岩土力学与工程前沿讲坛

Forum on Geomechanics and Geo-engineering

No.SKL*2023-42*

应岩土力学与工程国家重点实验室邀请，捷克科学院地球学研究所 Vlastimil Kajza 来访交流并做学术报告，报告信息如下：

报告人 Lecturer	**Vlastimil Kajza**
报告题目 Theme	**Initial experience with the newly created system for monitoring the dynamics of surface changes during the transition to the post-mining phase**
报告时间 Time	**2023 年 11 月 23 日 (周四) 上午 10:30**
报告地点 Spot	**武汉岩土所研发大楼 8 楼学术交流室**

欢迎广大科研人员及研究生参加！

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报告摘要

The study of the manifestations of mining cannot be done without a technology that allows monitoring the dynamics of surface changes. The Automatic Geodetic Monitoring System was developed to obtain measurement data on surface movements at the CSM coal mine (Czech Republic). This system will provide data of sufficient frequency and quality to evaluate the surface deformations caused by deep mining. Long-term monitoring will generate a dataset suitable for developing a method for assessing the consequences of mining after mine closure.

The monitoring system consists of two automatic total stations with an integrated 3D laser scanner, GNSS sensors and other accessories. The monitoring period was set to cover, at least in part, the main phase of surface movements caused by underground mining and their subsequent fading in time. However, it is important to note that measured data accuracy can be affected by various adverse factors, prompting ongoing enhancements to the monitoring system.

报告人介绍

Vlastimil Kajzar, Ph.D. has been working at the Institute of Geonics since 2006, first as a PhD student and currently as a researcher. He finish his PhD studies in Geoinformatics at the VSB Technical University of Ostrava, Czech Republic in 2012. Throughout his career, he has worked on scientific problems related to geoinformatics, 3D laser scanning, spatial data processing, GNSS, mining subsidence, underground mining, rock mechanics, and induced seismicity. He is involved in the use of 3D laser scanning technology in underground mining, all kinds of spatial data processing, and monitoring of mining subsidence. He has published several scientific papers and official reports on these topics.