Obituary
Prof. Radim Blaheta (April 1951 – January 2022)

Professor Radim Blaheta was a well-known researcher interested in numerical mathematics, computer sciences, geotechnical and environmental real-world problems and other scientific disciplines. He worked at the Institute of Geonics of the Czech Academy of Sciences (formerly the Mining Institute) since 1979. He was the Head of the Department of Applied Mathematics and Computer Science since 1993 and the Director of the Institute from 2006 to 2017.

Radim Blaheta's scientific career was influenced significantly by Professor Ivo Marek, who was his supervisor at the Charles University in Prague. Under his leadership, Radim Blaheta began to deal with iterative methods for solving large-scale linear algebraic systems of equations. He achieved his first international recognition with his doctoral dissertation focused on the method of algebraic multi-grids. Subsequently, he was successful in the development and analysis of various types of preconditioners of linear systems. He proposed the so-called displacement decomposition method and suggested several improvements to the overlapping Schwarz domain decomposition approach. Many of his results were supported by cooperation with world-renowned experts, especially his cooperation with Professor Owe Axelsson was very fruitful and long-term.

Radim Blaheta's research was mainly focused on geo-applications and motivated by socially important topics related to human activities in the Earth's crust. He was interested in the solution of large-scale problems of elasticity, plasticity, porous flow, contact on fractures, as well as multi-scale and coupled thermo-hydro-mechanical problems. He was also interested in finite element software development, high-performance computing, stochastic and inverse analysis.

Radim Blaheta participated significantly in the preparation and resolution of two major projects: a) the IT4Innovations Center of Excellence project, which enabled the establishment of the National Supercomputer Center IT4Innovations at the VŠB-Technical University of Ostrava; and b) the international project -- High Performance Computing in Geosciences II. Since 2007, he interested intensively in the issue of the deep storage of spent nuclear fuel and participated in three series of international projects under DECOVALEX - DEvelopment of COupled models and their VALidation against EXperiments. Currently, he worked on the Horizon 2020 European Joint Program on Radioactive Waste Management - EURAD. In this field, he cooperated with many foreign experts and with the Czech Radioactive Waste Repositories Authority.

As concerns the Czech and international numerical community, Radim Blaheta contributed significantly to the organization of conferences, which were popular not only for their strong scientific level, but also for their friendly atmosphere. A series of MODELLING and SNA conferences were among these events. The international conferences called MODELLING - Mathematical Modelling and Computational Methods in Applied Sciences and Engineering - are held over a five-year period. Radim Blaheta was the principal organizer of the last three MODELLING events, held in 2009, 2014 and 2019. The SNA-Seminars on Numerical Analysis help in creating a Czech numerical community and to increase its scientific level. These seminars have been organized since 2003 and Radim Blaheta were a co-founder and the main organizer of all these biennial events.

Furthermore, Radim Blaheta was involved for a long time in pedagogical activities and the supervision of Master or Doctoral students at the VŠB-TU Ostrava. In addition, he made multiple efforts in editorial and popularization activities, and was a member of several international scientific committees and professional boards. He wrote more than 160 scientific papers, and about 70 of them are indexed in the Web of Science database. Radim Blaheta received the honorary medal of the Czech Mathematical Society for his lifelong merit in Czech applied mathematics and will receive in memorial the Bernard Bolzano Honorary Medal of the Czech Academy of Sciences for Merit in the Mathematical Sciences. There is also a planetoid Blaheta = 2003 DF13 (No. 213772) called after Radim Blaheta.

His life's work contributed significantly to the Czech and international scientific community. He was an inspiration to many of us with his hard work, his passion for science and, not least, his warm social style.