



**INTERNATIONAL FEDERATION OF SURVEYORS (FIG)**  
**INTERNATIONAL SOCIETY OF PHOTOGRAMMETRY AND REMOTE SENSING (ISPRS)**  
**COUNCIL OF EUROPEAN GEODETIC SURVEYORS (CLGE)**  
**EUROPEAN GROUP OF SURVEYORS (EGoS)**  
**INTERNATIONAL ASSOCIATION OF GEODESY (IAG)**  
**UNION OF SURVEYORS AND LAND MANAGERS IN BULGARIA (USLMB)**  
**FEDERATION OF THE SCIENTIFIC ENGINEERING UNIONS (FSEU)**  
**BULGARIAN ACADEMY OF SCIENCE (BAS) - SPACE RESEARCH AND TECHNOLOGY INSTITUTE**  
**UNIVERSITY OF ARCHITECTURE, CIVIL ENGINEERING AND GEODESY (UACG)**  
**MINISTRY OF REGIONAL DEVELOPMENT AND PUBLIC WORKS – AGENCY OF GEODESY, CARTOGRAPHY AND CADASTRE (MRDPW-AGCC)**  
**MINISTRY OF AGRICULTURE AND FOOD (MAF)**  
**MINISTRY OF DEFENCE-MILITARY GEOGRAPHIC SERVICE (MD-MGS)**  
**CHAMBER OF SURVEYOR ENGINEERS (CSE)**  
**ASSOCIATION OF GEODETIC COMPANIES**  
**CHAMBER OF ENGINEERS IN THE INVESTMENT PROJECT – SECTION GEODESY**  
**UNION OF SCIENTISTS IN BULGARIA – SECTION OF TECHNICAL, GEOLOGICAL AND GEOGRAPHICAL SCIENCES (USB-STS-SGGS)**

## **XXVII INTERNATIONAL SYMPOSIUM ON**

**MODERN TECHNOLOGIES, EDUCATION  
 AND PROFESSIONAL PRACTICE IN GEODESY  
 AND RELATED FIELDS**

**With a special session for young scientists and students and  
 Exhibition**

## **PROGRAMME**

**Sofia, November 09 - 10, 2017**

**08 November 2017 r. (Wednesday)**

**15:00 – 20.00** Registration

**09 November 2017 r. (Thursday)**

**8.00 - 09.00** Registration

**9.00 – 09.15** Opening of the Symposium. Welcomes

**9.15 – 10.45 PAPERS AND DISCUSSIONS (I) – NATIONAL PROBLEMS**  
***Prof. D.Sc. Georgi Valev, Dr. Ivan Kalchev (BG)***

1. Current problems of geodesy in Bulgaria.  
Ivan Kalchev (BG)
2. Implementation, distribution and maintenance of the International Terrestrial Coordinate System (ITRS) on Livingstone Island through GNSS technology  
Georgi Mihailov, Petar Danchev (BG)

**10.45 – 11.00** Coffee break

**11.00 – 12.30 PAPERS AND DISCUSSIONS (II) - GEODESY**  
***Assoc. Prof. Dr. Eng. Bihter Erol (TR), Eng. Col. Petar Danchev (BG)***

1. Vertical Reference System and Geoid Modeling Studies in Turkey  
Bihter Erol, Serdar Erol, Mustafa Serkan Işık (TR)
2. Investigating the Water Storage Variations at Lake Basins in Turkey Using Altimeter and Gravity Field Satellite Missions Data  
Serdar Erol, Bihter Erol (TR)
3. Interpolation Methods in Height Transformation Surface Modeling Using GPS/Leveling Data  
Bihter Erol, Onur Karaca (TR)
4. The First Results of Post-Seismic Deformation after the 6 Feb 2017, Mw 5.5, Ayvacık Earthquake Çanakkale, NW Turkey  
R. Cuneyt Erenoglu, Oya Erenoglu, Tolga Bekler, Emin Uluggergerli, Suha Ozden (TR)
5. Thermal anomalies detection using aster images in tuzla hot springs region  
R. Cuneyt Erenoglu , Niyazi Arslan , Oya Erenoglu, Enis Arslan (TR)

**12.30 – 14.00** Lunch

**14.00 – 15.30 PAPERS AND DISCUSSIONS (III) – GEODESY, EDUCATION**  
***Assoc. Prof. Dr. R. Cuneyt Erenoglu (TR), Assoc. Prof. Dr. Todor Kostadinov (BG)***

1. Determination of the swing of high installations in wind effect by CCTV  
Todor Kostadinov, Romyana (BG)

2. A Novel Approach to Monitor Geodetic Landslide Deformation using Micro-UAS  
R. Cunevt Erenoglu (TR), Oya Erenoglu (TR), Niyazi Arslan (TR)
3. About terrain design and public utilities at home gardens in Bulgaria  
Veneta Kotseva, Teodor Karamochev (BG)
4. Determination of maximum distances between grate inlets  
Emiliya Ilieva (BG)
5. Challenges to Modern Higher Technical Education  
Nelly Zdravcheva (BG)

**15.30 – 16.00** Coffee break

**16.00 – 17.30** **PAPERS AND DISCUSSIONS (IV) - PHOTOGRAMMETRY,  
LASER SCANNING**  
*Prof. Dr. Plamen Maldjanski, Dr. Marian Makov (BG)*

1. Adaptive correlation matching procedure for images with miscellaneous topological features  
Borislav Marinov, Radostina Iordanova (BG)
2. Pixel-based and object-based classification of open pit  
Vesselina Gospodinova, Radostina Yordanova (BG)
3. The Accuracy Assessment of 3D Transformations for The Registration of Point Clouds  
Ramazan Alper KUÇAK, Serdar Erol, Bihter Erol (TR)
4. Digital Elevation Model Analyses in Urban Area using Airborne LIDAR Data  
Serdar Erol, Ramazan Alper Kuçak\*, Bihter Erol (TR)
5. Creation of photogrammetric 3D model with BUTEO drones  
Tsvetan Chetashki (BG)

**18.00** **Cocktail: Military Club - Central Army House**

**10 November 2017 (Friday)**

**9.00 – 10.30** **PAPERS AND DISCUSSIONS (V) - MAPPING AND GIS**  
*Prof. D.Sc. Stanislav Vassilev (BG), Assoc. Prof. Dr. Veneta Kotseva (BG)*

1. Actual mapping of the Rhodope Mountains in Bulgaria  
Veneta Kotseva (BG)
1. Mapping of the green territories for wide social using in the city of Plovdiv on the cadastral maps and regulation plans  
Desislava Valeva (BG)
3. Geoinformation system for managing and analyzing the data from the training practice on "Control geodetic networks and GNSS"

Asparuh Kamburov (BG)

4. Modelling the potential production from agricultural crops  
Boyko Kolev(BG), Hrisula Gatzelaki (GR)

**10.30 – 11.00** Coffee break

**11.00 – 12.30** **PAPERS AND DISCUSSIONS (VI)**  
**CADASTRE, ORGANIZATION AND PROTECTION OF THE TERRITORIES**  
***Prof. Dr. Boyko Ranguelov (BG) , Assoc. Prof. Dr. Kostadin Kostadinov***

1. The imperative terms of action for the implementation of decisions to change the primary use of agricultural land - spatial development limiter or stimulator  
Nadezhda Yarlovska (BG)
2. Legislation in the field of town development and town planning in Bulgaria from 1914 to 1928  
Veneta Kotzeva (BG)
3. The North Aegean Sea 24 May 2014 (Mw= 6.9) Earthquake: Analyses based on Different GNSS Data Processing Strategies  
Serdar Erol, Murat Merdivan, Bihter Erol (TK)
4. CABARET Project - Innovative Education Tools on Early Warning Systems for Complex Hazards  
Boyko Ranguelov (BG)
5. The acoustic environment of Antarctica and on the way to and back  
Boyko Ranguelov, Emil Oinakov, Tatiana Assenova (BG)

**12.30 – 14.00** Lunch

**14.00 – 15.30** **PAPERS AND DISCUSSIONS (VII)**  
**SATELLITE SYSTEMS, REMOTE SENSING**  
***Assoc. Prof. Reha Alkan (TR), Prof. Dr. Borislav Marinov (BG)***

1. Benefits of the starfire system when working with and without infrastructure GNSS networks  
Zdenko Kurtovic (CH)
2. Comparison of single baseline RTK and network RTK GNSS methods  
Reha Alkan, İ. Ozulu, V. İlçi (TR)
3. Detection of vertical displacements in the area of Mirovo salt deposit by means of D-InSAR and geodetic measurements,  
Mila Atanasova-Zlatareva, Hristo Nikolov (BG)
4. Creating spectral library from satellite and in-situ hyperspectral data  
Hristo Nikolov, Denitsa Borisova, SRTI-BAS (BG)
5. Application of vegetation indices  
Nelly Zdravcheva (BG)

**15.30 – 16.00** Coffee Break

**16.00 – 17.30 SESSION FOR YOUNG SPECIALISTS AND STUDENTS (VIII)**

***Assist. Prof. Dr. Boyko Kolev (BG), Assoc. Prof. Dr. Ivan Kunchev (BG)***

1. Mapping of the sites of the cultural and historical heritage on the example of Shumen district  
Sabin Ivanov, Krassimir Videov, Penka Kastreva (BG)
2. Announcement of the results of the photo contest  
Nadezhda Yarlovska (BG)

**POSTERS**

1. Modeling Regional Geoid using GNSS Observables  
R. Cuneyt Erenoglu (TR), Oya Erenoglu (TR) , Niyazi Arslan (TR)
2. Optimization of GNSS Network for Landslide Monitoring  
R. Cuneyt Erenoglu (TR), Oya Erenoglu (TR) , Niyazi Arslan (TR)

**EXHIBITION**

Room 4

The Bulgarian company Pro Drone Sys will expose and present the Buteo drones

**09-10 November 2017**

**DEMONSTRATIONS**

Room 2

**09 November 2017 (Thursday), 13:30**

1. The software GNSS receiver - a revolutionary new geotechnology for everyone!  
Leaders: Asparuh Kamburov and Tanya Slavova (BG)

**10 November 2017 (Friday), 11:00**

1. The starfire system when working with and without infrastructure GNSS networks  
Zdenko Kurtovic (CH)

**PHOTO EXHIBITION**

Room 4

**09-10 November 2017**

**"GEODETTIC ACTIVITIES IN THE OBJECTIVE"**

Presentation of the works of participants in the photo competition 2017

**"THE UNKNOWN SOUTH EARTH  
TERRA AUSTRALIS INCOGNITA"**

Most of the famous Antarctic maps will be displayed with interesting facts about the authors and how they are created

**GENERAL DISCUSSIONS, ACCEPTING OF RESOLUTIONS**

**CLOSING OF THE SYMPOSIUM**

**Спонсори**



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