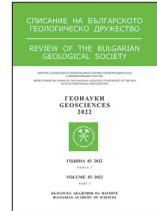




СПИСАНИЕ НА БЪЛГАРСКОТО ГЕОЛОГИЧЕСКО ДРУЖЕСТВО,
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Digitalization and creation of 3D 360-degree HDR 4K virtual tour with interactive tags of the Museum of Unique Crystals Ilia Deleff, Museum of Geology and Paleontology, Museum of Mineralogy, Petrology and Mineral Resources and Museum of Physics at the University of Mining and Geology St. Ivan Rilski

Дигитализация и създаване на 3D 360 градуса HDR 4K виртуална разходка с интерактивни тагове на Музей на уникалните кристали „Илия Делев“, Музей по геология и палеонтология, Музей по минералогия, петрография и полезни изкопаеми и Музей по физика при Минно-геоложки университет „Св. Иван Рилски“

Kameliya Marinova, Valeri Sachanski, Stanislav Stoykov, Radostin Pazderov, Banush Banushev, Maya Vatskicheva, Elitsa Zareva, Martin Dimitrov, Beihan Chaush, Simeon Kostadinov
Камелия Маринова, Валери Сачански, Станислав Стойков, Радостин Паздеров, Бануш Банушев, Майя Вацкичева, Елица Зарева, Мартин Димитров, Бейхан Чауш, Симеон Костадинов

University of Mining and Geology St. Ivan Rilski, Sofia, Bulgaria; E-mail: k.y.marinova@mgu.bgInstitution

“Digitalization and creation of 3D 360-degree HDR 4K virtual tour with interactive tags of the Museum of Unique Crystals “Ilia Deleff”, Museum of Geology and Paleontology, Museum of Mineralogy, Petrology and Mineral Resources and Museum of Physics at the University of Mining and Geology St. Ivan Rilski” is a project financed by REGULATION on the terms and conditions for the assessment, planning, the distribution and spending of state funds, contract number ППФ ТХ 001-09.05/2022. The main goal is to present the four museums located at the University of Mining and Geology St. Ivan Rilski in an interesting and modern way in front of the largest possible audience. At the same time, presenting and embedding the information in the interactive tags has been educational and supports learning in the fields of mineralogy, geology, petrography, mineral resources, paleontology, and physics.

In the museums are exposed minerals, rocks and fossils from all over the world. Special highlight of the Museum of Unique Crystals Ilia Deleff are

rare crystal and mineral specimens from Brazil. The Museum of Mineralogy, Petrology and Minerals Resources conserve variety of rocks and minerals from all Bulgarian deposits and from over then 50 countries. The Museum of Geology and Paleontology it is one of the largest specialized museums in the country, 6000 fossils and 2000 rock samples are stored there. The mission of the museums is educational, mainly as well as preserving the mineral diversity as part of the world geological heritage.

Digitalization of this type is a useful and quick method for teaching students and introducing the audience to the museums, located at the University of Mining and Geology St. Ivan Rilski. The virtual tour enhances the qualities of an interactive learning environment for students and facilitates distance learning. In this way, a shortcut to the university is also created for visiting at any time: this is a new opportunity for advertising, attracting visitors and prospective students. This type of virtual tour scans the exhibits and presents them in a 3D rotating model (Dollhouse) that creates an extremely realistic

feeling. The observer has the opportunity to move freely in the museum's virtual space, easily pass through the different sectors, look closely at different parts of the exhibits and receive information in the form of interactive tags. When the visitor selects any of the information points, a separate drop-down window opens with additional multimedia content in the form of a text in Bulgarian and English. The virtual tour gives a general idea of the buildings in which the museums are located, and with the help of different color markings, the main sectors are distinguished.

The created 3D 360° HDR 4K virtual tours are integrated into the website of the University of Mining and Geology St. Ivan Rilski (www.mgu.bg) together with information about the museums and the expositions, presented in the form of interactive tags. With the development of digital technologies and devices, this kind of visualization is a mandatory part of the presentation of modern museums and their expositions, thus making them more accessible and attractive, provoking interest in on-site visiting and being of help in the education of students and earth science enthusiasts.