКИ В КВАЗАР – ПРЕДПОСТАВКИ ЗА ВЪЗНИКВАНЕ
- 12:45** **Atanas Atanassov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, at_m_atanassov@yahoo.com
 SOLVING OF SITUATIONAL PROBLEMS HAVING SAME SITUATIONAL CONDITIONS
- 13:00** **Angel Manev, Tanyo Tanev, Veselin Tashev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, amanev@abv.bg
 АСТРОНОМИЧЕСКАТА ТОЧНОСТ НА СЛЪНЧЕВИТЕ КАЛЕНДАРИ
- 13:15** **Velko Velkov**
 ОСВЕТАВАНЕ НА ТЪМНАТА МАТЕРИЯ
- 13:25** **Velko Velkov**
 ГЛОБАЛЕН МОДЕЛ НА ВСЕМИРА

Poster session

- 1-1** **Rositsa Miteva, Dimitar Danov** – Space Research and Technology Institute – Bulgarian Academy of Sciences, rmiteva@space.bas.bg
Larisa Kashapova, Nataliia Meshalkina, Ivan Myshyakov, Dmitriy Zhdanov – Institute of Solar Terrestrial Physics SB – Russian Academy of Science
Irina Myagkova, Andrey Bogomolov – Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University
Nikola Petrov, Tsvetan Tsvetkov – Institute of Astronomy and National Astronomical Observatory – Bulgarian Academy of Sciences
 THE ORIGIN OF SEP EVENTS: NEW RESEARCH COLLABORATION AND NETWORK ON SPACE WEATHER
- 1-2** **Daniela Boneva** – Space Research and Technology Institute - Bulgarian Academy of Sciences, danvasan@space.bas.bg
 ON THE FEASIBLE ENGINES OF THE VORTICAL FLOW ACTIVITY IN CLOSE BINARY STARS

- 1-3** **Veneta Guineva, Rolf Werner** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *v_guineva@yahoo.com*
Irina Despirak, Boris Kozelov – Polar Geophysical Institute - Russian Academy of Sciences, *despirak@gmail.com*
 SUBSTORM DEVELOPMENT BY THEMISD SATELLITE DATA AND GROUND BASED AURORAS OBSERVATIONS AT APATITY – A CASE STUDY
- 1-4** **Rolf Werner, Dimitar Valev, Atanas Atanassov, Veneta Guineva** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *rolwer52@yahoo.co.uk*
Boyan Petkov – Institute of Atmospheric Sciences and Climate (ISAC) - CNR, Bologna, Italy
Andrey Kirillov – Polar Geophysical Institute - Russian Academy of Sciences, *kirillov@pgia.ru*
 DETERMINATION OF THE TOTAL OZONE COLUMN BASED ON TWO-DIMENSIONAL AND MULTI-DIMENSIONAL LOOKUP TABLES
- 1-5** **Nikola Petrov, Tsvetan Tsvetkov** – Institute of Astronomy and National Astronomical Observatory - BAS, *nip.sob@gmail.com*
 INTERNAL MOTIONS OF THE FINE STRUCTURE OF QUIESCENT PROMINENCES
- 1-6** **Kostadin Sheiretsky** – University of National and World Economy - Sofia, *ksheiretsky@space.bas.bg*
Rumen Shkevov – Space Research and Technology Institute - BAS
Nikolay Erokhin – Space Research Institute - Russian Academy of Sciences, Peoples' Friendship University of Russia, *nerokhin@mx.iki.rssi.ru*
 ИЗПОЛЗВАНЕ НА АСИМПТОТИЧНИ МЕТОДИ ЗА ИЗСЛЕДВАНЕ НА ДИНАМИЧНИ СИСТЕМИ
- 1-7** **Kamen Kozarev, Petar Duhlev, Kostadinka Koleva, Momchil Dechev** – Institute of Astronomy and National Astronomical Observatory - BAS, *kkozarev@astro.bas.bg*,
Astrid Veronig, Manuela Temmer, Karin Dissauer – IGAM of the University of Graz, Austria
Rositsa Miteva – Space Research and Technology Institute - BAS
 ПРЕДСТАВЯНЕ НА ПРОЕКТ „ИЗСЛЕДВАНЕ НА РАННИТЕ СТАДИИ НА СЛЪНЧЕВИТЕ ИЗРИГВАНИЯ – ОТ ДИСТАНЦИОННИ НАБЛЮДЕНИЯ КЪМ ВИСОКОЕНЕРГЕТИЧНИ ЧАСТИЦИ“
- 1-8** **Krasimir Krastev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *werholak@abv.bg*
 ОЦЕНКА НА ПЛАНЕТАРНОТО ВЛИЯНИЕ НА МАРС ВЪРХУ ДОЗАТА И ПОТОЦИТЕ, ИЗМЕРЕНИ НА “ЛЮЛИН – МО”

03.11.2017 (Friday)
Hall 1 („Малый зал”)

Session 2

Aerospace Technologies and Biotechnologies

Chairman: Corr. Member Petar Getsov,
Secretary: Assoc. Prof. Zoya Hubenova

- 14:00** **Gennadiy Maklakov** – *Petersburg Institute for Informatics and Automation - Russian Academy of Sciences, gmaklakov@mail.bg*
ОПТИМИЗАЦИЯ НА МУЗИКАЛНАТА ПСИХОТЕРАПИЯ НА
ОПЕРАТОРИТЕ НА ЕРГАТИЧНИ СИСТЕМИ ЧРЕЗ МЕТОДА ГРВ-
БИОЕЛЕКТРОГРАФИЯ
- 14:15** **Elissaveta Alexandrova** – *Bulgarian Astronautical Society, e_alexandr@mail.bg*
ОСИГУРЯВАНЕ НА ЧЕСТОТНО-ОРБИТАЛНИТЕ РЕСУРСИ
ЗА ПЪРВАТА БЪЛГАРСКА ТЕЛЕКОМУНИКАЦИОННА СПЪТНИКОВА
МРЕЖА
- 14:30** **Elissaveta Alexandrova** – *Bulgarian Astronautical Society, e_alexandr@mail.bg*
Tania Ivanova, Plamen Angelov – *Space Research and Technology Institute - Bulgarian Academy of Sciences*
БЪЛГАРСКО АСТРОНАВТИЧЕСКО ДРУЖЕСТВО – 60 ГОДИНИ
ДЕЙНОСТ
- 14:45** **Mihail Vladov** – *«Comelpro» SRL, Moldova, Chisinau, office@comelpro.com*
V. Afanasiev – *Aerosila Co., Russia*
Alexander Vladov – *Agat Plus Co., Russia, Moscow*
Georgi Sotirov – *Space Research and Technology Institute - Bulgarian Academy of Sciences, gsotirov@space.bas.bg*
ВИБРОАКУСТИЧЕСКАЯ СИСТЕМА ПРОГНОЗА ОСТАТОЧНОГО
РЕСУРСА ЛОПАСТЕЙ ВОЗДУШНОГО ВИНТА САМОЛЕТА
ИНТЕГРАЛЬНЫМ МЕТОДОМ СВОБОДНЫХ КОЛЕБАНИЙ
- 15:00** **Gergana Ivanova** – *Danube International School, Vienna, givanova@danubestudent.com*
FLUCTUATION OF STANDING WAVE AMPLITUDE BASED ON METAL
STRIP LENGTH
- 15:15** **Mihail Tsvetanov** – *koreolis@abv.bg*
СЛЪНЧЕВО-ГРАВИТАЦИОНЕН АЛТЕРНАТОР

15:30 **Coffee Break**

Poster session

- 2-1** **Zoya Hubenova, Konstantin Metodiev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, zhubenova@space.bas.bg*
БЕЛЕЖКИ ПО ПРЕПОДАВАТЕЛСКИЯ ОПИТ НАТРУПАН ЧРЕЗ СИМУЛАТОР SIMLAT C-STAR В БЪЛГАРИЯ
- 2-2** **Konstantin Metodiev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, komet@space.bas.bg*
РЕАЛИЗАЦИЯ НА ПРИБОР „ПЛЕВЕН-87“ НА МОБИЛНО УСТРОЙСТВО
- 2-3** **Malina Jordanova** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, mjordan@bas.bg*
Leonid Androuchko – *SUMAS (Sustainability Management School), Switzerland*
THE SUMAS eHEALTH DOCTORAL PROGRAM
- 2-4** **Igor Shibaev** – *Pushkov Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation (IZMIRAN), Troitsk, Russia*
Malina Jordanova – *Space Research and Technology Institute - Bulgarian Academy of Sciences, mjordan@bas.bg*
TEMPORAL STRUCTURES OF THE CEREBRAL VASCULAR PATHOLOGY (DATA BASED ON 5 YRS ADMISSIONS TO THE DEPARTMENT OF NEUROLOGY)

03.11.2017 (Friday)
Hall 2 (305)

14:00 **Round Table**

Space Sciences and Technologies and Their Role in Bulgarian Secondary School Education

Moderators: Assoc. Prof. Vanya Stamenova
Chief Assistant Stefan Stamenov

Session 3

Remote Sensing and Geoinformation Systems

Chairman: Assoc. Prof. Lachezar Filchev
Secretary: Assoc. Prof. Denitsa Borisova

- 16:00** *Rosen Iliev – South-West University “Neofit Rilski” – Blagoevgrad,
Rosen_faust@abv.bg*
MORPHOSTRUCTURAL PRECONDITIONS FOR THE SEISMIC
SETTING IN THE RHODOPE MOUNTAIN
- 16:15** *Hristo Nikolov, Denitsa Borisova, Doyno Petkov,
Valentin Atanassov – Space Research and Technology Institute -
Bulgarian Academy of Sciences, dborisova@stil.bas.bg*
POSSIBILITIES OFFERED BY MODERN HYPERSPECTRAL SYSTEMS
IN SOILS INVESTIGATION
- 16:30** *Stefan Stamenov, Vanya Stamenova – Space Research and
Technology Institute - Bulgarian Academy of Sciences,
stamenovstefan@yahoo.com*
ОБРАЗОВАТЕЛНА ИНИЦИАТИВА „КОСМИЧЕСКО УЧИЛИЩЕ“ –
РОЛЯ, ИСТОРИЯ И ПЕРСПЕКТИВИ
- 16:45** *Nadya Marinova – New Bulgarian University, nmarinova@nbu.bg*
УПРАВЛЕНИЕ НА ЧОВЕШКИТЕ РЕСУРСИ В ПРОЕКТИТЕ
- 17:00** *Ventzeslav Dimitrov – Space Research and Technology Institute -
Bulgarian Academy of Sciences, vdimitro@stil.bas.bg*
ПРОБЛЕМИ ОТ НЕСИСТЕМНИ ГРЕШКИ ПРИ ОЦЕНКА НА
ТЕМАТИЧНАТА ТОЧНОСТ НА ЗЕМНОТО ПОКРИТИЕ

Poster session:

- 3-1** **Veselin Tashev, Rolf Werner, Angel Manev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, veselinlt@abv.bg
Mariana Goranova – Technical University
Ana Shishkova – National Institute of Meteorology and Hydrology - branch Plovdiv
ИЗСЛЕДВАНЕ НА ТЕМПЕРАТУРАТА И ЛОКАЛНОТО ЗАТОПЛЯНЕ В АТМОСФЕРАТА НА РАЙОН СТАРА ЗАГОРА
- 3-2** **Veselin Tashev, Rolf Werner, Angel Manev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, veselinlt@abv.bg
Mariana Goranova – Technical University
ИЗСЛЕДВАНЕ И СРАВНЕНИЕ НА ГОДИШНИТЕ И МЕСЕЧНИТЕ КОЛИЧЕСТВА НА СЛЪНЧЕВА ЕНЕРГИЯ ПОПАДАЩА НА ЗЕМЯТА, ИЗМЕРЕНА С МЕТЕОСТАНЦИЯ VANTAGE PRO2 PLUS
- 3-3** **Ahmed Ramzi** – National Authority of Remote Sensing and Space Science (NARSS), Cairo, Egypt, Ahmedasi@hotmail.com
CLASSIFICATION ACCURACY OF URBAN LULC MAP BASED ON SAR DUAL POLARIMETRIC DATA
- 3-4** **Dessislava Ganeva** – Space Research and Technology Institute - Bulgarian Academy of Sciences, dessislava.ganeva@gmail.com
REMOTE ESTIMATION OF THE FLOWERING STAGE DURATION FOR WINTER RAPESEED CROP
- 3-5** **Temenuzhka Spasova, Roumen Nedkov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, tspasova@space.bas.bg
ИЗПОЛЗВАНЕ НА РАДАРНИ ДАННИ ЗА МОНИТОРИНГ НА НАВОДНЕНИ ПЛОЩИ
- 3-6** **Maria Dimitrova, Deyan Gotchev, Plamen Trentchev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, maria@space.bas.bg
РАЗПОЗНАВАНЕ НА ТИПОВЕ ГОРСКА РАСТИТЕЛНОСТ ПО РАЗЛИКАТА В СЕЗОННАТА ПРОМЯНА НА ВЕГЕТАЦИЯТА
- 3-7** **Deyan Gotchev, Roumen Nedkov, Maria Dimitrova, Plamen Trentchev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, dejan@space.bas.bg
ИЗПОЛЗВАНЕ НА РАДАРНИ ИЗОБРАЖЕНИЯ ЗА ИЗСЛЕДВАНЕ НА ФАЗОВИ ПРЕХОДИ НА ВОДАТА В ОКОЛОПОЛЯРЕН РАЙОН
- 3-8** **Tihomir Aleksiev** – Raina Kniaginya secondary school, Plovdiv, t_aleksiew@abv.bg
ДИСТАНЦИОННИТЕ МЕТОДИ И ГИС КАТО ИЗВЪНКЛАСНА ДЕЙНОСТ В УЧИЛИЩАТА ПО ПРИМЕРА НА КЛУБ „САТЕЛИТ“

- 3-9** ***Ivan Dimitrov*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, idimitrov@space.bas.bg*
МОНИТОРИНГ НА НАВОДНЕНИЯ ПО ПОРЕЧИЕТО НА РЕКА
КАМЧИЯ
- 3-10** ***Ivan Dimitrov*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, idimitrov@space.bas.bg*
ГАЗОПРОВОДЪТ "ТУРСКИ ПОТОК" – КОСМИЧЕСКИ МОНИТОРИНГ
- 3-11** ***Deyan Gotchev*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, dejan@space.bas.bg*
ИЗПОЛЗВАНЕ НА РАДАРНИ ИЗОБРАЖЕНИЯ ЗА ИЗСЛЕДВАНЕ НА
ВЪЗМОЖНИ ВРЪЗКИ МЕЖДУ ЕКСТРЕМНИ ГЕОФИЗИЧНИ
ЯВЛЕНИЯ

03.11.2017 (Friday)

Hall 2 (305)

Session 4

Ecology and Risk Management

Chairman: Prof. Garo Mardirossian

Secretary: Tsveta Srebrova, MS

- 09:30** **Boyko Rangelov** – Mining and Geology University – Bulgaria, *brangelov@gmail.com*
Richard Haigh, Dilanthi Amaratunga – The University of Huddersfield – UK
Maria Merino Gonzalez-Pardo – IHC Cantabria – Spain
Ruben Paul Borg – University of Malta – Malta
Francesco Romagnoli – Riga Technical University – Latvia
Samantha Hettiarachchi – University of Moratuwa - Sri Lanka
Fathmath Shadiya, Shazla Mohamaed – Maldives National University – Maldives
Marlon DL Era, Maria Caridad – De La Salle University – Philippines
THE CABARET PROJECT AND BULGARIAN PARTICIPATION
- 09:45** **Boyko Rangelov, Tatiana Asenova, Emil Oinakov** – Mining and Geology University, *brangelov@gmail.com*
PROJECT ACUSAN (ACOUSTIC INVESTIGATIONS IN ANTARCTICA)
- 10:00** **Vitaly Bogomolov, Sergey Svertilov, Michail Panasyuk, Ivan Maksimov** – M. V. Lomonosov Moscow State University, Physical Department, D. V. Skobeltsyn Institute of Nuclear Physics, *bogovit@rambler.ru*
STUDY OF ATMOSPHERIC GAMMA-RAY BACKGROUND VARIATIONS FROM NATURAL RADIOACTIVE ISOTOPES AND ACCELERATED ELECTRONS DURING THUNDERSTORMS
- 10:15** **Radik Martirosyan** – President of the National Academy of Sciences of the Republic of Armenia
Albert Gulyan, Gamlet Pirumyan, Hachik Manaselyan – Institute of Radiophysics and Electronics - NAS – Armenia
Margar Adibekyan – Western Survey for Seismic Protection State Non-Profit Organization - Armenia, *adibekyan@yahoo.com*
ИССЛЕДОВАНИЕ ВРЕМЕННЫХ ХАРАКТЕРИСТИКАХ ЭЛЕКТРОМАГНИТНЫХ ПРЕДВЕСТНИКОВ ЗЕМЛЕТЯСЕНИЙ, ОБНАРУЖЕННЫХ РАДИОАСТРОНОМИЧЕСКИМ МЕТОДОМ
- 10:30** **Margar Adibekyan** – Western Survey for Seismic Protection State Non-Profit Organization - Armenia, *adibekyan@yahoo.com*
СИСТЕМА ВЕРТИКАЛЬНОГО ЗОНДИРОВАНИЯ ИОНОСФЕРЫ ДЛЯ ОЦЕНКИ СЕЙСМИЧЕСКОЙ ОПАСНОСТИ

- 10:45** **Coffee Break**
- 11:00** ***Teodora Andreeva - Nesheva, Dimitar Teodosiev*** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *dteod@space.bas.bg*
Bojidar Srebrov – National Institute of Geophysics, Geodesy and Geography - BAS
ОСОБЕНОСТИ В РАЗПРЕДЕЛЕНИЕТО НА ЕМП В СИЛНО УРБАНИЗИРАНА ГРАДСКА СРЕДА (РАЙОН БАНКЯ - СОФИЯ) И ИЗВЪНГРАДСКА СРЕДА (ЛЕТИЩЕ ПЛОВДИВ)
- 11:15** ***Gennadiy Maklakov, Nadezhda Georgieva*** – Petersburg Institute for Informatics and Automation - Russian Academy of Sciences, *gmaklakov@mail.bg*
ПРИЛОЖЕНИЕ НА МЕТОДА ГАЗОРАЗРЯДНА ВИЗУАЛИЗАЦИЯ ЗА ИЗСЛЕДВАНЕ НА ПЕРСПЕКТИВНИ РЕКРЕАЦИОННИ ЗОНИ В КРУШУНСКИЯ КРАЙ (БЪЛГАРИЯ)
- 11:30** ***Venelin Jivkov*** – Technical University - Sofia
Philip Philipoff, Petar Mandiev, Simona Doneva, Yordan Tankovsky – Institute of Mechanics - Bulgarian Academy of Sciences, *philip.philipoff.auto@gmail.com*
Anelia Psneva – University of Oldenburg, Germany
Venkatanathan Natarajan – SASTRA University, India
Petar Getsov, Georgi Sotirov, Garo Mardrossian – Space Research and Technology Institute - Bulgarian Academy of Sciences
Boyko Rangelov – Mining and Geology University, *brangelov@gmail.com*
Stoian Velkosky – GAPE Institute – Skopje, Macedonia
APPLICATION OF THE MONITORING OF LOCAL ANOMALIES OF THE TEMPERATURE, ELECTROMAGNETIC AND GAS EMISSIONS FOR THE AIMS OF EARTHQUAKE PREDICTION
- 11:45** ***Dimitar Dimitrov, Emil Botev*** – National Institute for Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, *clgdimi@bas.bg*
ЗЕМЕТРЕСЕНИЯТА ОТ ЧИРПАН – ПЛОВДИВ 1928 г. – ГЛАВНИ РАЗЛОМИ ОТ ГЕОДЕЗИЧЕСКИ ДАННИ И ТЕРЕННИТЕ РАЗКЪСВАНИЯ
- 12:00** ***Julia Stoyanova, Christo Georgiev, Anna Kortcheva, Marieta Dimitrova*** – National Institute of Meteorology and Hydrology - Bulgarian Academy of Sciences, *Christo.Georgiev@meteo.bg*
SATELLITE APPLICATIONS IN MARINE AND LAND SURFACE ANALYSES FOR ENVIRONMENTAL RISK ASSESSMENT
- 12:15** ***Valeria Stoyanova, Annie Shoumkova*** – Institute of Physical Chemistry “Rostislav Kaischew” - Bulgarian Academy of Sciences
Adelina Miteva – Space Research and Technology Institute - Bulgarian Academy of Sciences, *ad.miteva@gmail.com*
CHARACTERIZATION AND ENVIRONMENTAL IMPACT OF FINE FLY ASH PARTICLES

- 12:30** **Stojan Velkoski** – *GAPE Institute – Skopje, contact@igape.edu.mk*
STONE ART IN THE REPUBLIC OF MACEDONIA HAS BEEN A MESSAGE FROM THOUSANDS OF YEARS
- 12:40** **Stojan Velkoski, Mihail Velkoski, Jane Velkoski** – *GAPE Institute – Skopje, Macedonia, contact@igape.edu.mk*
THE HISTORY AND THE DESTINY OF THE PREMKA TEMPLAR KNIGHTS
- 12:50** **Tanyo Tanev, Angel Manev, Veselin Tashev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, amanev@abv.bg*
ЕКОЛОГИЧНА АГРЕСИЯ ЧРЕЗ ПОЛИТИЧЕСКО РЕШЕНИЕ

Poster session:

- 4-1** **Ralitsa Berberova, Bilyana Kostova, Rangel Gjurov** – *New Bulgarian University, rberberova@nbu.bg*
РЕЗУЛТАТИ ОТ ГЕОРАДАРНО ИЗСЛЕДВАНЕ НА СКЛОНОВИ ПРОЦЕСИ
- 4-2** **Ralitsa Berberova, Bilyana Kostova** – *New Bulgarian University, rberberova@nbu.bg*
ЕКСПЕРИМЕНТАЛНО ИЗСЛЕДВАНЕ НА ДИГАТА НА Р. ИСКЪР
- 4-3** **Vilma Petkova, Bilyana Kostova** – *New Bulgarian University, vilmapetkova@gmail.com, vpetkova@nbu.bg*
Ventseslav Stoyanov – *Higher School of Civil Engineering (VSU) “L. Karavelov”*
Alexander Kalinkin – *I. V. Tananaev Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials of the Russian Academy of Sciences Kola Science Center*
Irina Zvereva – *St. Petersburg University*
Yana Tsvetanova – *Institute of Mineralogy and Crystallography - Bulgarian Academy of Sciences*
Ekaterina Serafimova – *University of Chemical Technology and Metallurgy*
SPECTROSCOPIC INVESTIGATIONS OF PHASE FORMATION IN CEMENT MORTARS WITH A HIGH CONTENT OF MINERAL FILLERS
- 4-4** **Iva Ivanova, Roumen Nedkov, Natalia Stankova** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, ivaivanova@space.bas.bg*
ДИНАМИКА НА ПЛАВАЩИТЕ ТРЪСТИКОВИ ОСТРОВИ В ЕЗЕРОТО СРЕБЪРНА ЗА ПЕРИОДА АПРИЛ-СЕПТЕМВРИ 2017 Г., С ИЗПОЛЗВАНЕТО НА SAR ДАННИ
- 4-5** **Natalia Stankova, Roumen Nedkov, Iva Ivanova** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, natalia_hs@space.bas.bg*
ОЦЕНКА НА СТЕПЕНТА НА УВРЕЖДАНЕ НА ГОРСКИ ЕКОСИСТЕМИ СЛЕД ПОЖАР

- 4-6** **Atidje Ahmed, Georgi Markov** – *Institute of Biodiversity and Ecosystem Research, atidje_dj@abv.bg*
ASSESSMENT OF HEAVY METAL IN ROE DEER (CAPREOLUS CAPREOLUS) AS ZOOMONITOR SPECIES IN ECOLOGICAL MONITORING IN BULGARIA
- 4-7** **Marieta Dimitrova, Anna Kortcheva, Christo Georgiev, Vasko Galabov** – *National Institute of Meteorology and Hydrology - Bulgarian Academy of Sciences, Christo.Georgiev@meteo.bg*
USE OF SATELLITE-DERIVED WIND AND WAVE DATA FOR NUMERICAL WAVE FORECASTS IN THE BLACK SEA

03.11.2017 (Friday)
Hall 1 („Малый зал”)

Session 5

Space Material Science and Nanotechnology

Chairman: Prof. Dimitar Teodosiev
Secretary: Assoc. Prof. Zdravka Karaguiozova

- 15:30** ***Dimitar Teodosiev, Anna Bouzekova-Penkova*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, dteod@space.bas.bg*
Nartsislav Petrov – *Institute of Organic Chemistry - Bulgarian Academy of Sciences*
ВЛИЯНИЕ НА КОСМИЧЕСКИТЕ УСЛОВИЯ ВЪРХУ СТРУКТУРНИТЕ ПАРАМЕТРИ НА ПОКРИТИЯ ОТ СЪКЛОВЪГЛЕРОД
- 15:45** ***Zdravka Karaguiozova, Adelina Miteva***– *Space Research and Technology Institute - Bulgarian Academy of Sciences, karazuzi@yahoo.com*
Aleksander Ciski, Grzegorz Cieślak – *Institute of Precision Mechanics, Warsaw, Poland*
AEROSPACE APPLICATIONS OF ALUMINIUM ALLOYS
- 16:00** ***Zdravka Karaguiozova***– *Space Research and Technology Institute - Bulgarian Academy of Sciences, karazuzi@yahoo.com*
SILVER COATINGS PLATED BY IMMERSION METHOD
- 16:15** **Coffee Break**
- 16:30** ***Julian Karadjov, Lyudmil Markov, Anna Buzekova*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, doctorka@abv.bg*
ИЗПИТВАНЕ НА ПРОТИВОФРИКЦИОННИТЕ СВОЙСТВА НА СМАЗОЧНО МАСЛО С ДОБАВКА ОТ НАНОДИАМАНТ, СТАБИЛИЗИРАН СЪС СЪРФАКТАНТ
- 16:45** ***Anna Petrova*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, anippetrova@abv.bg*
METHODS FOR ANALYSIS OF SURFACE MODIFIED METAL ALLOYS
- 17:00** ***Anna Petrova*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, anippetrova@abv.bg*
SURFACE MORPHOLOGY ANALYSIS OF NANOSTRUCTURES BY SCANNING PROBE MICROSCOPY

Poster session:

- 5-1** **Stefka Kasarova, Nina Sultanova, Radostin Kasarov – Asen Zlatarov**
University, Bourgas
Ivan Nikolov – Sofia University St. Kl. Ohridski,
ivandn2 @phys.uni-sofia.bg
OPTICAL POLYMERS IN REMOTE IMAGING DEVICES

Г Р А Ф И К

Дата	Мраморна зала
02.11.2017 четвъртък следобед	<p>13:30 – 14:30 Ден на отворени врати, изложба и награждаване, организиран в рамките на проект „Образование по наблюдение на Земята за българските средни училища“ (EEOBSS)</p> <p>15:00 – 17:00 Регистрация</p> <p>16:00 Официално откриване на S E S 2017</p>

Дата	Зала 1 („Малый зал“)	Зала 2 (305)
03.11.2017 петък сутрин	<p>09:00 – 13:40 <i>Сесия 1</i> „Космическа физика“</p>	<p>09:30 – 13:00 <i>Сесия 4</i> „Екология и управление на риска“</p>
03.11.2017 петък следобед	<p>14:00 – 15:30 <i>Сесия 2</i> „Аерокосмически технологии и биотехнологии“</p> <p>15:30 – 17:15 <i>Сесия 5</i> „Космически материали и нанотехнологии“</p>	<p>14:00 Кръгла маса на тема: „Космическите науки и технологии – място и роля в средното образование в България“</p> <p>16:00 – 17:15 <i>Сесия 3</i> „Дистанционни изследвания и GIS“</p>
03.11.2017 петък	-	<p>17:30 Закриване на конференцията</p>

A G E N D A

Date	Marble Hall
02.11.2017 Thursday afternoon	<p>13:30 – 14:30 Open Day “My meeting with the Earth from Space”, Exhibition and Awards ceremony - organized within Education in Earth Observation for Bulgarian Secondary Schools (EEOBSS) Project</p> <p>15:00 – 17:00 Registration</p> <p>16:00 Opening Ceremony S E S 2017</p>

Date	Hall 1 “Malyi zal” („Малый зал”)	Hall 2 (305)
03.11.2017 Friday morning	<p>09:00 – 13:40 <i>Session 1</i> “Space Physics”</p>	<p>09:30 – 13:00 <i>Session 4</i> „Ecology and Risk Management”</p>
03.11.2017 Friday afternoon	<p>14:00 – 15:30 <i>Session 2</i> “Aerospace Technologies and Biotechnologies”</p> <p>15:30 – 17:15 <i>Session 5</i> “Space Material Science and Nanotechnologies”</p>	<p>14:00 Round Table: Space Sciences and Technologies and Their Role in Bulgarian Secondary School Education</p> <p>16:00 – 17:15 <i>Session 3</i> „Remote Sensing and GIS”</p>
03.11.2017 Friday	-	<p>17:30 Closing of the Conference</p>

NOTES