

BULGARIAN ACADEMY OF SCIENCES
SPACE RESEARCH AND TECHNOLOGY INSTITUTE
BULGARIAN ASTRONAUTICAL SOCIETY
REPRESENTATIVE OFFICE OF ROSSOTRUDNICHESTVO
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SUSTAINABLE DEVELOPMENT FOR BULGARIA FOUNDATION

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

S E S 2016

P R O G R A M M E

2 and 3 November 2016
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

02.11.2016 15:00 – 17:00 *Russian Culture and Information Centre*
03.11.2016 09:00 – 12:00 *Russian Culture and Information Centre*

02.11.2016 (Wednesday) **Russian Culture and Information Centre**

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

Petar Getsov

БЪЛГАРСКИТЕ КОСМИЧЕСКИ ИЗСЛЕДВАНИЯ В КОНТЕКСТА НА ЧЛЕНСТВОТО НА БЪЛГАРИЯ В ЕВРОПЕЙСКАТА КОСМИЧЕСКА АГЕНЦИЯ

Jordanka Semkova, Rositza Koleva, Tsvetan Dachev, Yurii Matviichuk, Borislav Tomov, Stephan Maltchev, Plamen Dimitrov, Krasimir Krastev, Nikolay Bankov, Igor Mitrofanov, Alexey Malakhov, Maxim Mokrousov, Anton Sanin, Maxim Litvak, Alexander Kozyrev, Vladislav Tretyakov, Dmitry Golovin, Sergey Nikiforov, Andrey Vostrukhin, Fedor Fedosov, Natalia Grebennikova, Victor Benghin, Vyacheslav Shurshakov

BULGARIAN PARTICIPATION IN ESA-ROSCOSMOS MISSION EXOMARS. RADIATION CHARACTERISTICS ONBOARD EXOMARS TGO DURING THE CRUISE TO MARS ACCORDING LIULIN-MO DATA

17:15 Awarding Ceremony

17:45 Opening of the Artistic Exhibition of Assoc. Prof. Dr. Petar Stoyanov

18:00 Welcome Party

03.11.2016 (Thursday)
Hall 1 („Малый зал”)

Session 1

Space Physics

Chairmen: Prof. Tsvetan Dachev,
Corr. Member Peter Velinov
Secretaries: Chief Assistant Maria Dimitrova,
Chief Assistant Daniela Boneva

- 09:30** ***Tsvetan Dachev, Nikolay Bankov, Borislav Tomov, Yury Matviichuk, Plamen Dimitrov*** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *tdachev@bas.bg*
Donat-Peter Häder – Neue Str. 9, 91096 Möhrendorf, Germany
Gerda Horneck – DLR, Institute of Aerospace Medicine, Köln, Germany
ISS RADIATION ENVIRONMENT AS OBSERVED BY THE R3DR2 INSTRUMENT IN THE PERIOD OCTOBER 2014-JANUARY 2016
- 09:45** ***Nikolay Erokhin, Vladimir Loznikov, Nadezhda Zolnikova, Ludmila Mikhailovskaya*** – Space Research Institute - Russian Academy of Sciences, *nerokhin@mx.iki.rssi.ru*
Rumen Shkevov – Space Research and Technology Institute - Bulgarian Academy of Sciences, *shkevov@space.bas.bg*
EXAMINATION OF FEATURES FOR SURFATRON ACCELERATION OF PROTONS BY ELECTROMAGNETIC WAVES IN SPACE PLASMA
- 10:00** ***Rumen Shkevov*** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *shkevov@space.bas.bg*
Nikolay Erokhin, Vladimir Loznikov, Nadezhda Zolnikova, Ludmila Mikhailovskaya – Space Research Institute - Russian Academy of Sciences, *nerokhin@mx.iki.rssi.ru*
SURFATRON ACCELERATION OF PROTONS BY WAVE PACKET: PARTICLE TRAJECTORY ANALYSIS
- 10:15** ***Peter Velinov*** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *pvelinov@bas.bg*
Alexander Mishev – Space Climate Research Unit
COMPUTATION OF SHORT AND MID TIME SCALE IONIZATION IN ATMOSPHERE DURING GROUND LEVEL ENHANCEMENTS OF COSMIC RAYS: GLE 59 AND GLE 70

- 10:30** **Yavor Chapanov** – National Institute of Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, yavor.chapanov@gmail.com
Cyril Ron, Jan Vondrak – Astronomical Institute - Academy of Sciences of Czech Republic
 POSSIBLE SOLAR EXCITATION OF COMMON SUBDECADAL OSCILLATIONS OF EARTH ROTATION, MSL AND CLIMATE
- 10:45** **Coffee Break**
- 11:00** **Atanas Atanassov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, at_m_atanassov@yahoo.com
 UNIFIED “POOL OF THREADS” CONTROL FOR APPLICATION IN DIFFERENT PARALLEL SOLVERS
- 11:10** **Atanas Atanassov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, at_m_atanassov@yahoo.com
 SITUATION ANALYSIS BASED ON SPACE-TIME SITUATION CONDITIONS
- 11:20** **Andrey Kirillov** – Polar Geophysical Institute - Russian Academy of Sciences, kirillov@pgia.ru
Rolf Werner, Veneta Guineva – Space Research and Technology Institute - Bulgarian Academy of Sciences, rolwer52@yahoo.co.uk
 KINETICS OF METASTABLE MOLECULAR NITROGEN IN THE ATMOSPHERE OF TITAN AND IN THE MIXTURE WITH CARBON MONOXIDE
- 11:35** **Elissaveta Alexandrova** – Bulgarian Astronautical Society, e_alexandr@mail.bg
Anushka Stancheva – New Bulgarian University, astancheva@nbu.bg
Maxim Zayakov – “BulgariaSat” EAD
 БЪЛГАРСКОТО УЧАСТИЕ И РЕЗУЛТАТИ ОТ РАДИОАСАМБЛЕЯТА (RA-15) И СВЕТОВНАТА РАДИОКОНФЕРЕНЦИЯ (WRC-15)
- 11:50** **Daniela Boneva, Lachezar Filipov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, danvasan@space.bas.bg
 ANALYSIS OF DISC’S MODELS AND ACTIVE STATES INDICATIONS IN ACCRETING COMPACT BINARY STARS
- 12:05** **Krasimira Yankova** – Space Research and Technology Institute – Bulgarian Academy of Sciences, f7@space.bas.bg
 DEVELOPMENT ADVECTION MECHANISM IN GR
- 12:20** **Dimitar Teodosiev** – Space Research and Technology Institute – Bulgarian Academy of Sciences, dteod@space.bas.bg
Nartzislav Petrov – Institute of Organic Chemistry
 COMPARATIVE ANALYSIS OF THE ELECTRO-PHYSICAL AND MECHANICAL PROPERTIES OF GLASS CARBON COATING ON GRAPHITE SAMPLES AFTER A LONG STAY IN SPACE ON THE BOARD OF ISS

- 12:35** **Angel Manev, Tanyo Tanev, Veselin Tashev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *amanev@abv.bg*
ДАТИРАНЕ НА КОСМИЧЕСКИ РЕПЕРИ В ИСТОРИЧЕСКИТЕ ХРОНОЛОГИИ
- 12:45** **Angel Manev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *amanev@abv.bg*
АДЕКВАТНОСТ НА БИНАРНИЯ МОДЕЛ НА СЛЪНЧЕВАТА СИСТЕМА
- 13:00** **Velko Velkov** – *velvel@mail.bg*
РАЗШИРЯВАЩА СЕ ВСЕЛЕНА - РЕАЛНОСТ ИЛИ ИЛЮЗИЯ.
- 13:10** **Velko Velkov** – *velvel@mail.bg*
ОТНОСНО РЕГИСТРИРАНЕТО НА ГРАВИТАЦИОННИ ВЪЛНИ.

Poster session

- 1-1** **Krasimira Yankova** – Space Research and Technology Institute – Bulgarian Academy of Sciences, *f7@space.bas.bg*
DEVELOPMENT ON THE BOUNDARY IN THE SYSTEM DISK-CORONA, EVOLUTION ON THE SYSTEM
- 1-2** **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*
STUDY OF THE SUBSTORMS OBSERVED OVER APATITY DURING 2015/2016 WINTER
- 1-3** **Marusya Buchvarova** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *marusjab@space.bas.bg*
ПРИБЛИЖЕНИ РЕШЕНИЯ НА ТРАНСПОРТНОТО УРАВНЕНИЕ НА ГАЛАКТИЧНИТЕ КОСМИЧНИ ЛЪЧИ И ПОЛУЕМПИРИЧНИ МОДЕЛИ. ПРЕГЛЕД.
- 1-4** **Dimitar Draganov, Marusya Buchvarova** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *dtdraganov@space.bas.bg*
PARTICLE RADIATION AT AIRCRAFT ALTITUDES DURING THE SOLAR CYCLE
- 1-5** **Peter Tonev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *ptonev@bas.bg*
ELECTROSTATIC RESPONSE OF ATMOSPHERIC REGIONS BY FAIR-WEATHER CONDITIONS TO DISTANT CLOUD-TO-GROUND LIGHTNING DISCHARGE
- 1-6** **Rolf Werner, Veneta Guineva, Dimitar Danov, Dimitar Valev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, *rolwer52@yahoo.co.uk*
Andrey Kirillov – Polar Geophysical Institute - Russian Academy of Sciences, *kirillov@pgia.ru*
AMO AND TSI INFLUENCE ON CLIMATE

- 1-7 **Peter Velinov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, pvelinov@bas.bg
Yury Balabin, Eugeny Mauricev – Polar Geophysical Institute
 DETERMINATION OF IONIZATION EFFECTS IN STRATOSPHERE DURING THE GREATEST RELATIVISTIC SOLAR PROTON EVENT ON 23 FEBRUARY 1956 (GLE 05)
- 1-8 **Rositza Koleva** – Space Research and Technology Institute - Bulgarian Academy of Sciences, rkoleva@stil.bas.bg
Elena Grigorenko – Space Research Institute - Russian Academy of Sciences
 TRANSIENT PLASMA STRUCTURES: DISCRETE STRUCTURES OR THE PLASMA SHEET/LOBE INTERFACE
- 1-9 **Penka Stoeva, Alexey Stoev** – Space Research and Technology Institute - Bulgarian Academy of Sciences, penm@abv.bg
 КОНВЕКТИВНИ И ТУРБУЛЕНТНИ ПРОЦЕСИ В АТМОСФЕРАТА В КОНУСА НА ЛУННАТА СЯНКА ПО ВРЕМЕ НА ПЪЛНО СЛЪНЧЕВО ЗАТЪМНЕНИЕ
- 1-10 **Alexey Stoev, Penka Stoeva** – Space Research and Technology Institute - Bulgarian Academy of Sciences, stoev52@abv.bg
 ВАРИАЦИИ НА ТЕМПЕРАТУРАТА НА ПРИЗЕМНИЯ АТМОСФЕРЕН СЛОЙ, РАЗПОЛОЖЕН НАД КАРСТОВИ МАСИВИ И 11- ГОДИШНИЯ СЛЪНЧЕВ ЦИКЪЛ
- 1-11 **Krasimir Krastev, Jordanka Semkova, Tsvetan Dachev, Stephan Maltchev, Borislav Tomov, Yurii Matviichuk, Plamen Dimitrov, Rositza Koleva, Nikolay Bankov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, werholak@abv.bg
Igor Mitrofanov, Alex Malakhov, Maxim Mokrousov, Anton Sanin, Maxim Litvak, Alexander Kozyrev, Vladislav Tretyakov, Dmitry Golovin, Sergey Nikiforov, Andrey Vostrukhin, Fedor Fedosov, Natalia Grebennikova, Victor Benghin, Vyacheslav Shurshakov – State Scientific Center of Russian Federation, Institute of Biomedical Problems, Russian Academy of Sciences
 LIULIN MO DOSIMETRIC INSTRUMENT - BASIC PARAMETERS AND PRELIMINARY RESULTS OBTAINED ONBOARD EXOMARS 2016

03.11.2016 (Thursday)
Hall 1 („Малый зал”)

Session 2

Aerospace Technologies and Biotechnologies

Chairmen: Corr. Member Petar Getsov,
Assoc. Prof. Tania Ivanova
Secretaries: Chief Assistant Iliana Ilieva
Assoc. Prof. Zoya Hubenova

- 16:00** ***Malina Jordanova*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, mjordan@bas.bg*
Frank Lievens – *Lievens-Lanckman bvba, Belgium*
CURRENT REGULATIONS REGARDING eHEALTH
- 16:15** ***Hristofor Skandaliev, Tomislav Skandaliev*** – *Club for Aerospace Technologies Zodiac, fori2ivanov@yahoo.com*
Kalin Krumov, Neli Siveva – *University of Chemical Technology and Metallurgy, kalin_krumov@mail.bg*
ЕКСПЕРИМЕНТАЛНИ ИЗСЛЕДОВАТЕЛСКИ РАКЕТИ "БИО"
- 16:30** ***Konstantin Metodiev*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, komet@space.bas.bg*
ИЗСЛЕДВАНЕ НА ДВИЖЕНИЕТО НА АВТОМАТ – НАКЛОНИТЕЛ СИСТЕМА „HILLER–BELL“ В СРЕДА AUTODESK INVENTOR
- 16:45** ***Pavlin Gramatikov*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, pgramatikov@space.bas.bg*
ВТОРИЧНА ЕЛЕКТРОЗАХРАНВАЩА СИСТЕМА НА БЕЗПИЛОТЕН ЛЕТАТЕЛЕН АПАРАТ
- 17:00** ***Plamen Trendafilov*** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, pl_trendafilov@abv.bg*
ОТНОСНО РАБОТАТА НА СИСТЕМИТЕ ЗА БЛИЗКА РАДИОЛОКАЦИЯ ИЗПОЛЗВАЩИ НЕПРЕКЪСНАТ ЧЕСТОТНО МОДУЛИРАН СОНДИРАЩ СИГНАЛ
- 17:15** **Coffee Break**

Poster session

- 2-1** **Zoya Hubenova, Konstantin Metodiev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, zhubenova@space.bas.bg*
ОБУЧЕНИЕ И ОЦЕНКА НА ОПЕРАТОРИ НА БЛА С ТРЕНАЖОР SIMLAT
- 2-2** **Malina Jordanova** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, mjordan@bas.bg*
Frank Lievens – *Lievens-Lanckman bvba, Belgium*
Anton Vladzimirsky
A CENTURY OF TELEMEDICINE: CURATIO SINE DISTANTIA ET TEMPORA
- 2-3** **Dobrin Seyzinski, Stanimir Penchev, Boyan Todorov** – *Technical University – Sofia, Branch Plovdiv, dobsey@abv.bg*
SPECIFICS OF AERODYNAMIC DESIGN OF SMALL AND MINI UAVs
- 2-4** **Dobrin Seyzinski, Stanimir Penchev** – *Technical University – Sofia, Branch Plovdiv, dobsey@abv.bg*
STUDY OF WING VORTEX WAKE CHARACTERISTICS IN WIND TUNNEL
- 2-5** **Pavlin Gramatkov, Roumen Nedkov, Doyno Petkov** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, pgramatkov@space.bas.bg*
ВТОРИЧНА ЕЛЕКТРОЗАХРАНВАЩА СИСТЕМА НА ВИДЕОЗАПОМНЯЩОТО УСТРОЙСТВО ОТ ВСК „ФРЕГАТ“
- 2-6** **Pavlin Gramatkov, Roumen Nedkov, Stoyan Tanev, Plamen Trendafilov** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, pgramatkov@space.bas.bg*
СРАВНИТЕЛЕН АНАЛИЗ НА ВТОРИЧНИТЕ ЕЛЕКТРОЗАХРАНВАЩИ СИСТЕМИ НА ПРИБОРИТЕ „ЗОРА“ И „НЕВРОЛАБ - Б“

03.11.2016 (Thursday)

Hall 2 (204)

Session 3

Remote Sensing and Geoinformation Systems

Chairman: Assoc. Prof. Lachezar Filchev

Secretary: Assoc. Prof. Denitsa Borisova

- 09:30** **Zlatomir Dimitrov, Eugenia Roumenina** – *Space Research and Technology Institute – Bulgarian Academy of Sciences, zlatomir.dimitrov@space.bas.bg, roumenina@space.bas.bg*
ПОТЕНЦИАЛ НА РАДАРНАТА ПОЛЯРИМЕТРИЯ И ИНТЕРФЕРОМЕТРИЯ (POL-INSAR) ЗА ИЗСЛЕДВАНЕ НА ГОРСКИТЕ ЕКОСИСТЕМИ
- 09:45** **Bozhidar Srebrov, Lyubka Pashova** – *National Institute of Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, srebrov@geophys.bas.bg*
ОПРЕДЕЛЯНЕ ГРАНИЦАТА НА МОХОРОВИЧИЧ ЗА ТЕРИТОРИЯТА НА БЪЛГАРИЯ ПО СПЪТНИКОВИ ГРАВИМЕТРИЧНИ ДАННИ
- 10:00** **Rumiana Kancheva** – *Space Research and Technology Institute – Bulgarian Academy of Sciences, rumecho@abv.bg*
ПОГРЕШНОСТИ В БЪЛГАРСКАТА УПОТРЕБА НА ТЕРМИНИ ОТ ОБЛАСТТА НА ДИСТАНЦИОННИТЕ ИЗСЛЕДВАНИЯ
- 10:15** **Alexander Gikov** – *Space Research and Technology Institute – Bulgarian Academy of Sciences, gikov@space.bas.bg*
ИЗСЛЕДВАНЕ НА МНОГОГОДИШНАТА ДИНАМИКА В ЛАНДШАФТИТЕ НА РИЛА ПЛАНИНА С ДИСТАНЦИОННИ МЕТОДИ
- 10:30** **Coffee Break**
- 10:45** **Denitsa Borisova, Hristo Nikolov, Doyno Petkov** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, dborisova@stil.bas.bg*
Viktor Savorskiy – *Institute of Radio-engineering and Electronics - Russian Academy of Sciences*
Banush Banushev – *University of Mining and Geology*
РАЗПОЗНАВАНЕ НА ОТКРИТИ РУДНИЦИ ПО СПЕКТРАЛНИ ХАРАКТЕРИСТИКИ В БЛИЗКАТА ИНФРАЧЕРВЕНА ОБЛАСТ
- 11:00** **Ventzeslav Dimitrov** – *Space Research and Technology Institute – Bulgarian Academy of Sciences, vdimitro@stil.bas.bg*
ASSURANCE AND CONTROL OF THE QUALITY OF SPATIAL INFORMATION BEING EXTRACTED FROM SATELLITE IMAGES

11:15 **Tihomir Aleksiev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, t_aleksiev@abv.bg*
ОБУЧЕНИЕ ПО ГЕОПРОСТРАНСТВЕНИ ТЕХНОЛОГИИ ЗА УЧЕНИЦИ
ПО ПРИМЕРА НА КЛУБ "САТЕЛИТ"

Poster session:

- 3-1** **Maria Dimitrova, Deyan Gotchev, Plamen Trentchev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, maria@space.bas.bg*
СРАВНЕНИЕ НА ОТРАЖАТЕЛНИТЕ ХАРАКТЕРИСТИКИ НА
ОСНОВНИ ОБЕКТИ, ПОЛУЧЕНИ ПО ДАННИ ОТ СПЕКТРОМЕТРИТЕ
TM, ETM+ И OLI И ПО SENTINEL 2
- 3-2** **Maria Dimitrova, Plamen Trentchev, Deyan Gotchev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, maria@space.bas.bg*
СРАВНЕНИЕ НА NDVI И NDWI ИНДЕКСИТЕ НА ШИРОКОЛИСТНА
ГОРА ЗА ПЕРИОДА 1984-2016 Г., ПОЛУЧЕНИ ПО ДАННИ ОТ
СПЕКТРОМЕТРИТЕ TM, ETM+ И OLI.
- 3-3** **Maria Dimitrova, Plamen Trentchev, Deyan Gotchev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, maria@space.bas.bg*
ОТРАЖАТЕЛНИ ХАРАКТЕРИСТИКИ, NDVI И NDWI ИНДЕКСИ НА
ИГЛОЛИСТНА ГОРА И ПРОМЕНЯЩА СЕ ТРЕВНА РАСТИТЕЛНОСТ
ПО ДАННИ ОТ TM, ETM+ И OLI
- 3-4** **Maria Dimitrova, Deyan Gotchev, Plamen Trentchev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, maria@space.bas.bg*
СЕЗОННО ИЗМЕНЕНИЕ НА ОТРАЖАТЕЛНИТЕ ХАРАКТЕРИСТИКИ,
NDVI И NDWI ИНДЕКСИТЕ НА ШИРОКОЛИСТНА, ИГЛОЛИСТНА
ГОРА И ТРЕВНА РАСТИТЕЛНОСТ ПО ДАННИ ОТ TM И OLI
- 3-5** **Veselin Tashev, Rolf Werner, Angel Manev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, veselinlt@abv.bg*
Mariana Goranova – *Technical University*
ИЗМЕРВАНЕ НА СЛЪНЧЕВАТА ЕНЕРГИЯ ПОПАДАЩА НА ЗЕМЯТА
ЗА РАЗЛИЧНИ ПЕРИОДИ ОТ ВРЕМЕ С ПОМОЩТА НА
МЕТЕОСТАНЦИЯ VANTAGE PRO2 PLUS
- 3-6** **Veselin Tashev, Rolf Werner, Angel Manev** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, veselinlt@abv.bg*
Mariana Goranova – *Technical University*
Ana Shishkova
ОБРАБОТКА НА ДЪЛГОСРОЧНИ ДАННИ ЗА ТЕМПЕРАТУРАТА НА
АТМОСФЕРАТА В РАЙОН СТАРА ЗАГОРА

- 3-7** *Ivan Dimitrov* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *idimitrov@space.bas.bg*
 ПЕРСПЕКТИВНИ АРХЕОЛОГИЧЕСКИ ОБЕКТИ КРАЙ НИКУЛИЦЕЛ
- 3-8** *Lachezar Filchev, Garo Mardirossian, Dimitar Dimitrov, Tsveta Srebrova, Lubomira Krалеva* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *lachezarhf@space.bas.bg*
 EDUCATION IN EARTH OBSERVATION FOR BULGARIAN SECONDARY SCHOOLS (EEOBSS)
- 3-9** *Valentin Atanassov, Denitsa Borisova, Hristo Lukarski* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *vatanassov@space.bas.bg*
 MULTITASK APPLICATIONS OF HYPERSPECTRAL INSTRUMENT
- 3-10** *Dora Krezhova* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *dkrezhov@stil.bas.bg*
Tsenko Vachev, Kalinka Velichkova – Institute of Soil Science, Agro-Technology and Plant Protection "Nikola Pushkarov" - Bulgarian Academy of Agriculture
 APPLICATION OF REMOTE SPECTRAL REFLECTANCE MEASUREMENTS FOR ASSESSMENT OF THE INFLUENCE OF BIOTIC STRESSES ON PLANTS
- 3-11** *Stefan Stamenov, Vanya Stamenova* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *stamenovstefan@yahoo.bg*
 "SPACE SCHOOL" INITIATIVE – A WAY TO FUTURE

03.11.2016 (Thursday)

Hall 2 (204)

Session 4

Ecology and Risk Management

Chairman: Prof. Garo Mardirossian

Secretary: Tsveta Srebrova, MS

- 13:00** *Boyko Ranguelov* – Mining and Geology University, *branguelov@gmail.com*
Edelvays Spassov – Kinematics, CA, USA, *ens@kmi.com*
THE PARADOX EARTHQUAKES – POSSIBLE EXPLANATIONS
- 13:15** *Boyko Ranguelov, Emil Iliev* – Mining and Geology University, *branguelov@gmail.com*
ДЪЛБОЧИННИ НЕЕДНОРОДНОСТИ В РАЙОНА НА
СЕИЗМОАКТИВНАТА КАЛАБРИЙСКА АРКА УСТАНОВЕНИ ПО
МЕТОДА НА МИКРОСЕИЗМИЧНИЯ ШУМ
- 13:30** *Dimitar Dimitrov* – National Institute for Geophysics, Geodesy and
Geography - Bulgarian Academy of Sciences
ПРИЛОЖЕНИЕ НА КОСМИЧЕСКИТЕ ГЕОДЕЗИЧНИ МЕТОДИ ЗА
ИЗСЛЕДВАНЕ НА СЕИЗМОГЕННИ ЗОНИ
- 13:45** *Gennadiy Maklakov* – Petersburg Institute for Informatics and Automation
- Russian Academy of Sciences, *gmaklakov@mail.bg*
ПЕРСПЕКТИВИ ЗА ИЗПОЛЗВАНЕ НА ГРВ-БИОЕЛЕКТРОГРАФИЯТА
В АЕРОКОСМИЧЕСКИТЕ ИЗСЛЕДВАНИЯ
- 14:00** *Gennadiy Maklakov* – Petersburg Institute for Informatics and Automation
- Russian Academy of Sciences, *gmaklakov@mail.bg*
ВЪЗМОЖНОСТИ ЗА ПРИЛОЖЕНИЕ НА ГРВ-ТЕХНОЛОГИЯТА ЗА
МОНИТОРИНГ НА ОКОЛНАТА СРЕДА
- 14:15** *Rangel Gjurov* – New Bulgarian University, *rgjurov@nbu.bg*
АКТИВИЗИРАНЕ НА ГЛОБАЛНИТЕ СЕИЗМИЧНИ ЗОНИ ПОД
ВЛИЯНИЕ НА ДИНАМИЧНАТА СИСТЕМА ЗЕМЯ-ЛУНА-СЛЪНЦЕ
- 14:30** *Strachimir Mavrodiev* – Institute for Nuclear Research and Nuclear
Energy, Space Research and Technology Institute - Bulgarian Academy of
Sciences, , *schtmavr@yahoo.com*
Petar Getsov, Georgi Sotirov, Garo Marditossian – Space Research
and Technology Institute - Bulgarian Academy of Sciences
Lazo Pekevski – University “Sts. Cyril and Methodius”, Seismological
Observatory, Skopje, Macedonia, *lazopekovski@yahoo.com*
ON THE EARTHQUAKE'S PREDICTION

- 14:45** **Coffee Break**
- 15:00** ***Iliya Trifonov*** – *National Institute for Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, okichobi@mail.bg*
СТАТИСТИЧЕСКО ПРЕЦИЗИРАНЕ НА ГЛОБАЛНИ КЛИМАТИЧНИ МОДЕЛИ И ПРОГНОЗИРАНЕ НА ТЕМПЕРАТУРАТА НА ВЪЗДУХА В РАЙОНА НА БЪГАРСКОТО ЧЕРНОМОРСКО КРАЙБРЕЖИЕ
- 15:15** ***Philip Philipoff, Venelin Zhivkov*** – *Institute of Mechanics - Bulgarian Academy of Sciences, philip.philipoff.gibraltar@gma*
Petar Getsov, Garo Mardirossian, Georgi Sotirov – *Space Research and Technology Institute - Bulgarian Academy of Sciences*
Atanas Kovachev, Petar Mandiev, Simona Doneva – *Technical University - Sofia*
ECOLOGY FRIENDLY TECHNOLOGIES FOR THE INFRASTRUCTURE OF THE FUTURE
- 15:30** ***Violeta Velikova*** – *Institute of Plant Physiology and Genetics, violeta.velikova@gmail.com*
БИОГЕННИТЕ ИЗОПРЕНОИДИ - ВАЖЕН ФАКТОР ЗА КАЧЕСТВОТО НА ВЪЗДУХА И УСТОЙЧИВОСТТА НА РАСТЕНИЯТА КЪМ СТРЕС
- 15:45** ***Nikolay Yordanov*** – *National Institute for Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, niki0814@abv.bg*
ВЪЗДЕЙСТВИЕ ОТ ПОТРЕБЛЕНИЕТО НА ВОДА КАТО ФАКТОР ВЪРХУ РЕЖИМА НА ПОВЪРХНОСТНИТЕ ВОДИ В БАСЕЙНА НА Р. ТУНДЖА
- 16:00** ***Teodora Andreeva*** – *European Public Administration, EU Delegation to Ukraine, teodora.andreeva@ec.europa.eu*
Dimitar Teodossiev – *Space Research and Technology Institute - Bulgarian Academy of Sciences*
Bozhidar Srebrov – *National Institute for Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, srebrov@geophys.bas.bg*
ELECTROMAGNETIC FIELD MONITORING IN 5 HZ – 7 GHZ RANGE IN THE REGION OF PLOVDIV – RESULTS AND CONCLUSIONS
- 16:10** ***Teodora Andreeva*** – *European Public Administration, EU Delegation to Ukraine, teodora.andreeva@ec.europa.eu*
HIGHLIGHTS AND UNSOLVED PROBLEMS OF THE EUROPEAN LEGISLATION IN THE CONTROL OF THE ELECTROMAGNETIC POLLUTION OF THE ENVIRONMENT
- 16:20** ***Valeria Stoyanova, Annie Shoumkova, Radost Pascova*** – *Institute of Physical Chemistry “Rostislav Kaischew” – Bulgarian Academy of Sciences, valeria@ipc.bas.bg*
Adelina Miteva – *Space Research and Technology Institute - Bulgarian Academy of Sciences*
UTILIZATION OF MUNICIPAL AND AGRICULTURE WASTES BY HYDROTHERMAL TREATMENT INTO USEFUL ZEOLITIC PRODUCTS

- 16:35** **Stojan Velkoski, Vesna Mirjanoska, Jane Velkoski, Mihail Velkoski** – GAPE Institute – Skopje, contact@igape.edu.mk
Marina Malis Sazdovska – Faculty of Security in Skopje, mmalis@fb.uklo.edu.mk
 DESTRUCTION OF CULTURAL HERITAGE IN REPUBLIC OF MACEDONIA DUE TO INADEQUATE PROTECTION
- 16:45** **Stojan Velkoski, Jane Velkoski, Mihail Velkoski** – GAPE Institute – Skopje, contact@igape.edu.mk
 COSMO PATHOLOGY AND OCCURRENCE OF CANCER
- 16:55** **Nadia Marinova** – New Bulgarian University, nmarinova@nbu.bg
 ЕКОЛОГИЧНИЯТ РИСК – ПРОБЛЕМ ЗА РАЗВИТИЕТО
- 17:10** **Ivan Todorov, Elena Todorova**
 ДИФЕРЕНЦИАЛЕН МЕТОД ЗА УСТАНОВЯВАНЕ НА ПРОМЕНИ В СУПРАМОЛЕКУЛЯРНАТА СТРУКТУРА НА НИСКО И УМЕРЕНО МИНЕРАЛИЗИРАНИ ПРИРОДНИ И ТЕХНИЧЕСКИ ОБРАБОТЕНИ ВОДИ, ПРИЧИНЕНИ ОТ ВЪЛНОВИ ЕНЕРГО-ИНФОРМАЦИОННИ ВЪЗДЕЙСТВИЯ

Poster session:

- 4-1** **Ralitsa Berberova, Bilyana Kostova, Georgi Petrov** – New Bulgarian University, rberberova@nbu.bg
 ГЕОРАДАРНО ИЗСЛЕДВАНЕ НА ДИГАТА НА Р. ИСКЪР, С. ВЛАДО ТРИЧКОВ
- 4-2** **Ivan Dimitrov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, idimitrov@space.bas.bg
 ПОЖАРИ В БЛИЗОСТ ДО ОБЕКТИ ОТ КРИТИЧНАТА ИНФРАСТРУКТУРА
- 4-3** **Ekaterina Serafimova** – University of Chemical Technology and Metallurgy, ekaterina_sr@abv.bg
Vilma Petkova – New Bulgarian University
 GLOBAL PROBLEMS WITH DEFORESTATION. EVALUATION OF SUSTAINABLE FOREST MANAGEMENT IN BULGARIA
- 4-4** **Vilma Petkova, Bilyana Kostova** – New Bulgarian University, vilmametkova@gmail.com
 INFLUENCE OF HIGH ENERGY MILLING ON PHASE TRANSFORMATION OF SYSTEM APATITE-QUARTZ-CALCITE
- 4-5** **Radina Nikolova, Vilma Petkova** – New Bulgarian University, vpetkova@nbu.bg
 ORGANIC MOLECULES IN SPACE

- 4-6** **Anton Sotirov** – Association “Club Avangard”,
sotirov_anton@hotmail.com
Neli Siveva – University of Chemical Technology and Metallurgy
Hristofor Skandaliev, Tomislav Skandaliev – Club for Aerospace
Technologies Zodiac, fori2ivanov@yahoo.com
ИЗСЛЕДВАНЕ НА ВЛИЯНИЕТО НА БИТОВИТЕ СМЕТИЩА ВЪРХУ
КАЧЕСТВОТО НА ВОДАТА НА РЕКА БИСТРИЦА
- 4-7** **Svetla Dimitrova** – Space Research and Technology Institute - Bulgarian
Academy of Sciences, svetla_stil@abv.bg
ЗАЩО СА НЕОБХОДИМИ ЗА ШИРОКАТА ОБЩЕСТВЕНОСТ
НАУЧНИТЕ ЕЖЕДНЕВНИ ПРОГНОЗИ НА ГЕОМАГНИТНИТЕ БУРИ?
- 4-8** **Natalia Stankova, Roumen Nedkov, Iva Ivanova** – Space Research and
Technology Institute - Bulgarian Academy of Sciences,
natalia_hs@space.bas.bg
ИЗСЛЕДВАНЕ НА ПОСЛЕДСТВИЯТА И СЪСТОЯНИЕТО НА ГОРСКИ
ЕКОСИСТЕМИ СЛЕД ПОЖАР ЧРЕЗ ИЗПОЛЗВАНЕ НА
ДИСТАНЦИОННИ АЕРОКОСМИЧЕСКИ МЕТОДИ И ДАННИ
- 4-9** **Mirjana Despotovikj, Jane Velkoski** – GAPE Institute – Skopje,
contact@igape.edu.mk
MINERALS AND THEIR USE AS A ROLE IN ENVIRONMENTAL
PROCESS FOR THE PRESERVATION OF HEALTH
- 4-10** **Zdravko Bonev** – University of Architecture, Civil Engineering and
Geodesy
Boriss Grozdanoff – Institute for study of Societies and Knowledge -
Bulgarian Academy of Sciences
Petar Mandiev – Institute of Mechanics - Bulgarian Academy of Sciences
Yordan Tankovsky – Institute of Neurobiology - Bulgarian Academy of
Sciences
APPLICATION OF PERSPECTIVE MATERIALS AND TECHNOLOGIES
IN METROPOLITAN ENGINEERING, PROTECTION OF CULTURAL
MONUMENTS AND PROTECTION OF USAGE OF MINERAL WATERS
IN SOFIA MUNICIPALITY

03.11.2016 (Thursday)
Hall 1 („Малый зал”)

Session 5

Space Material Science and Nanotechnology

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

- 14:00** ***Mila Ilieva-Obretenova*** – *Mining and Geology University,*
milailieva@abv.bg
ВЪРХУ НЯКОИ АСПЕКТИ НА НАНОИНФОРМАТИКАТА. ОСНОВНИ
ИЗИСКВАНИЯ
- 14:15** ***Zdravka Karaguiozova, Adelina Miteva*** – *Space Research and*
Technology Institute - Bulgarian Academy of Sciences,
karazuzi@yahoo.com
MAGNESIUM APPLICATION IN AEROSPACE INDUSTRY
- 14:30** ***Zdravka Karaguiozova*** – *Space Research and Technology Institute -*
Bulgarian Academy of Sciences, karazuzi@yahoo.com
HYDROGEN PEROXIDE/SULPHURIC ACID ETCHING SOLUTION
- 14:45** ***Adelina Miteva*** – *Space Research and Technology Institute - Bulgarian*
Academy of Sciences, ad.miteva@gmail.com
QUANTUM CONFINED STARK EFFECT IN NON-RECTANGULAR
SEMICONDUCTOR QUANTUM WELLS
- 15:00** ***Valentin Gospodinov*** – *Space Research and Technology Institute -*
Bulgarian Academy of Sciences, vgospodinov@space.bas.bg
A COMPARATIVE STUDY OF THE VARIOUS APPROACHES TO
THE VOLUME DEPENDENCE OF THE GRÜNEISEN RATIO

15:15 **Coffee Break**

Poster session:

- 5-1** ***Anna Bouzekova-Penkova, Julian Karadjov*** – *Space Research and*
Technology Institute - Bulgarian Academy of Sciences,
a_bouzekova@abv.bg
Y. Evstatieva, D. Nikolova – *Biotechnology Department, Biological*
Faculty, Sofia University “St. Kliment Ochridski
ИЗСЛЕДВАНЕ НА МИКРОБНАТА ОСЕМЕНЕНОСТ НА РАЗЛИЧНИ
ПРОБИ ИЗЛОЖЕНИ ЗА 30 МЕСЕЦА В ОТКРИТИЯ КОСМОС

Г Р А Ф И К

Дата	Мраморна зала
02.11.2016 сряда следобед	15:00 – 17:00 Регистрация 16:00 Официално откриване на SES 2016

Дата	Зала 1 („Малый зал”)	Зала 2 (204)
03.11.2016 четвъртък сутрин	09:30 – 13:20 <i>Сесия 1</i> ”Космическа физика”	09:30 – 11:30 <i>Сесия 3</i> „Дистанционни изследвания и GIS”
03.11.2016 четвъртък следобед	14:00 – 15:30 <i>Сесия 5</i> ”Космически материали и нанотехнологии” 16:00 – 17:15 <i>Сесия 2</i> ”Аерокосмически технологии и биотехнологии”	13:00 – 17:25 <i>Сесия 4</i> „Екология и управление на риска”
03.11.2016 четвъртък	-	17:30 Закриване на конференцията