

EGRSE



International Journal of Exploration Geophysics, Remote Sensing and Environment



XXVI.2
2019
CZECH REPUBLIC
(CD-ROM) ISSN 1803-1447

EXPLORATION GEOPHYSICS, REMOTE SENSING AND ENVIRONMENT

Journal "Exploration Geophysics, Remote Sensing and Environment" (EGRSE) publishes original contributions dealing with:

- application of geophysical methods in geology, engineering geology, hydrogeology,
- geofactors of environment and geothermal energy,
- remote sensing and its application in geology, geodesy, GIS and ecology,
- tectonophysics, physics of the interior of the Earth, seismology, seismotectonics and seismic hazard

Editorial board:

Chairman: BLÁHA Pavel, Assoc. Prof., RNDr., D.Sc., GEOtest, a.s., Brno, Czech Republic

Members: GAJDOŠ Vojtech, Assoc. Prof., RNDr., CSc., Comenius University, Faculty of Sciences, Bratislava, Slovakia (retired).
IDZIAK Adam, Prof. zw., Dr. hab., University of Silesia, Faculty of Earth Sciences, Sosnowiec, Poland.
JIRÁNKOVÁ Eva, Assoc. Prof., Ing., Ph.D., VŠB-Technical University of Ostrava, Faculty of Mining and Geology, Czech Republic.
KALÁB Zdeněk, Prof., RNDr., CSc., Czech Academy of Sciences, Institute of Geonics, v.v.i., Ostrava, Czech Republic.
MYKOLA Yakymchuk, Prof., Dr., President of All Ukrainian Association of Geoinformatics (AUAG), Kyiv, Ukraine.
PALACKÝ Jiří, Mgr., Ph.D., Geological Survey of Canada, Ottawa, Canada, (retired).
RYŠAVÝ František, RNDr., Karotáž a cementace s.r.o., Hodonín, Czech Republic, (retired).
TÁBOŘÍK Petr, RNDr., Ph.D., Charles University, Faculty of Sciences, Prague, Czech Republic.
VLČKO Ján, Assoc. Prof. RNDr., Ph.D., Comenius University, Faculty of Sciences, Bratislava, Slovakia.

Editor in chief: GEBAUER Jan, Ing.

All correspondence to Exploration Geophysics, Remote Sensing and Environment Journal; GEBAUER Jan, Ing., GEOtest, a. s., Kapitolní 583/13, 700 30 Ostrava, gebauer@geotest.cz

EGRSE is the official Journal of ČAAG - the Czech Association of Geophysicists, issued twice a year. Deadlines for submission of articles are: January 10; July 10. ČAAG is associated with EAGE from 1997.

Issued price 250 Kč. Single issue price: 450 Kč (two issues), exclusive of postage. Journal is distributed by the editors.

Advertising: Advertisements are accepted. Information on prices can be received from the editors.

COVER: The location of boreholes 1 and 2 in relation to the standpoints 1, 2 and 3, where the first and second blasts were realized; Authors: Ján Baulovič et al.,

© ČAAG - PRAHA, Czech Republic; IČO: 60460253

Acknowledgements

EGRSE thanks the following contributor for its financial support:
- Council of Scientific Societies of the Czech Republic

Editorial Board

All contrubutions have been reviewed

CONTENT - OBSAH

Baulovič J., Pandula B., Kondela J., Prekopová M.

Preparation of mining in Dargov quarry from the view point of seismic effects of blasting works on the road and supporting wall

Príprava ťažby v lome Dargov z pohľadu seizmických účinkov trhacích prác na cestu a opornú stenu

DOI: 10.26345/EGRSE-001-19-201

1

Kaláb Z., Stolárik M.

Typical sources of vibration generated by geotechnical works

Typické zdroje vibráci vyvolaných při geotechnických pracích

DOI: 10.26345/EGRSE-019-19-202

19

Krásný O., Brož M.

Seismo-acoustic effects of fractures in rock samples

Seismoakustické projevy při porušování horninových vzorků

DOI: 10.26345/EGRSE-030-19-203

31

Ryšavý F.

Method of the controlled current regulation – the surface records

Metoda kontrované regulace proudu – povrchová měření

DOI: 10.26345/EGRSE-050-19-204

51

Ryšavý F.

Some knowledge focused on the polyethylene imitators used for the neutron well-logging methods

Některé zkušenosti zaměřené na polyetylenové imitátory použité pro neutronové karotážní metody

DOI: 10.26345/EGRSE-079-19-205

79

Ryšavý F.

The basic statistical characteristics of a neutron source and their influence on the neutron characteristics of rocks

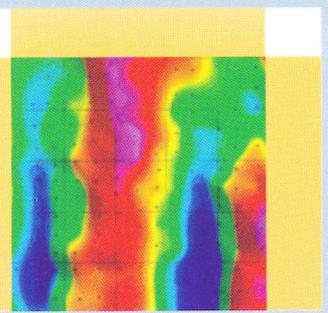
Základní statistické charakteristiky neutronového zářiče a jejich vliv na neutronové charakteristiky hornin

DOI: 10.26345/EGRSE-091-19-206

91

Instructions for authors





Great Czech Geophysicists

In association with UNESCO, the world's scientific community commemorates this year the 100th anniversary of the death of Roland Eötvös (1848-1919), a pioneer of high precision gravitational physics, founding father of geophysics and innovator of higher education (see <https://eotvos100.hu/en/page/eotvos-100>).

This anniversary inspired us to commemorate also great Czech geophysicists. It is not easy task because significant achievements were obtained in global, but also applied, engineering and mining geophysics. As example, V. Láska, B. Šalamon, F. Běhounek, R. Běhounek, A. Zátopek, F. Čechura, K. Pěč, J. Gruntorád, S. Mareš, and K. Müller can be mentioned.



Prof. Václav Láska (1862–1943) was a renowned Czech astronomer, geophysicist, and mathematician. He conducted most of his work at Charles University.

Born in 1862 in Prague, graduated in mathematics and astronomy from the German University of Charles-Ferdinand. In 1890 he was appointed as an assistant at the Czech Astronomical Observatory, and from 1896 as a professor of astronomy and higher geodesy at the Higher Polytechnic School in Galicia, Lemberg, and from 1911 as Professor of Applied Mathematics at the Faculty of Arts of the Czech University of Charles-Ferdinand. In 1920 he founded the Geophysical Institute at the Charles University, later the Geophysical State Institute. In 1924 he installed a horizontal Wiechert seismograph in Prague on Charles. He has written over 300 scientific papers. He died in 1943 in Černošice near Prague. (According <http://geo.mff.cuni.cz/historie.htm>).

Láska formula (for earthquakes in distance 2–10 megameters): “Epicentral distance in megameters = difference of S and P wave arrival time in minutes - 1”.

Prof. Alois Zátopek (1907- 1985) was a Czech geophysicist, founder of modern Czech seismology.



Born 1907 in Zašová in Vsetín, graduate of mathematics and physics at the Faculty of Science, Charles University. From 1934 to 1950, he worked at the State Geophysical Institute, during the war at the Geophysical Institute of the German University. Since 1947, he has been associate professor at the Faculty of Science, since 1952 professor of geophysics at the newly created Faculty of Mathematics and Physics. He led the Department of Geophysics from her independence in 1965 to 1971. In 1953 he was elected a member-correspondent of the Czechoslovak Academy of Sciences, and since 1968 an academician; in the years 1956–1972 he represented the Czechoslovak Socialist Republic in the European Seismological Commission, and in 1959–1962 he was its Vice President, 1962–1966 the President. He studied theoretical geophysics, tectonophysics, the mechanism of microseisms, seismicity, observatory seismology and experimental physics. He has published more than 220 scientific papers. He raised a whole generation of Czech geophysicists. As a passionate cellist, he met in the string quartet with J. Horák, J. Jarník and K. Drbohlav. He was a cousin of the Olympian Emil Zátopek. He died in 1985 in Prague. (According <http://geo.mff.cuni.cz/historie.htm>).



Prof. František Běhounek (1898–1973) was a Czech scientist (radiologist), explorer and writer. The asteroid 3278 Běhounek is named after him.

Běhounek studied physics and mathematics at Charles University, later radiology in France with Marie Curie-Skłodowska. In 1920s, he was one of the founders of State Radiological Institute. In 1926, he took part in an expedition of Roald Amundsen to the North Pole with airship Norge. In 1928, as an expert on cosmic rays, he was a member of crew of airship Italia led by Umberto Nobile. He survived its crash in 1928, and later described it in book *Trosečníci na kře ledové*.

As a scientist, he worked in industrial companies, medical institutions, universities and in the state academy. Since the 1950s, he has participated in work of UNESCO. (According https://en.wikipedia.org/wiki/Franti%C5%A1ek_B%C4%9Bhounek).

