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Victoria Shamraeva
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Introduction

We are glad to present the collection of materials of the International scientific and practical conference "Remote Sensing of the Earth: Geoinformatics, Cartography, Ecology and Agriculture" (RSE2022), which took place April 19-21, 2022 at Tajik Technical University named after Academician M.S. Osimi (Dushanbe, Republic of Tajikistan). Due to restrictive measures on the territory of the Republic of Tajikistan, in connection with COVID-19, the meeting was held in a virtual format. The conference was held on the Microsoft Teams platform, which allowed all participants to present their materials from anywhere in the world.

The conference is held to develop new information technologies for the purposes of Earth sensing, cartography, geodesy, cadastre, land management, ecology and agriculture. Within the framework of the program of studying international experience in remote sensing of the earth's surface, the development of modern technologies to ensure the functioning of virtual and information technologies and the formation of new directions for the development of technologies in this direction.

The topics of the conference were as follows:
- Geoinformatics and information technology in cartography;
- Information technologies in ecology and problems of ecological safety;
- Geoinformatics, geoengineering, digital technologies and engineering in agriculture;
- Agriculture, field cultivation, animal husbandry, forestry and agricultural products.

As part of the section reports, work on the development of information technologies and engineering in agriculture, ecology, cartography, geodesy, cadastre, land management and Earth sounding was heard.

The conference was attended by representatives of scientific, government and commercial organizations, representatives of agricultural universities, as well as scientists from near and far abroad. Among the conference participants are representatives of five states: Poland, Republic of Uzbekistan, Republic of Kazakhstan, Republic of Tajikistan and Russian Federation.

The conference made it possible to form new scientific results in the following areas:
- Development of scientific and practical potential in order to form proposals for the introduction of high technologies in agriculture;
- The formation of new directions in remote sensing of the earth's surface, the development of modern technologies to ensure the functioning of virtual and information technologies and the formation of new directions of development;

- Formation of recommendations aimed at improving technical systems and information technologies in matters of biological diversity conservation.

Thus, the conference made it possible to formulate new scientific directions and recommendations for the development of information technologies and engineering.

The organizing committee of the conference expresses its gratitude to the staff of SPIE, who helps to place the proceedings of scientific conferences in SPIE Digital Library and provide support for the publication of materials.

In addition, the organizing committee would like to thank the conference participants; reviewers and everyone who helped organize this conference and form the presented volume for publication in the SPIE Digital Library.

Shahriyor Sadullozoda
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