

TO THE JUBILEE OF Dr. Eng. JÁN KANTOR, C.Sc.



Dr. Eng. Ján Kantor, C. Sc., recently celebrated his fiftieth birthday. He is a significant Slovak geologist-geochemist, well-known by us and abroad, mainly by his works in the field of modern geochemical methods including geochronology and nuclear geology. However, the jubilant paid attention also to wider mineralogical-geochemical, petrogenetic and metallogenetic problems. He stood at the cradle of Slovak geology and he can be justly designated as the founder of modern mineralogical-geochemical investigation in Slovakia. Therefore we consider as right when the whole geological public in Czechoslovakia and abroad is get acquainted with the personality of Dr. Eng. J. Kantor, C. Sc. and his numerous works.

He was born March 3rd 1921 in Poprad. He comes from a numerous worker's family. After school leaving examination at the State Czechoslovak non-classical secondary school in Kežmarok he started to study mining engineering at the Technical College in Bratislava. The higher classes he attended at the Mining College in Příbram and Ostrava, where he has obtained engineering diploma in 1946. However, his hobby and aim of living was geology. After termination of the study he therefore has entered the State Geological Institute (Dionýz Štúr Institute of Geology now) in Bratislava. In the year 1949 he obtained doctor's degree at the Natural Science Faculty of the Slovak University in Bratislava and in 1965 he was conferred the degree of Candidate of Science after public vindication of his works.

In the first years of activity at the Dionýz Štúr Institute he was dealing with investigation of metallogenesis and ores in the Spišsko-gemerské rudohorie Mts. Longer time he was managing exploration work at many deposits. In that period he collected valuable material of samples, which he treated gradually from mineralogical and geochemical standpoint. He participated in discovery of the magnesite deposit in Podrečany, for what he was awarded with Klement Gottwald State Prize in the year 1954. Beside solving mineralogical-deposit problems he also paid attention to petrographical and petrochemical investigation of rocks in the Spišsko-gemerské rudohorie Mts. Beside field investigation right at the beginning he did his best for development of laboratory methods so that his laboratory analyses should be at world standard of technical development. This tendency and efforts became the main content of his work. It is mainly to ment on building up of geochronological laboratory, the first laboratory of this kind in Czechoslovakia, and beside the USSR also the first one in the states of People's Democracies. He also successfully developed thermoluminescent and thermovacuumetric (decrepitation) investigation. Within the range of nuclear investigation he was solving not only problems of the West Carpathian area but for comparison he also analysed samples from the region of the Bohemian Massif and other regions in the world (Hungary, Turkey, Algeria, Tunisia). In last time his investigations were shift from geochronology to problems of investigation of stable isotopes. Very interesting and successful results he presented from investigation of sulphur isotopes in sulfidic ore minerals from the West Carpathian region. This way he cleared up several genetic problems of these deposits, which could not have been solved by other methods. He mainly traced sulphides from synsedimentary metamorphosed deposits (Smolník, Hľpa, Malé Karpaty Mts.). He is preparing for investigation of isotopes of other elements, as C, O, N, H, etc.

For outstanding success in these investigations he has become the head of the Nuclear Geology and Experimental Geochemistry Department at the Dionýz Štúr Institute of Geology in Bratislava, where he is responsible for development of these methods of investigation. The mentioned laboratory is the only one of this kind in Slovakia, of good representation for our state. In the year 1965 Dr. Eng. J. Kantor, C. Sc. was awarded the medal „Best Worker of the Geological Service“ for systematic successful work.

Beside his extraordinary talent the great success in the work of Dr. Eng. J. Kantor, C. Sc. lies in systematism and creative approach in organizing the work and in broad view of world literature. Owing to his knowledge of languages (he actively masters all six world languages) nothing escapes his attention concerning the problems studied by him.

Dr. Eng. J. Kantor, C. Sc., has lively personal and written contacts with many geochemists in the world. Due to preciseness of the works by Dr. J. Kantor also

his first works have not lost their topical character even at present and every researcher is based on the facts mentioned in them with extraordinary confidence. At present we range Eng. Dr. J. Kantor among outstanding and most significant scientists in the field of geology and geochemistry. After the war he has got the task to create dignified and modern scientific base for geochemical, mineralogical and nuclear geological investigations without any foundations and traditions.

Eng. Dr. J. Kantor also intensively participated in securing the tasks of the Comenius University in Bratislava. He willingly works in various commissions of examination or qualification. According to need he also aids in education of geologists in introducing them into the methods of investigation of nuclear geology and geochemistry. He represents and manages the Geochronological Commission of the Carpathian-Balkan Geological Association. In the years 1966–1967 he was expert at the university in Irak, where he lectured geology of deposits.

On occasion of the 50-ieth birthday of Eng. Dr. J. Kantor, C. Sc. all colleagues, friends and all the geological public wish him much health and energy in further work. We enjoy his up to present extraordinary success in science and congratulate him to his works making good reputation of our science at home and abroad.

Prof. Bohuslav Cambel, Dr. Sc.

LIST OF Dr. Eng. JÁN KANTOR'S PAPERS

1. Impregnácie medených rúd na okolí Kvetnice. (Copper ore impregnations in the surroundings of Kvetnica.) Geol. sborn. Slov. akad. vied II, Bratislava, 1951.
2. Poznámky k výskytu sedimentárnych železných rúd vo veľkej Spišsko-gemerskej rudohoria. (Observations on sedimentary iron ores from the Werfenian of the Spišsko-gemerské rudohorie Mts.) (With J. Bystrický and O. Fusán.) Geol. sborn. Slov. akad. vied III, 1–2, Bratislava, 1952.
3. Výskyt sedimentárnych železných rúd vo veľkej Spišsko-gemerskej rudohoria. (Sedimentary iron-ores in the Werfenian of the Spiš-Gemer Ore Mts.) (With J. Bystrický and O. Fusán.) Uhlí a rudy 2, Praha, 1952.
4. O volfráme na antimonovom ložisku v Spišskej bani JZ od Mníšku nad Hnilcom. (Tungsten in the stibnite deposit near Spišská Baňa, SW of Mníšek nad Hnilcom.) Geol. sborn. Slov. akad. vied IV, 1–2, Bratislava, 1953.
5. Zpráva o geologickom výskume na liste Švedlár. (Report on geological investigations, Quadrangle Švedlár.) (With O. Fusán.) Geol. práce, Zprávy 1, Bratislava, 1954.
6. K otázke tzv. zrudnenia sírnych baktérií a ich stratigrafické rozšírenie. (The problem of the so called mineralized sulphur bacteria and their stratigraphic distribution.) Geol. práce 2, Bratislava, 1954.
7. O genéze manganových rúd v Spišsko-gemerskom rudohorí. (Genesis of manganese ores of the Spišsko-gemerské rudohorie Mts.) Geol. práce, Zprávy 1, Bratislava, 1954.
8. Mikroskopické pozorovania na sulfidickom ložisku Alžbeta v Bystrém Potoku, južne od Švedlára. (Ore microscopic observations on the sulphide deposit „Alžbeta“ in Bystrý Potok, S of Švedlár.) (With O. Fusán.) Geol. sborn. Slov. akad. vied VI, 1, Bratislava, 1954.
9. Nález hübnertu pri Chyžnom v Spišsko-gemerskom rudohorí. (Huebnerite find near Chyžné, in the Spišsko-gemerské rudohorie Mts.) Geol. práce, Zprávy 3, Bratislava, 1955.
10. Rudné minerály spišsko-gemerských serpentinitov (awaruit, haezlewoodit). (Ore minerals in serpentinites of the Spišsko-gemerské rudohorie Mts.) Geol. sborn. Slov. akad. vied VI, 3–4, Bratislava, 1955.
11. Diabázy juhoslovenského mezozoika. (Diabases from the Mesozoic of Southern Slovakia.) Geol. práce 41, Bratislava, 1955.
12. Deweylit od Sedlíc. (Deweylite from the locality Sedlice.) Geol. práce, Zprávy 2 za rok 1954, Bratislava, 1955.
13. Príspevok k poznaniu markazitového ložiska pri Tepličanoch severne od Košíc. (Contribution to the knowledge of the marcasite deposit Tepličany, N of Košice.) (With V. Kantorová.) Geol. sborn. Slov. akad. vied V, 3, Bratislava, 1955.

14. Absolutný vek lepidolitov od Rožnej na Morave na základe metódy rádiogenného stroncia. (Absolute age of lepidolites from Rožná, Moravia, by radiogenic strontium.) (With G. K u p ě o.) Geol. práce, Zprávy 7, Bratislava, 1956.
15. Serpentinity južnej časti Spišsko-gemerského rudohoria. (Serpentinities from the southern part of the Spišsko-gemerské rudohorie Mts.) Geol. práce, Zprávy 6, Bratislava, 1956.
16. Aragonitová jaskyňa na Hrádku pri Jelšave. (The aragonite cave at Hrádok near Jelšava.) (With R. Š e v ě í k.) Geol. práce, Zprávy 7, Bratislava, 1956.
17. Geochronologická štúdia monazitov z náplavov rieky Otavy v juhozápadných Čechách metódami He/U Th, He/alfa aktivita Pb/U Th a Pb/alfa aktivita. (Geochronological study of alluvial monazites of the Otava river in SW Bohemia by He/U, He/alpha; Pb/U, Th; and Pb/alpha methods.) Geol. práce, Zprávy 11, Bratislava, 1957.
18. A^{40}/K^{40} metóda určovania absolútneho veku hornín a jej aplikácia na betliarsky granit. (A^{40}/K^{40} method of absolute dating and its application to the Gemeride granite.) Geol. práce, Zprávy 11, Bratislava, 1957.
19. Vek niektorých vysokotatranských granitoidov a kryštálických bridlic podľa rádioaktívneho rozpadu K^{40} . (Absolute age of some High Tatras granitoids and crystalline schists according to the radioactive decay of K^{40} .) Geol. sborn. Slov. akad. vied X, 1, Bratislava, 1959.
20. Príspevok k poznaniu veku niektorých granitoidov a s nimi spätých ložísk Západných Karpát. (Contribution to the knowledge of absolute age of certain granites and genetically related ore-deposits of the West Carpathians.) Acta geol. et geogr. Universitatis Comenianae 2, Bratislava, 1959.
21. Niekoľko poznámok k uránovému zrudneniu v perme severogemeridnej synklinály. (Some observations regarding the uranium mineralization in the Permian of the Northgemeride syncline.) Acta geol. et geogr. Universitatis Comenianae 2, Bratislava, 1959.
22. Príspevok ku geochronológii nízkotatranských granitoidov. (Contribution to the geochronology of Lower Tatras granitoids.) Geol. práce 55, Bratislava, 1959.
23. Príspevok k poznaniu veporidných granitov podľa A/K^{40} metódy. (Contribution to the argon-potassium dating at the Veporide granitoids.) Geol. práce, Zprávy 16, Bratislava, 1959.
24. Príspevok k poznaniu veku niektorých žúl a pegmatitov žltičko-tepelského kryštáliku A/K^{40} metódou. (Contribution to absolute age of granitoids and pegmatites of the Žltice-Teplá Crystalline by the potassium-argon method.) Geol. práce, Zprávy 15, Bratislava, 1959.
25. Kriedové orogenetické procesy v svetle geochronologického výskumu veporidného kryštáliku. (Cretaceous orogenetic processes in the light of absolute dating of the Veporide Crystalline.) Geol. práce, Zprávy 19, Bratislava, 1960.
26. K voprosu o geochronologičeskom issledovanii Zapadnykh Karpat. (Geochronological investigations of the West Carpathians.) Karpato-Balkanskaja asocijacija, Rezhume soobščeniij, 5-tyj kongress, Bucuresti, 1961.
27. Beitrag zur Geochronologie der Magmatite und Metamorphite des westkarpatischen Kristallins. Geol. práce 60, Bratislava, 1961.
28. Izotopy obyčejného olova na niektorých západokarpatských ložiskách. (Isotopes of „ordinary lead“ from some West Carpathian deposits.) Geol. práce 61, Bratislava, 1962.
29. Zpráva o geochemických a geochronologických výskumoch v Západných Karpatoch za r. 1963. (Report on geochemical and geochronological investigations in the West Carpathians in 1963.) Zprávy o geol. výskumoch v r. 1963, 2, Slovensko, Bratislava, 1963.
30. Nález šelitu na rudných žilách v Banskej Stiavnici, Hodruša a Vyhniach. (Scheelite find in ore veins of Banská Štiavnica, Hodruša and Vyhne.) (With K. E l i á š.) Geol. práce, Zprávy 27, Bratislava, 1963.
31. Je studenecký granit zo západnej časti Nízkych Tatier kriedovou intrúziou? (Is the „Studenec“ granite from the western part of the Nízke Tatry Mts. a Cretaceous intrusion?) Geol. práce, Zprávy 31, Bratislava, 1964.
32. Absolute dating on rocks of the Steiermark Crystalline in Austria. (With H. F l u e g e l.) Anzeiger der Mathematisch-Naturwissensch. Klasse der Österreichischen Akademie der Wissenschaften 10, Wien, 1964.
33. Isotopes of Ore-Lead Several Deposits of West Carpathian Crystalline. (With M. R y b á r.) Geol. sborn. Slov. akad. vied XV, 2, Bratislava, 1964.
34. Stratigraficko-geologické kritériá pre posúdenie prognóz metasomatických a sedimentárnych rúd v gemeridách (hlavne Fe rúd). (Stratigraphical and geological criteria for the estimation of prognoses for metasomatic and sedimentary ores in the Gemeride-unit.) (With T. G r e g o r and J. I l a v s k ý.) Zprávy o geol. výskumoch 2, Slovensko, Bratislava, 1964.
35. Príspevok ku geochronológii širšieho okolia Kabulu (Afganistan). (Contribution to geo-

chronology of Kabul area, Afganistan.) (With J. Ilavský.) Geol. práce, Zprávy 37, Bratislava, 1965.

36. Príspevok ku genéze niektorých ložísk podľa izotopov olova Szabadbattyán (Maďarsko). (Contribution to the genesis of ore deposits according to lead isotopes investigations. Szabadbattyán in Hungary.) Geol. práce, Zprávy 37, Bratislava, 1965.

37. Thermoluminescence and Lead Isotopes at the Poniky Lead-Zinc Deposits in the Triassic of the West Carpathians. Geol. sborn. Slov. akad. vied XVI, 1, Bratislava, 1965.

38. Ložisko Ján Nepomucký pri Pile a jeho genéza podľa izotopov olova. (The deposit „Ján Nepomucký“ near Pila and it's genesis according to lead isotopes.) (With J. Biely.) Geol. práce, Zprávy 37, Bratislava, 1965.

39. Tungsten in the West-Carpathian Metallogenetic Province. Geol. práce, Zprávy 36, Bratislava, 1965.

40. Thermoluminescence of Barites on Example of some Westcarpathian Deposits. Geol. sborn. Slov. akad. vied XVII, 1, Bratislava, 1966.

41. Štúdium vápencov silúru gemeríd s cieľom vypracovania stratigraficko-štruktúrnych kritérií pre vyhľadávanie rúd (hlavne metasomatických sideritov). [Study of Silurian limestones of the Gemeridy-unit in the search for stratigraphic and structural criteria for the exploration of ores (metasomatic siderites).] (With T. Gregor and J. Ilavský.) Zprávy o geol. výskumoch v roku 1963, 2, Bratislava, 1963.

42. Intramineralizačné postavenie ryolitov v Banskej Štiavnici. (The intra-mineralization position of rhyolites in Banská Štiavnica.) (With J. Stohl and K. Eliáš.) Geol. práce, Zprávy 43, Bratislava, 1967.

43. Contribution to the problem of regeneration of ore deposits in Alpine orogenic belts (Tunisia). (With M. Rybár and K. Dillnberger.) Geol. práce, Zprávy 44–45, Bratislava, 1968.

44. Thermo-vacuometric method of study of primary and secondary dispersion aureoles as a guide to ore. (With K. Eliáš.) Geol. práce, Zprávy 44–45, Bratislava, 1968.

45. Lead isotopes of some lead-zinc deposits of the Ouarsenis Mts., Algeria. Geol. sborn. Slov. akad. vied XX, 2, Bratislava, 1969.

46. Sulphur isotopes at the Smolník and Mníšek nad Hnilcom sulphide deposits of the Cambro-Silurian Series., Spiš-Gemer Ore Mts., Czechoslovakia. (With M. Rybár.) Geol. zborn. Slov. akad. vied XXI, 2, Bratislava, 1970.

47. Sulfur isotopes of the metamorphosed pyrrhotite-pyrite deposit of Hefpa, Nízke Tatry Mts., Czechoslovakia. (With M. Rybár and A. Klíneč.) Geol. zborn. Slov. akad. vied XXII, 2, Bratislava, 1971.