

TIIAME



**Agenda**

**ANNUAL INTERNATIONAL SCIENTIFIC CONFERENCE ON GEOINFORMATICS – GI 2021**

**“Supporting sustainable development by GIST”, January 27-29, 2021**

Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME), Tashkent, Uzbekistan

**ONLINE**

***Language:*** English, Uzbek, Russian (simultaneous translation)

***Platform:*** Zoom

***\*All stated times are Tashkent time, UTC+5***

|  |  |
| --- | --- |
| **January 26, TUESDAY** | |
| 16:00 | ***Icebreaker*** *-* Informal welcome/icebreaker/speaker registration/platform check |

|  |  |
| --- | --- |
| **January 27, WEDNESDAY** | |
| **OPENING CEREMONY**  **13:00-15:00** | |
| 13:00  13:10  13:20  13:30  13:40  13:50  14:00  14:10  14:20  14:30  14:40  14:50 | Moderator: **Ilhom ABDURAHMANOV** – Orientation: warm-up to GI2021 live online  **Welcome Speeches:**  Rectorof TIIAME, Uzbekistan  Chairman of the Supreme Attestation Commission at the Cabinet Ministers of the Republic of Uzbekistan  Minister of Higher and Secondary Specialized Education of the Republic of Uzbekistan  Minister of Innovative Development of the Republic of Uzbekistan  Minister of Water Resources of the Republic of Uzbekistan  Minister of Agriculture of the Republic of Uzbekistan  Charge de affairs of the European Union Delegation in Uzbekistan  Ambassador of Hungary in Uzbekistan  Director of the Cadastral Agency under the State Tax Committee of the Republic of Uzbekistan  National ERASMUS+ Office coordinator, Uzbekistan  Erasmus+ DSinGIS Project Coordinator, Obuda University, Hungary |
| **KEYNOTES I-III**  **15:00-16:15** | |
| 15:00  15:25  15:50 | **Keynote I:** Multi-sensor approach for detecting coarse woody debris in a landscape with varied ground cover  ***Speaker:* *Shukhrat SHOKIROV,*** *Australian National University, Australia*  **Keynote II:** Globalization of Geospatial Information Infrastructures  ***Speaker:* *Prof. Josef STROBL,*** *University of Salzburg, Austria*  **Keynote III:** Geoinformation analysis and mapping of ecosystem and their services in the protected natural areas of the Aral Sea region  ***Speaker: Mamanbek REIMOV,*** *TIIAME, Uzbekistan* |
| 16:15 | **Break** |
| **Session I: GIS FOR REGIONAL SUSTAINABLE DEVELOPMENT**  **16:30-17:30**  **Moderator: Max Hofmann, IAMO, Germany** | |
| 16:30  16:50  17:10 | Object-based approach for urban land cover mapping using high spatial resolution data  **Malgorzata Verone Wojtaszek, Levente Ronczyk and Zokhid Mamatkulov**  ***Reporter:*** *Malgorzata Verone Wojtaszek, Obuda University, Hungary*  Land Use and Land Cover Change in Khorezm, Uzbekistan  **Sherzod Rakhmonov, Uktam Umurzakov, Kosimdjon Rakhmonov, Iqbol Bozarov and Ozodbek Karamatov**  ***Reporter:*** *Sherzod Rakhmonov, TIIAME, Uzbekistan*  An overview of land fund categories distribution in Surkhandarya, Uzbekistan  **Khudoyberdi Abdivaitov, Sanjarbek Muratov, Abdurashid Altiyev, Sevarakhon Abdivaitova, Musurmon Norkulov and Barnokhon Khalilova**  ***Reporter:*** *Khudoyberdi Abdivaitov, TIIAME, Uzbekistan* |
| **Session II: GIS FOR MANAGEMENT IN THE FIELD OF ENVIRONMENTAL PROTECTION**  **17:30-18:55**  **Moderator: Mamanbek Reimov, TIIAME, Uzbekistan** | |
| 17:30  17:55  18:15  18:35 | **Keynote IV:** Geoinformatics for sustainable forestry and nature management  ***Speaker: Eldar Kurbanov,*** *Volga State University of Technology, Russia*  Influence of Adverse Ecological Factors on the Incidence of Malignant Neoplasms  **Izimbet Turdimambetov, Amet Madreymov, Lorant Foldvary, Medetbay Oteuliev, Murat Kurbanov, Kamila Utarbaeva and Kuatbay Bekanov**  ***Reporter:*** *Medetbay Oteuliev, Karakalpak State University, Uzbekistan*  Investigation of the population area of snow leopard in the Central Tian-Shan Mountains  **Mirlan Dyldaev, Akylbek Chymyrov, Askat Mukabaev and Orozbek Omurzak uulu**  ***Reporter:*** *Dr. Mirlan Dyldaev from the Bishkek State University named after K. Karasaev*  Basics of Atlas Mapping Optimization in the Fergana Valley  **Kamolakhon Khakimova, Ilhomjon Musaev and Akbarjon Khamraliev**  ***Reporter:*** *Akbarjon Khamraliev, TIIAME, Uzbekistan* |
| 18:55 | **Closing the 1st day of the Conference** |

|  |  |
| --- | --- |
| **January 28, THURSDAY** | |
| **Session III: GIS IN AGRICULTURE**  **13:00-15:10**  **Moderator: Akylbek Chymyrov, Kyrgyz State University of Construction, Transport and Architecture n.a. N. Isanov, Kyrgyzstan** | |
| 13:00  13:30  13:50  14:10  14:30  14:50 | **Keynote V:** Optical remote sensing for mapping within-field moisture content to improve the decision making process in precision agriculture  ***Speaker*: *Malgorzata Verone Wojtaszek,*** *Obuda University, Hungary*  Land cover-adjusted index for the former Aral Sea using Landsat images  **Ilhomjon Aslanov, Sayidjakhon Khasanov, Yakhshimurad Khudaybergenov, Michael Groll, Christian Opp Ch, F. Li and Ramirez Del-Valle E.**  ***Reporter:*** *Ilhomjon Aslanov, TIIAME, Uzbekistan*  Application of GIS and RS in real time crop monitoring and yield forecasting: a case study of cotton fields in low and high productive farmlands  **Zokhid Mamatkulov, Eshkobil Safarov, Rustam Oymatov, Ilhom Abdurahmanov and Maksud Rajapbaev**  ***Reporter:*** *Zokhid Mamatkulov, TIIAME, Uzbekistan*  Creating large-scale maps for agriculture using remote sensing  **Gayrat Yakubov, Khamid Mubarakov, Ilkhomjon Abdullaev and Azizjon Ruziyev**  ***Reporter:*** *Gayrat Yakubov, National University of Uzbekistan (NUUz), Uzbekistan*  Experience in creating a soil-reclamation map of the Zarafshan river valley based on the system analysis of lithodynamic flow structures  **Naila Sabitova, Oykhumor Ruzikulova and Ilhomjon Aslanov**  ***Reporter:*** *Naila Sabitova, NUUz, Uzbekistan*  The role of GIS technology in determining irrigated geosystems  **Oykhumor Ruzikulova, Naila Sabitova and Gulbakhor Kholdorova**  ***Reporter:*** *Oykhumor Ruzikulova, TIIAME, Uzbekistan* |
| 15:10 | **Break** |
| **Session IV: GEOINFORMATICS IN GEODETIC OPERATIONS**  **15:25-16:45**  **Moderator: Lorant Foldvary, Obuda University, Hungary** | |
| 15:25  15:45  16:05  16:25 | Present Software of photogrammetric processing of digital images  **Máté Lehoczky and Zoir Abdurakhmonov**  ***Reporter:*** *Máté Lehoczky, Pannon Geodézia Ltd, Hungary*  Deformation analysis based on GNSS measurements in Tashkent region  **Dilbarkhon Sh. Fazilova and Lola V. Sichugova**  ***Reporter:*** *Dilbarkhon Fazilova, Astronomical Institute of Uzbek Academy of Sciences, Uzbekistan*  Application of modern geodetic tools in the operation of railway reconstructions  **Yuriy Ten, Rustam Oymatov, Kholmurod Khayitov, Guzal Saydalieva, Ulugbek Nulloev and Izzatillo Nematov**  ***Reporter:*** *Yuriy Ten, TIIAME, Uzbekistan*  Improvement of the method for comparing subsidence of structures using the Fischer's F-test and the Foster-Stuart test  **Abdusali Suyunov, Shukhrat Suyunov, Malika Aminjanova and Kamola Rakhmatullaeva**  ***Reporter:*** *Malika Aminjanova, Samarkand State Architectural and Civil-Engineering Institute (SamSACEI), Uzbekistan* |
| **Session V: NEW TRENDS AND TECHNOLOGIES IN CADASTRE AND LAND MANAGEMENT**  **16:45-18:10**  **Moderator: Prof. Josef Strobl, University of Salzburg, Austria** | |
| 16:45  17:10  17:30  17:50 | **Keynote VI:** Use of high-precision satellite imagery in the identification (changes) of real estate objects and analysis using available data  ***Speaker:* *Farkhod Omanov****, Cadastral Chamber under the Cadastral Agency, Uzbekistan*  Advantages of formation non-agricultural land allocation projects based on GIS technologies  **Allabergan Babajanov, Rashid Abdiramanov, Ilhom Abdurahmanov and Utkir Islomov**  ***Reporter:*** *Rashid Abdiramanov, TIIAME, Uzbekistan*  Improvement of cadastral information provisioning system in an administrative region  **Kosimdjon Rakhmonov and Mokhigul Abdurakhimova**  ***Reporter:*** *Mokhigul Abdurakhimova, TIIAME, Uzbekistan*  The Value of the Cards in Water Basins with the Installation of Solar Power Plants in Yangiyul District of Tashkent Province of Uzbekistan  **Ilhomjon Musaev, Abdujalol Bokiev and Mukhtaram Botirova**  ***Reporters:*** *Ilhomjon Musaev and Abdujalol Bokiev, TIIAME, Uzbekistan* |
| 18:10 | **Closing the 2nd day of the Conference** |
| **January 29, FRIDAY** | |
| **Session VI: PROFESSIONAL AND FURTHER EDUCATION IN THE FIELD OF GEOINFORMATICS**  **13:00-14:30**  **Moderator: Andrea Podor, Obuda University, Hungary** | |
| 13:00  13:30  13:50  14:10 | **Keynote VII:** Educating professionals  ***Speaker:* *Prof. Bela Markus,*** *Obuda University, Hungary*  GI school projects and their value and transferability to Uzbekistan  ***Reporters: Sabine Hennig and Robert Vogler,*** *University of Salzburg, Austria*  Erasmus+ DSinGIS Project and achieved results  ***Reporter:* *Lorant Foldvary,*** *Project coordinator, Obuda University, Hungary*  Project Erasmus+ NICoPA: New and Innovative Courses for Precision Agriculture  ***Reporter: Ilhom Abdurahmanov*,** *Local Project Coordinator, TIIAME, Uzbekistan* |
| **Session VII: GIS in Mechanization and Automatization of Agriculture and Water Resources**  **14:30-16:00**  **Moderator: Ilhom Abdurahmanov, TIIAME, Uzbekistan** | |
| 14:30  15:00  15:20  15:40 | **Keynote VIII:** Use of geoinformatics in Precision Agriculture and in practice  ***Speaker:* *Prof. Jitka Kumhálová,*** *Czech University of Life Sciences Prague, Czech Republic*  Wheat harvesting by combine with GPS receiver and grain sensor  **Кomil Astanakulov, Kodir Shovazov, Atkham Borotov, Akram Turdibekov and Saidmukhammad Ibrokhimov**  ***Reporter:*** *Кomil Astanakulov, TIIAME, Uzbekistan*  Indicators of the combine equipped with GPS receiver in sunflower harvesting  **Otabek Ochildiev, Golibjon Fozilov, Shodi Achildiev, Maxmud Karimov and Nurali Ashurov**  ***Reporter:*** *Otabek Ochildiev,* *SRIMA, Tashkent, Uzbekistan*  Monitoring of the Combine with Smart Devices in Soybean Harvesting  **Кomil Astanakulov, Tulegen Abdillaev, Abdigappor Umirov, Golibjon Fozilov and Bobamurod Hatamov**  ***Reporter:*** *Golibjon Fozilov,**TIIAME, Uzbekistan* |
| **Poster Session** | |
|  | Climate indicators for forest landing and evaluation of forest shelterbelts  ***Maftuna Begimova,*** *TIIAME, Uzbekistan*  Features of the organization of agroclusters in the structure of land management projects  ***Abdugani Mukumov, Komil Xujakeldiev, Fayzullo Xamidov, Sharafatdin Narbaev and Khudoyberdi Abdivaitov,*** *TIIAME, Uzbekistan*  Application of GIS on Research of Horizontal Refraction in Polygonometry on Network  ***Abdusali Suyunov, Shukhrat Suyunov and Olim Urokov,*** *SamSACEI, Uzbekistan*  The essence, features and prospects of homestead land use in Uzbekistan  ***Abdullo Ashurov and Guzal Saydaliyeva,*** *TIIAME, Uzbekistan* |
| **CLOSING CEREMONY, THE BEST PAPERS, CERTIFICATIONS**  **16:00-16:30**  **Moderator: Ilhom Abdurahmanov, TIIAME, Uzbekistan** | |