

Conference invitation:



**MEASUREMENT, VISUALISATION
AND PROCESSING IN BIM FOR
DESIGN AND CONSTRUCTION
MANAGEMENT II**

We would like to invite you to the international conference organized by the technical group **ISPRS TC V/WG7 - Innovative Technologies in Training Civil Engineers and Architects** in cooperation with **PHEDCS Institute**.

The conference takes place in Prague on February 7th and 8th 2022 at CTU in Prague.

<https://www.mvpbim2022.com/>

Topics of the conference are below. We would be very grateful if you are interested in sponsorship or any form of support for our conference.

For the technical group of ISPRS TC V/WG7, co-chair:

Ing. Karel Vach CSc.



www.phedcs.com

vach@phedcs.com

ISPRS TC V/WG7 event

Venue: Faculty of Civil Engineering, CTU in Prague

Name of the event: MEASUREMENT, VISUALISATION AND PROCESSING IN BIM FOR DESIGN AND CONSTRUCTION MANAGEMENT II.

Date: February 7th and 8th 2022

The international conference will follow-up the conference organized in 2019 in Prague (MVP BIM 2019) and is intended for a narrow group of international experts. We will deal with strategic topics in response to current events in the Czech Republic. The conference is organized by the working group ISPRS TC V/WG7. Our main mission is to connect scientific disciplines, experts, specialists, young scientists across various professional fields such as Photogrammetry, Remote Sensing, Geomatics, Construction, Architecture, Geology, 3D Modeling, Designing and Laser Scanning.

The scientific international conference is focused on young scientist (PhD, Scopus, WoS) At the same time leading experts from Czech Republic and our working group ISPRS TC V/WG7 are invited to give lectures that characterize situation in Czech Republic and in the world.

The submitted papers will be reviewed. If the required criteria are fulfilled, papers will be included in the Scopus and WoS database.

Suggested topics:

According to UN forecast, by the year 2050, more than 67% of the world's population will be concentrated in cities. Related to this is their further rapid development, the development of infrastructure and the logical pressure on the construction industry and related fields, which will support the expected population growth. As a result of the trend, there are enormous demands for sorted information and then questions: how to handle such a huge data stream? Will BIM be a suitable tool? Its modification? Will it be a transition to artificial intelligence?

Topics we would like to discuss: History and development of BIM. Modern design concept. Geospatial technologies and BIM. Non-destructive control and its integration into BIM. BIM for construction management. BIM and AR/VR. BIM standardization. BIM software. BIM education. Green BIM and its applications. Digital twins and their applications. Intelligent building and its applications.

The conference will be divided into the following sections:

I BIM - non-destructive measurement and construction diagnostics (RNDr. Jaroslav Bárta CSc. At al).

Evaluation of the current state and trends in the development of methods, instrumentation and software with emphasis on geophysics and defectoscopy. Practical examples of use in the operation of transport structures and buildings. Monitoring the stability of notches and protective walls.

II BIM twin (Prof. Vladimir Sereдовich, Prof. Roman Shults, PHEDCS,)

Creation and permanent maintenance of current computers construction models, building, object and processes, which are created in real time, take place and intertwine throughout their life cycle with emphasis on the use of various sensors and devices for online records of their status.

III BIM - records of elements of buildings and structures in public space.

The registration of owners' property in public space is partly carried out in the form of entries in the cadastre, but many buildings and structures are not registered in the cadastre. Experience and practice in different countries is very diverse. How is this problem solved within the EU countries? What is the experience in other countries? How is the intersection of information kept in the cadastre and in other registers solved?

ISPRS - The International Society for Photogrammetry and Remote Sensing (<https://www.isprs.org/>) is a non-governmental organization devoted to the development of international cooperation for the advancement of photogrammetry and remote sensing and their applications. The organization was founded in 1910.

The working group ISPRS TC V/WG7 - Innovative Technologies in Training Civil Engineers and Architects (<https://www2.isprs.org/commissions/comm5/wg7/>) aims to promote global literacy and innovation in the field of geospatial technologies, mainly in photogrammetry, laser scanning and remote sensing for implementation in the educational process of civil engineers and architects through the development of multidisciplinary educational content. The working group was established in 2016.

PHEDCS Institute (<http://www.phedcs.com/>) was founded by members of the ISPRS TC V/WG7 in 2017 for the realization of conferences, education, training.

The Czech Society for Photogrammetry and Remote Sensing (SFDP) - (<http://www.sfdp.cz/>) is an interest group of professionals engaged in photogrammetry, remote sensing, laser scanning and geographic information systems. The organization was founded in 1930.

BIM (Building Information Modeling or Building Information Management) is creation and data management of a building or a construction. The process during the entire life cycle.

Scopus (<https://www.scopus.com/>) – is the largest abstract and citation database of peer-reviewed literature: scientific book series, journals and trade journals. It provides a comprehensive overview of the results of world research in the field of science, technology, medicine, social sciences and humanities.