

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

***SIXTEENTH INTERNATIONAL
SCIENTIFIC CONFERENCE***

UNDER THE MOTTO

BULGARIAN MEMBERSHIP IN EUROPEAN SPACE AGENCY

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

S E S 2020

P R O G R A M M E

**2 – 4 December 2020
Sofia**

Russian Culture and Information Centre

**The Conference is supported by Bulgarian National Science Fund
Contract № КП-06-МНФ/16 – 24.09.2020**

IMPORTANT:

**The Conference will be held in strict compliance
with antiepidemic rules.
The Organizational Committee
provided the necessary distances, protective masks
and disinfectants.**

***The titles of the reports are written in the languages
in which they will be delivered/posted***

***Заглавията на докладите са на езика,
на който ще бъдат представени***

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Bulgarian Academy of Sciences**

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REGISTRATION

02.12.2020 13:00 – 16:00
03.12.2020 08:30 – 11:30

02.12.2020 (Wednesday)

16:00 Official Opening

Welcome Speech
Corr. Member Petar Getsov

Greeting words from the Bulgarian Academy of Sciences

Greeting Words and Addresses
Prof. Roumen Nedkov – *Director of SRTI-BAS*

16:30 Plenary Session

Milan Mijovic, LL.M – *President of the Executive board, Serbian Office for Space Sciences, Research and Development*
Developing the Space sector in South East Europe - A joint approach for common goal

Lucia Paciucci – *National Research Council of Italy – Department of Engineering, ICT and Technologies for Energy and Transport, Italy*
Italian-Bulgarian Cooperation in Space Exploration

Prof. Sergey Kuzin – *P.N.Lebedev Physical Institute of Russian Academy of Sciences*
Cubesats for Solar physics

Acad. Gennadii Maklakov – *Petersburg Institute for Informatics and Automation - Russian Academy of Sciences, Biophotonics Research Center - Smolyan*
The Coronavirus problem and aerospace technologies - opportunities and prospects

18:45 Presentation of new books on the topic of the Conference

19:00 Opening of the Artistic Exhibition of Assoc. Prof. Dr. Petar Stoyanov

19:15 Welcome Party

03.12.2020 (Thursday)

Hall 1

Session 1

Space Physics

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

Secretariy: Assoc. Prof. Daniela Boneva

- 09:00 **Jordanka Semkova, Rositza Koleva, Victor Benghin, Tsvetan Dachev, Yuri Matviichuk, Borislav Tomov, Krasimir Krastev, Stephan Maltchev, Plamen Dimitrov** – Space Research and Technology Institute, Bulgarian Academy of Sciences, Sofia, Bulgaria, jsemkova@stil.bas.bg
Igor Mitrofanov, Alexey Malahov, Dmitry Golovin, Maxim Mokrousov, Anton Sanin, Maxim Litvak, Andrey Kozyrev, Vladislav Tretyakov, Sergey Nikiforov, Andrey Vostrukhin, Lev Zelenyi – Space Research Institute, Russian Academy of Sciences, Moscow, Russia
Vyacheslav Shurshakov, Sergey Drobyshev – Institute of Biomedical Problems of the Russian Academy of Sciences, Moscow, Russia
Radiation Environment in the Interplanetary Space and Mars Orbit in 2016-2020 According Measurements Aboard ExoMars TGO
- 09:15 **Sergei Kuzin, Andrey Pertsov** – Lebedev Institute of Physics, RAS, Moscow, Russian Federation, s.kuzin@lebedev.ru
Alexey Stoev, Penka Stoeva – Space Research and Technology Institute – Bulgarian Academy of Sciences, astoev52@space.bas.bg
High resolution coronal structures during the "calmly Sun" based on TSE photos 2016, 2017 and 2019
- 09:30 **Alexey Stoev, Penka Stoeva** – Space Research and Technology Institute – Bulgarian Academy of Sciences, astoev52@space.bas.bg
Sergei Kuzin, Andrey Pertsov – Lebedev Institute of Physics, RAS, Moscow, Russian Federation, s.kuzin@lebedev.ru
Photometry of halo phenomena in the cone of the moon's shadow in the visible and infrared regions of the spectrum
- 09:45 **Krasimira Yankova** – Space Research and Technology Institute – Bulgarian Academy of Sciences, f7@space.bas.bg
Advection and cosmology - connections and consequences
- 10:00 – 10:15 **Coffee Break**
- 10:15 **Daniela Boneva** – Space Research and Technology Institute – Bulgarian Academy of Sciences, danvasan@mail.space.bas.bg
Mass transfer rate and accretion efficiency of two binary stars with compact objects

- 10:30** **Miroslav Kostov** – Yuri Gagarin Astronomical Observatory, Stara Zagora, miroslavkostov@abv.bg
Penka Stoeva – Space Research and Technology Institute – Bulgarian Academy of Sciences
Form of the solar corona during the downward trend of solar activity in the period 2016–2019
- 10:45** **Lyubomira Raykova, Alexey Stoev** – Space Research and Technology Institute – Bulgarian Academy of Sciences, heiti56@gmail.com
Solar-terrestrial atmospheric effects on closed rock structures
- 11:00** **Mina Spasova** – Institute of Philosophy and Sociology at BAS, mina.stoeva@gmail.com
Solar calendars from prehistoric times in Bulgarian caves
- 11:15** **Rumen Shkevov** – Space Research and Technology Institute - Bulgarian Academy of Sciences, shkevov@space.bas.bg
Nikolay Erokhin, Nadezhda Zolnikova, Ludmila Mikhailovskaya – Space Research Institute, Russian Academy of Sciences, Moscow, Russia
Kostadin Sheiretsky – University of National and World Economy, Sofia
Wave-particle interactions preceding the resonant acceleration of charged particles in space plasma
- 11:30** **Natalia Kilifarska** – NIGGG-BAS, natalya_kilifarska@yahoo.co.uk
Влияние на вариациите в слънчевата активност върху озона в ниската стратосфера и климата
- 13:00** **Svetoslav Zabunov** – Space Research and Technology Institute – Bulgarian Academy of Sciences, SvetoslavZabunov@gmail.com
Rositsa Miteva – Institute of Astronomy and NAO - Bulgarian Academy of Sciences, rmiteva@nao-rozhen.org
Online Real-time Visualization of radioSolariz Spectrum and Spectrogram
- 13:15** **Rositsa Miteva** – Institute of Astronomy and NAO - Bulgarian Academy of Sciences, rmiteva@nao-rozhen.org
Susan Samwel – National Research Institute of Astronomy and Geophysics, Egypt
Svetoslav Zabunov – Space Research and Technology Institute – Bulgarian Academy of Sciences, SvetoslavZabunov@gmail.com
Multi-energy proton events and geomagnetic storms in solar cycles 23 and 24

- 13:30** *Peter Velinov* – Space Research and Technology Institute – Bulgarian Academy of Sciences, *pvelinov@bas.bg*
Alexander Mishev – Space Physics and Astronomy Research Unit, University of Oulu, Finland
Ionization effects in Regener–Pfozter maximum due to cosmic rays during Ground Level Enhancements GLE 65, 66, 67 in October–November 2003
- 13:45** *Rolf Verner, Dimitar Valev, Veneta Guineva* – Space Research and Technology Institute – BAS, *rwerner@space.bas.bg*
Andrey Kirillov – Polar Geophysical Institute, RAS, Apatity, Russia
Boyan Petkov – Institute of Atmospheric Sciences and Climate, National Research Council, Bologna, Italy
Low ozone events over Bulgaria - a case study
- 14:00** *Dimitar Stoynov, Dilyan Stoynov* – VEGA System 2010, *dgstoinov@gmail.com*
Описание на опитна установка с цел да се определи посоката и скоростта на движение на Земята в космоса
- 15:30 – 16:30** **Poster session**
- 1-1** *Veselin Tashev, Veneta Guineva, Angel Manev* – Space Research and Technology Institute – Bulgarian Academy of Sciences, *veselinlt@abv.bg*
Methods for measuring low intensity emissions in the far UV spectrum of the magnetosphere
- 1-2** *Irina Despirak* – Polar Geophysical Institute, Apatity, Russia
Veneta Guineva – Space Research and Technology Institute, BAS, Stara Zagora Department
MID-latitude geomagnetic effects during some intense substorms
- 1-3** *Oleg Stepanyuk* – UATL Private Research University, iAthena7 Labs, *stepanyuk.oleg@aol.com*
Kamen Kozarev – Institute of Astronomy and National Astronomical Observatory, Bulgarian Academy of Sciences
Image processing in solar physics: a method proposal and a software concept
- 1-4** *Alexander Shibaev* – Moscow State University
Анализ ряда чисел Вольфа методом машинного обучения и возможности прогнозирования
- 1-5** *Peter Tonev* – Space Research and Technology Institute – Bulgarian Academy of Sciences, *ptonev@bas.bg*
Interpretation of MINIS measurement data of electric characteristics in Antarctic stratosphere on 20 January 2005

- 1-6 **Tsvetelina Velichkova, Natalia Kilifarska – NIGGG-BAS,**
joy_real@abv.bg
Фактори влияещи върху изменчивостта на глобалния климат на планетата
- 1-7 **Daniela Boneva, Krasimira Yankova – Space Research and Technology Institute – Bulgarian Academy of Sciences, f7@space.bas.bg**
Evgeny Mikhailov, Maria Pashentseva, Dmitriy Sokoloff – M. V. Lomonosov Moscow State University, Faculty of Physics, Moscow, Russian Federation
Estimation of accretion parameters in the presence of magnetic field of the binary star Gamma Cas
- 1-8 **Rumiana Bojilova – National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences, rbojilova@geophys.bas.bg**
Метод за реконструкция на критичните честоти на йоносферата над България по данни на TEC
- 1-9 **Rumiana Bojilova – National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences, rbojilova@geophys.bas.bg**
Анализ на точността на предлагания метод за реконструкция на foF2 и MUF3000 за територията на България по данни на TEC
- 1-10 **Veneta Guineva, Rolf Verner – Space Research and Technology Institute, BAS, Stara Zagora Department, v_guineva@yahoo.com**
Substorms manifestation at mid-latitudes during the geomagnetic storm on 25 August 2018

03.12.2020 (Thursday)

Hall 2

Session 2

Aerospace Technologies and Biotechnologies

Chairman: Corr. Member Petar Getsov

Secretary: Assoc. Prof. Zoya Hubenova

- 09:15** *Petar Getsov, Tsvetan Tsvetkov, Georgi Sotirov, Zoya Hubenova* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *getsovp@space.bas.bg*
Iliana Nacheva, Maria Doneva, Petya Metodieva – Institute of Cryobiology and Food Technologies
Development and application of technology for production of space food's modules for crews working in extreme conditions
- 09:30** *Svetoslav Zabunov* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *s14@ialms.net*
An Acoustic Drone Reconnaissance System
- 09:45** *Svetoslav Zabunov, Garo Mardirossian* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *s14@ialms.net*
Malicious Drones Interception and Neutralization – Latest Technologies Overview
- 10:00** *Dimitar Yordanov* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *dimitar.v.jordanov@gmail.com*
Драматичен момент от изпитанията на един МиГ
- 10:15** *Dimitar Yordanov, Pavel Penev* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *penevpb@gmail.com*
Възможности за извеждане на наноспътници с МиГ-29
- 10:30 – 11:00** Coffee Break
- 11:00** *Konstantin Metodiev* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *komet@space.bas.bg*
Средство за оценка кинематиката на сакада
- 11:15** *Georgi Sotirov, Evgeni Hubenov, Zoya Chiflijanova* – Space Research and Technology Institute - Bulgarian Academy of Sciences, *zhubenova@space.bas.bg*
Формиране и изследване на интелигентна интегрирана мобилна система за мониторинг на критична инфраструктура

- 11:30 **Atanas Atanassov** – *Space Research and Technology Institute - BAS, at_m_atanassov@yahoo.com*
Development of Tools for Models' Creation of Systems of Multi-Satellite systems
- 11:45 **Pavel Penev, Petar Getsov** – *Space Research and Technology Institute - BAS, penevpb@gmail.com*
Svetlozar Asenov – *Bulgarian Astronautical Society - Plovdiv*
Динамично моделиране на развитие на събития при кацане на въздухоплавателно средство в режим „2-ри кръг“
- 12:00 **Svetlozar Asenov** – *Bulgarian Astronautical Society - Plovdiv*
Изследване на влиянието на реалната техническа надеждност върху ефективността на резервиране на информацията, необходима за функциониране на диагностични системи
- 12:15 **Dimo Zafirov, Petar Getsov** – *Space Research and Technology Institute - BAS, zafirov@space.bas.bg*
Wang Bo – *Ningbo University of Technology, China*
Влияние на избора на параметри на електрически многороторни безпилотни летателни апарати върху основните им летателни характеристики
- 14:00 – 15:15 **Poster session**
- 2-1 **Malina Jordanova** – *Space Research and Technology Institute, BAS, Bulgaria, mjordan@space.bas.bg*
Todor Uzunov – *Asklepios Clinic for Mental Health, Clinic for Psychiatry, Psychotherapy and Psychosomatics, Academic Teaching Hospital of the Goethe University Frankfurt am Main, Langen, Germany*
ICT for Mental Health in COVID-19 Pandemic
- 2-2 **Petar Getsov, Konstantin Metodiev, Zoya Hubenova, Svetla Dimitrova, Dimo Zafirov, Dimitar Nedialkov** – *Space Research and Technology Institute - Bulgarian Academy of Sciences, getsovp@space.bas.bg*
Lyubomir Alexiev – *Military Medical Academy*
Окулографските изследвания и възможностите за тяхното използване за анализ и оценка на човешкия фактор в дистанционно-управляемите летателни системи
- 2-3 **Igor Shibaev** – *IZMIRAN, Troitsk, Russia, ishib@izmiran.ru*
Yuriy Kuksa – *GEMRC IPE RAS, Troitsk, Russia*
Correlation relations between pulse and blood pressure as a characteristic of the patient's condition
- 2-4 **Lyubomir Alexiev, Deanna Alexandrova** – *Military Medical Academy*
Zoya Hubenova, Konstantin Metodiev, Svetla Dimitrova – *Space Research and Technology Institute - Bulgarian Academy of Sciences*
Айтрекинг технология за оценка на зрителното внимание на обучаеми оператори на БЛА чрез симулиран „полет - еталон“

04.12.2020 (Friday)

Hall 2

Session 3

Remote Sensing and Geoinformation Systems

Chairman: Assoc. Prof. Lachezar Filchev

Secretary: Assoc. Prof. Maria Dimitrova

- 10:15** *Eugenia Roumenina, Georgi Jelev – Space Research and Technology Institute – Bulgarian Academy of Sciences, roumenina@space.bas.bg*
Развитие на дистанционни изследвания провеждани на аерокосмическите полигони в България (Development of the remote sensing studies carried out on the territory of the aerospace test sites in Bulgaria)
- 10:30** *Milen Chanev, Lachezar Filchev – Space Research and Technology Institute – Bulgarian Academy of Sciences, lachezarhf@gmail.com*
Възможности за прогнозиране на добива от биологична пшеница с използване на аерокосмически методи
- 10:45** *Milen Chanev, Lachezar Filchev – Space Research and Technology Institute – Bulgarian Academy of Sciences, lachezarhf@gmail.com*
Оценка на добивите от пшеница за земеделската 2019/20 година с използване на спътникови данни
- 11:00 – 11:15** **Coffee Break**
- 11:15** *Angel Manev, Lyubomira Raykova, Miroslav Kostov, Veselin Tashev – Space Research and Technology Institute – Bulgarian Academy of Sciences, amanev@space.bas.bg*
Геофизични условия при възникването на температурни аномалии на повърхността на Черно море
- 11:30** *Ventzeslav Dimitrov – Space Research and Technology Institute – BAS, vdimitrov@stil.bas.bg*
Yulia Krumova – National Institute of Geophysics, Geodesy and Geography - BAS
Radka Koleva – University of Forestry
Borislava Borisova – Ministry of Agriculture, Food and Forestry
Инвентаризация на пространствени данни за целите на CLC+

11:45 – 12:30 Poster session

- 3-1** *Ivan Dimitrov – Space Research and Technology Institute – BAS,
idimitrov@space.bas.bg*
**Ескизна реконструкция на двореца на Аспарух и Тервел край
Никулицел**
- 3-2** *Ivan Dimitrov – Space Research and Technology Institute – BAS,
idimitrov@space.bas.bg*
**Космически мониторинг на консервационните работи на храма
на Арес край Долна Козница**
- 3-3** *Iva Ivanova, Nataliya Stankova – Space Research and Technology
Institute – BAS, ivaivanova@mail.space.bas.bg*
**Dynamics and development of Alepu swamp for the period
2013-2020 based on satellite data**

03.12.2020 (Thursday)

Hall 2

Session 4

Ecology and Risk Management

Chairman: Prof. Garo Mardirossian

Secretary: Tsveta Srebrova, MS

- 13:30 **Boyko Ranguleov** – Mining and Geology University,
branguelov@gmail.com
Richard Haigh, Dilanthi Amaratunga – University of Huddersfield, UK
Fathimath Shadya – Maldives National University, Maldives
Ruben Paul Borg – University of Malta, Malta
Francesco Romagnoli – Riga Technical University, Latvia
Marlon Era – De La Salle University, Philippines
CABARET Project – A Modern capacity Building International Tool
- 13:40 **Boyko Ranguelov, Stefan Dimovsky, Atanas Kisyov** – Mining and
Geology University, *branguelov@gmail.com*
Dimo Solakov – NIGGG-BASa
**Digitization of the ground conditions for big cities in North
Bulgaria – Varna, Ruse, Turnovo**
- 13:50 **Genadiy Maklakov, Nadejda Georgieva** – Petersburg Institute for
Informatics and Automation - Russian Academy of Sciences,
gmaklakov@mail.bg
Momchil Karaivanov – Научно-изследователски център по
биофотоника, Смолян, България
**Приложение на биофотонната визуализация за мониторинг на
рекреационни зони в Родопите и въздействието им върху
психосоматиката на човека**
- 14:00 **Genadiy Maklakov, Nadejda Georgieva** – Petersburg Institute for
Informatics and Automation - Russian Academy of Sciences,
gmaklakov@mail.bg
**Изследване на екологорехабилитиращи звукови среди на
рекреационни зони в България за рехабилитация и
профилактика на работещи в аерокосмическия отрасъл**

14:15 – 14:30 Coffee Break

- 14:30** *Ekaterina Serafimova – University of Chemical Technology and Metallurgy – Sofia, ekaterina_sr@ustm.edu*
Vilma Petkova – Institute of Mineralogy and Crystallography “Acad. Iv. Kostov” – BAS, vilmapetkova@gmail.com
Изследване на физични и химични характеристики на компост от статичен биореактор
- 14:40** *Ekaterina Serafimova – University of Chemical Technology and Metallurgy – Sofia, Ekaterina_sr@ustm.edu*
Vilma Petkova – Institute of Mineralogy and Crystallography “Acad. Iv. Kostov” – BAS, vilmapetkova@gmail.com
Спектрометрично изследване на тежки метали в биоорганичен продукт с оценка на здравния риск
- 14:50** *Ralitsa Berberova, Bilyana Kostova – New Bulgarian University, rberberova@nbu.bg*
Георадарно изследване на свлачищен процес в кв. Бистрица, София
(GPRS investigation of landslide process in area of Bistritsa, Sofia)
- 15:00** *Maria Dimitrova, Plamen Trenchev, Deyan Gochev – Space Research and Technology Institute – Bulgarian Academy of Sciences, maria@space.bas*
Spatial and Seasonal distribution of NO₂ pollution over Bulgaria, based on Tropomi measurements
- 15:10** *Nadia Marinova – New Bulgarian University, nmarinova@nbu.bg*
Космосът – сигурност и възможност за планиране на конкурентоспособно бъдеще
- 15:20** *Oleg Stepanyuk – UATL Private Research University, iAthena7 Labs, stepanyuk.oleg@aol.com*
Estimation of a Natural Hazard Risk Index for the extreme weather events: Tornadoes, Hurricanes, Droughts and Wildfires. A method and a software proposal
- 15:30** *Lachezar Filchev – Space Research and Technology Institute – Bulgarian Academy of Sciences, lachezarhf@space.bas.bg*
Моделиране на техногенното замърсяване на почвите във водосбора на р. Тайна
- 15:45** *Lachezar Filchev – Space Research and Technology Institute – Bulgarian Academy of Sciences, lachezarhf@space.bas.bg*
Модели в дистанционните изследвания за оценка на състоянието и абиотичен стрес на иглолистни ландшафти
- 16:00** *Anelya Klisarova – Medical University - Varna, klisarova@gmail.com*
Elka Radeva – Medical University - Sofia, eliradeva@abv.bg
Philip Philipoff – Institute of Mechanics – BAS, philip.philipoff.quadruple.dregan@gmail.com
Pneumatic engineering automobile tools against crashes

- 16:15** **Anelya Klisarova** – Medical University - Varna, *klisarova@gmail.com*
Elka Radeva – Medical University - Sofia, *eliradeva@abv.bg*
Atanas Mangarov – Infectious Hospital – Sofia, *amangarov@gmail.com*
Philip Philipoff – Institute of Mechanics – BAS,
philip.philipoff.quadruple.dregan@gmail.com
Sofia metropolitan UV disinfection
- 16:25** **Stoyan Velkoski, Jane Velkoski, Mihail Velkoski** – Instiyute GAPE,
 Skopje, Rep. North Macedonia, *contact@igape.edu.mk*
Analysis of the reason for the outbreak and transfer of COVID-19
- 16:40** **Emil Oynakov, Emil Botev** – NIGGG-BAS, *emob@mail.bg*
Скрита периодичност в „потока“ земетресения в Южната част на Балканския полуостров
- 16:55** **Dimitar Alexandrov** – Bulgarian Astronautical society,
deakhv@mail.bg
Контрол на необратимата енергия, с оглед намаляване на парниковия ефект, на разрушението на озоновия слой и на покачването на температурата на атмосферата
- 17:10** **Dimitar Dimitrov, Emil Botev** – NIGGG-BAS, *emob@mail.bg*
Земетресенията от Чирпан – Пловдив 1928 г. – главни разломи от геодезични данни и теренни разкъсвания
- 17:15 – 18:45** **Poster session**
- 4-1** **Anton Sotirov, Nikolay Glavev** – “Velanto Group”Ltd., Kyustendil,
sotirov_anton@hotmail.com
Dimitar Sotirov, Stanislava Dimitrova – Institute of Agriculture,
 Kyustendil, Bulgaria
Nikola Pistalov, Viktor Sotirov, Krasimir Sotirov – Environmental
 NGO “Club Vanguard”, Kyustendil, Bulgaria
Ecological and technological parameters of apples
- 4-2** **Svetla Dimitrova, Rosanna Chizhova** – Space Research and
 Technology Institute – Bulgarian Academy of Sciences,
svetla_stil@abv.bg
Elchin Babayev – Baku State University, Baku, Azerbaijan
Famil Mustafa – Shamakhy Astrophysical Observatory named after
 N.Tusi – Azerbaijan National Academy of Sciences
Geomagnetic variations and dynamics of sudden cardiac deaths
- 4-3** **Hristo Nikolov** – Space Research and Technology Institute – BAS
Mila Atanasova – National Institute of Geophysics, Geodesy and
 Geography - BAS
Изследване на деформации по планински склонове посредством временна серия данни от радари със синтезирана апертура

04.12.2020 (Friday)

Hall 1

Session 5

Space Material Science and Nanotechnology

Chairman: Prof. Dimitar Teodosiev

Secretary: Daniela Shuleva

- 09:30 ***Dimitar Teodosiev, Anna Bouzekova - Penkova, Boyko Tsintsarski, Alexander Tsanev, Georgi Stanev – Space Research and Technology Institute – Bulgarian Academy of Sciences, dteod@space.bas.bg***
Jaroslav Voita – Czech Academy of Sciences, Czech Republic
Физико-химични характеристики на стъкловъглеродните покрития, използвани при изработване на сферични датчици, за измерване на електрични полета от борда на спътници и Международната Космическа Станция в околоземната плазма
- 09:45 ***Dimitar Teodosiev, Korneli Grigorov, Anna Bouzekova – Penkova, Alexandar Tsanev, Rositsa Koleva – Space Research and Technology Institute – Bulgarian Academy of Sciences, dteod@space.bas.bg***
Влияние на йонизиращото лъчение на ниска космическа орбита върху повърхностната енергия на проби с покритие от стъкло-въглерод
- 10:00 ***Valeria Stoyanova – Institute of Physical Chemistry “Acad. Rostislav Kaischew”, Bulgarian Academy of Sciences***
Adelina Miteva – Space Research and Technology Institute, Bulgarian Academy of Sciences, ad.miteva@gmail.com
Aerosol particles and modes of cloud droplets freezing
- 10:15 ***Adelina Miteva – Space Research and Technology Institute, Bulgarian Academy of Sciences, ad.miteva@gmail.com***
Nanotechnology in military applications
- 10:30 ***Ludmil Markov – Space Research and Technology Institute, Bulgarian Academy of Sciences, lmarkov@space.bas.bg***
Взривно пресоване на метални прахове
- 12:15 – 13:00 **Poster session**

A G E N D A

Date	Marble Hall
02.12.2020 Wednesday	<p>13:00 – 16:00 Registration</p> <p>16:00 Opening Ceremony & Plenary Session S E S 2020</p> <p>Welcome Party 19:15 – 20:30</p>

Date	Hall 1	Hall 2
03.12.2020 Thursday	<p>09:00 – 11:45 <i>Session 1</i> “Space Physics”</p>	<p>09:15 – 12:30 <i>Session 2</i> “Aerospace Technologies and Biotechnologies”</p>
03.12.2020 Thursday	<p>13:00 – 14:15 <i>Session 1</i> “Space Physics”</p>	<p>13:30 – 17:25 <i>Session 4</i> “Ecology and Risk Management”</p>
04.12.2020 Friday	<p>09:30 – 10:45 <i>Session 5</i> “Space Material Science and Nanotechnologies”</p> <p>Discussion & Round Table 13:00 – 14:30</p> <p>Closing of the Conference 15:00 – 17:00</p>	<p>10:15 – 11:45 <i>Session 3</i> „Remote Sensing and GIS”</p>

All poster sessions will be held in the Marble hall

NOTES