HISTORY

Institute of Geonics of the Czech Academy of Sciences

Serious problems related to the increase in mining, accompanied by accelerated mining to greater depths and more complex mining-geological and technical conditions (increased temperatures, significantly higher methane emissions, increased rock pressures, several times higher risk of coal, gas or rock outbursts and mining-induced earthquakes), which exceeded the research capabilities of the operational staff providing and managing the production, led to the establishment of the **Mining Institute of the Czechoslovak Academy of Sciences** (MI, 1 January 1958). The MI consisted of several departments previously belonging to the National Institute of Fuels (dressing, chemistry of caustobiolites, briquetting, analytical chemistry) and of newly established departments of geomechanics, mine ventilation, groundwater hydraulics and radioisotopes. Particular issues in the field of geosciences and chemistry of extracted raw materials (especially coal) were investigated using a multidisciplinary approach and synthesis of results. Thanks to the Institute, the mining sciences in Czechoslovakia firstly reached qualitative excellence at global level (one of the prominent personalities was, for example, František Špetl, an internationally recognized expert in the field of dressing).

In the 1970s, the Mining Institute was undergoing major organizational changes. In connection with serious mining accidents in the Ostrava-Karviná district and due to a significant position and needs of the mining industry, a detached workplace of the Mining Institute was established in Ostrava on 1 January 1978. A year later, on 1 January 1979, the detached workplace of the MI in Ostrava was set up a **MI branch** in form of the department of geomechanics led by Lubomír Šiška, Dean of the Faculty of Mining and Geology at the Mining University in Ostrava. In 1979, the Mining Institute of the Czechoslovak Academy of Sciences in Prague was renamed to the Institute of Geology and Geotechnics of the Czechoslovak Academy of Sciences (IGG) and the existing Geological Institute of the Czechoslovak Academy of Sciences was incorporated into its organizational structure. The MI branch in Ostrava then became a mining sector of the IGG (the future independent Mining Institute of the Czechoslovak Academy of Sciences Ostrava), the task of which was to create theoretical bases for solving problems of deep coal mining, especially by determining geomechanical conditions of mining at depths over 1000 m, mining of seams with high risk of rock bursts, deep mine ventilation and ergonomics.

The establishment of new workplaces was quite demanding and complex. It was necessary to build a qualified team for managing organizational tasks and for starting research activities, and secondly, to find suitable space for both creative and organizational activities of the nascent research team. At first, employees of the newly established workplace were settled in two offices of the Faculty of Mining and Geology of the VSB-Technical University Ostrava situated on Michálkovická Street in the Silesian Ostrava. Due to the fact that the VSB-TU Ostrava had already moved to new buildings in Poruba at that time, it was possible to acquire two buildings of the Faculty of Mining and Geology of the VSB-TU Ostrava on Hladnovská Street n. 7-9 in Silesian Ostrava for the needs of the initial development of the Institute. These buildings were originally used by the university Department of mineralogy, petrography and geochemistry, and the

Department of petrography of coal and deposits of raw materials. The buildings were reconstructed based on project designs provided by the branch office of Báňské projekty Ostrava, a.s. (Designing of Mines Ostrava Ltd) in Valašské Meziříčí. The MI employees had to move in the old building n. 7, while employees of Báňské stavby Ostrava started the reconstruction works - first of the building on Hladnovská Street n. 9, then n. 7. Finally, both former university auditoriums were changed to laboratories for heavy equipment. Reconstruction works were completed in 1982.

With effect **from 1 July 1982**, a separate **Mining Institute of the Czechoslovak Academy of Sciences Ostrava** (MI Ostrava) was established from the former mining sector of the IGG by a resolution of the Presidium of the Czechoslovak Academy of Sciences made on 20 April 1982. The MI Ostrava consisted of three research departments: department of rock geomechanics, department of rock aerology and geophysics and department of special measuring methods. At this time, the MI Ostrava had 59 employees and was led by Lubomír Šiška, the former head of the IGG branch in Ostrava.

Historical picture (1978) of the original building of the Mining Institute of the CSAS Ostrava (nowadays the Institute of Geonics of the Czech Academy of Sciences) with a seat in the Silesian Ostrava, Hladnovská Street. Author of the sketch is Mr. Břetislav Závada, a former employee of the Institute.

The MI Ostrava was originally focused on solving problems in deep mining of deposits in the former Czechoslovakia. Location of Ostrava - approximately in the middle of the Czechoslovak Republic - was thus advantageous. However, another significant factor for the establishment of the institute in Ostrava was the Mining University of Ostrava, providing the best mining education in the country. The closeness of both workplaces, i.e.

university and research institution, enabled synergy of the scientific work and pedagogical processes for mutual benefit and easier transfer of new knowledge into education. In addition, young people (students) were close to a scientific workplace which they could contact in case of any problems arising in their future praxis.

The construction of a new building of the MI Ostrava in Ostrava-Poruba was designed by STAVOPROJEKT Ostrava and the construction was realised by Bytostav Ostrava. The investment plan was issued in September 1978. Construction works began in March 1983 and were completed in June 1986. In September 1987, almost the entire staff moved from Ostrava-Hladnov to Ostrava-Poruba. The official handover of the new building took place on 9 October 1987 with participation of the Chairman of the Czechoslovak Academy of Sciences, prof. Říman.

In 1990, new political conditions initiated systematic transformation of the entire Czechoslovak Academy of Sciences and its institutes. At that time, a new concept of the MI Ostrava was prepared based on significant but natural broadening of research activities. The Institute was focused not only on the extraction of raw materials, but also on other uses of the Earth's crust, i.e. underground construction engineering, underground storage of waste materials, new geotechnologies related to energy storage, research on geoenvironmental impacts of human activities, etc.

During transformations, the workplace in Brno with focus on the environmental geography was assigned to the MI Ostrava. The transformation of the Institute was accomplished in 1993 and on 1 April 1993, the Mining Institute was renamed to the **Institute of Geonics of the Czech Academy of Sciences**.

On 1 January 2007, the legal form of the Institute of Geonics of the CAS has been changed from a state-subsidized organization to a public research institution.

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DIRECTORS

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