

Table of Contents

How and why non-marine bivalves record the growth and the collapse of the Variscan belt Balleuvre M.	1
Magnetic fabrics of the NE part of the Central Bohemian Plutonic Complex Bárta O. & Melichar R.	2
Shear failure of rocks and creating their shear plane Berčáková A. & Melichar R.	3
Tectonic applications of the local earthquake waveforms analysis in the West Bohemia/ Vogtland swarm area Boušková A., Hrubcová P., Vavryčuk V. & Horálek J.	4
Superimposed Variscan granite bodies in the Tribeč-Zobor Tatric unit: petrological and structural evidence Broska I., Madarás J., Petřík I. & Uher P.	5
Tectono-metamorphic evolution of western part of the Tauern Window, Eastern Alps Bukovská Z. & Jeřábek P.	6
Petrogenesis and emplacement of the Carboniferous Sag-say Massif in the SE Mongolian Altai Buriánek D., Janoušek V., Hanžl P., Jiang Y., Schulmann K., Lexa O. & Altanbaatar B.	7
Determination of thermal diffusivity of sea sediments from temperature time series Burmam S.	8
Microstructural and anisotropy of magnetic susceptibility records of a granite intrusion in Bohemian massif (Central Sudetes, Variscan orogenic belt) Calassou T., Závada P., Schulmann K., Hasalová P. & Štípská P.	9
Deformation of Ordovician sedimentary rocks, Prague Synform, Barrandian, Czech Republic Černý J. & Melichar R.	10
Usage of magnetic studies in coastal paleoseismology, Mexican Pacific coast Černý J., Ramírez-Herrera M. T., Felicidad Bógalo M., Goguitchaichvili A., Castillo-Aja R. & Morales J.	11
Distinction of Variscan, Permo–Triassic and Alpine events in andalusite–biotite–sillimanite schists from Sopron area, W-Hungary Dégi J., Török K. & Schuster R.	12
Geochemical and tectonic correlation of the Permian basalts from the Hronic Unit (Western Carpathians) Demko R.	13
Origin of columnar jointing and direction of cooling Drahokoupil K. & Melichar R.	14
AMS fabrics in the Upper Proterozoic metasediments of Barrandian Dudinskiy K. & Melichar R.	15
Two Variscan metamorphic events in basement rocks from the Moldanubian Zone (Bohemian Massif) Faryad S. W.	16
The Saxo-Danubian plutonic belt: a late Variscan structure linking West Bohemia and South Bohemia Finger F. & Gerdes A.	17

Phases of extensional deformation and rotations within a few million years interval: an integrated paleomagnetic and structural study (Pohorje, Slovenia)	
Fodor L., Márton E., Vrabec M., Jelen B., Koroknai B., Rifelj H., Trajanova M. & Vrabec M.	18
Research on thermally loaded rock – perspectives of underground thermal energy storages	
Franěk J., Záruba J., Sosna K., Novák P., Vondrovic L., Bukovská Z. & Švagera O.	19
Structural evolution of Carpathian thrust front east of Tarnów (SE Poland)	
Głuszyński A. & Aleksandrowski P.	20
Which structural style to choose for constructing 3D geological model of the Lublin basin? Constraints from 2D seismic	
Głuszyński A., Tomaszczyk M., Kijewska S. & Małolepszy Z.	21
Palaeogeothermal gradient reconstruction for the Carboniferous units in Upper Silesian Coal Basin, Czech Republic	
Geršlová E., Goldbach M., Geršl M. & Skupien P.	22
Moho depth model from GOCE gravity gradient data for the Central Asian Orogenic Belt	
Guy A., Ebbing J. & Holzrichter N.	23
Nature of the lower crust of the Mongolian Central Asian Orogenic Belt inferred from gravity and geochemical data	
Guy A., Schulmann K., Janoušek V., Štípská P., Armstrong R., Belousova E., Dolgoplova A., Seltmann R., Lexa O., Jiang Y. & Hanžl P.	24
Garnet–clinopyroxene-bearing ultrahigh-pressure rocks from Eger Crystalline Complex: their P–T evolution	
Haifler J. & Kotková J.	25
Growth of accretionary wedges and pulsed ophiolitic mélangé formation by successive subduction of volcanic elevations	
Hajná J., Žák J. & Kachlík V.	26
Orthogneisses of the Devonian protolith age along the eastern wedge of the Tseel Metamorphic Complex, the Mongolian Altai	
Hanžl P., Jiang Y., Hrdličková K., Buriánek D., Janoušek V., Lexa O., Schulmann K., Battushig A. & Turbat G.	27
Cretaceous deformations of the Keszthely Hills and the northern part of the Zala Basin	
Héja G., Fodor L. & Kövér S.	28
Alpine metamorphic and magnetic fabric overprints of the Variscan basement in the Gemeric Unit of the Western Carpathians	
Hrouda F. & Faryad S. W.	29
The pyrrhotite fabric relationship between the slates of the Jílové Belt and the neighbouring granitoids of the Central Bohemian Plutonic Complex as revealed in the Josef Gallery	
Hrouda F., Franěk J., Hanák J. & Chlupáčová M.	30
Identification of the Variscan ophiolite suture in the Western Carpathians: implications for the geological structure and geodynamic evolution of this area	
Ivan P. & Méres Š.	31
The Cambrian Khantaishir Arc – a conspicuous and geotectonically important structure in the Lake Zone of the Mongolian Altai (Central Asian Orogenic Belt)	
Janoušek V., Jiang Y., Buriánek D., Schulmann K., Hanžl P., Altanbaatar B., Ganchuluun T., Lexa O. & Erban V.	32

The polyphase Variscan tectonometamorphism of the Goszów quartzites, the Orlica-Śnieżnik Dome	
Jastrzębski M., Stawikowski W. & Budzyń B.	33
Metamorphic reactions and textural changes in coronitic metagabbros from the Teplá crystalline and Mariánské Lázně complexes, Bohemian Massif	
Jašarová P., Racek M. & Jeřábek P.	34
Multiple prograde metamorphic history of UHP granulites from the Moldanubian Zone (Bohemian Massif) revealed by Y+REEs compositional zoning in garnets	
Jedlička R. & Faryad S. W.	35
Petrogenesis of the Paleozoic synorogenic granitoids in the southern Altai Orogenic Belt, central Asia: new insights into the crustal evolution of accretionary orogenic system	
Jiang Y., Štípská P., Sun M., Schulmann K., Guy A. & Lexa O.	36
Subsidence and thermal history of the Uhřice 18 borehole	
Kanalášová S., Goldbach M. & Geršlová E.	37
Three phases activity of the Clay Fault (Barrandian)	
Knížek M. & Melichar R.	38
Rapid cooling and geospeedometry of granitic rocks exhumation from the Central Slovakian Volcanic Field	
Kohút M. & Danišík M.	39
Tracking end of the “Carnian Crisis” and/or Carnian stage in the Western Carpathians	
Kohút M., Hofmann M., Havrila M., Linnemann U. & Havrila J.	40
AMS of Křivoklát-Rokycany Complex, Barrandian	
Kolářová K., Černý J. & Melichar R.	41
Angra Fria magmatic complex in the Kaoko Belt of NW Namibia – a continuation of the Neoproterozoic Granite Belt in the Dom Feliciano Belt (Uruguay and SE Brazil)?	
Konopásek J., Košler J., Oyhantçabal P., Sláma J. & Ulrich S.	42
Zircon (re)crystallization during short-lived, high-P granulite facies metamorphism (Eger Complex, NW Bohemian Massif)	
Konopásek J., Pilátová E., Košler J. & Sláma J.	43
Geochronology of the Najd Fault System: SHRIMP U-Pb zircon data from shear zones of the Neoproterozoic Midyan Terrane (NW Arabian Shield)	
Kozdrój W., Kennedy A., Johnson P. R., Ziólkowska-Kozdrój M. & Kadi K.	44
Source and tectonic implication of the intermediate to acidic volcanoclasts from Jurassic Neotethyan mélanges	
Kövér S., Fodor L., Zajzon N. & Szabó C.	45
Distinct deformation microstructures identified in quartzo-feldspathic rocks of different nappes in the Krušné hory Mountains	
Kryl J., Jeřábek P., Lexa O., Závada P. & Hasalová P.	46
Oroclinal buckling and associated material flow under laboratory conditions	
Krýza O., Lexa O., Schulmann K., Gapais D., Guy A. & Cosgrove J.	47
New structural model of the Kock Fault Zone (Lublin Basin, SE Poland)	
Kufraša M. & Krzywiec P.	48
On geochemical variability of orogenic peridotites from Bohemian Massif	
Kusbach V., Machek M. & Janoušek V.	49

Structural pattern of deformation in the Turňa Nappe constrained by fold and cleavage analysis (Western Carpathians)	
Lačný A., Vojtko R. & Plašienka D.	50
Structural geology research of the Sodoměřice Tunnel – the paleostress analysis (Moldanubicum, South Bohemia)	
Lakotová K. & Knížek M.	51
Radiolaria species present on a locality in the Čoltovská roklina ravine – final results	
Ledvényiová L.	52
Tectonic classification of the southern Bohemian Massif according to the Tectonic Data Set of the Geological Survey of Austria (TDS)	
Linner M., Bayer I., Schuster R. & Fuchs G.	53
Cavitonics: how to use caves in neotectonics (introduction of a new method)	
Littva J., Hók J. & Bella P.	54
Deformation record in an orogenic peridotite body of the St. Leonhard granulite massif	
Machek M., Kusbach V. & Racek M.	55
Bohemian granulites: effect of Zener pinning on grain size evolution and deformation mechanisms	
Maierová P., Lexa O., Jeřábek P., Franěk J. & Schulmann K.	56
Tectonic studies of igneous rocks in metabasite zone and diorite belt in Brno massif	
Mareček L. & Melichar R.	57
Electronic examination from structural geology	
Marhanský T. & Melichar R.	58
Subsidence and thermal history of the Tlumačov-1 borehole	
Medvecká L., Goldbach M. & Geršlová E.	59
Two stages of blueschists exhumation in the Western Carpathians constrained by the sedimentary age of their erosional products (Klape Unit, Pieniny Klippen Belt)	
Mérés Š., Sýkora M., Plašienka D., Ivan P. & Lačný A.	60
3D model of the base of the Doupovské hory Volcanic Complex	
Mlčoch B. & Skácelová Z.	61
Geophysical and geological significance of the contact between Saxothuringian Zone and Teplá-Barrandian Unit known as the Litoměřice Fault	
Mlčoch B. & Skácelová Z.	62
Extreme geochemical variability of leucogranites at the margin of the Granulite Complex of Southern Bohemia	
Nahodilová R., Vrána S. & Pertoldová J.	63
Contractional modification of the back-arc rift system; Eocene–Quaternary Black Sea case study	
Nemčok M., Sheya C., Jánošík M., Vangelov D., Meissner A., Bubniak I., Bubniak A., Glonti V., Kotulová J., Molčan M., Welker C., Matejová M., Pelech O., Rybár S., Ledvényiová L., Bošanský M., Klučiar T., Dvořáková V., Geletti R. & Marson I.	64
Geochemical characteristics of the Triassic volcanic horizons in the Bükkium (NE Hungary) with structural implications	
Németh N., Móricz F., Pethő G. & Zajzon N.	65
High-temperature fracturing and grain-size-sensitive creep in lower crustal gabbros: Evidence for coseismic loading followed by creep during decaying stress in the lower crust?	
Okudaira T., Jeřábek P., Stünitz H. & Füsseis F.	66

The effect of rheology on the strain partitioning in the crustal section at the western margin of the Teplá-Barrandian Unit Peřestý V., Lexa O. & Jeřábek P.	67
Complexity of feeding systems within monogenetic volcanoes: cases from the Bohemian Paradise, Chaîne des Puys, and New Mexico Petronis M.S., Rapprich V., Valenta J., Lindline J., Brister A., Foucher M. & de Vries B. W.	68
Ancient silica sinter in the northeastern part of Krowiarki, Sudetes Piotrowska A. & Kowalczyk E.	69
Tectonics of the Carpathian Klippen Belt in the Middle Váh River Valley (western Slovakia) Plašienka D., Bučová J., Soták J. & Šimonová V.	70
Fabric pattern and metamorphic evolution of southwestern Moldanubian Zone (Central European Variscides) Pour O., Verner K. & Buriánek D.	71
Anisotropy of man-made rupture strength Proisl T. & Melichar R.	72
P–T conditions of crustal xenoliths and gravity measurements: architecture and composition of the crust in an accretionary orogen, Mongolia Prudhomme A., Guy A., Štípská P., Hanžl P., Heimlich C., Henrion E., Schulmann K. & Masson F.	73
Metasomatic interaction of cm-scale mantle xenoliths with felsic granulite (St. Leonhard granulite massif, Lower Austria) Racek M.	74
Structural and metamorphic record in schist mantle of the Saxonian Granulite Massif Ramešová O. & Jeřábek P.	75
Volcanic and seismic hazards in Southern Ethiopia Rapprich V., Verner K., Hroch T., Málek J., Žáček V., Leta A., Yewubinesh B. & Habtamu B.	76
Variscan tectonics of the Southern Drahany Upland Rembe J. & Kroner U.	77
Evolution of depositional systems in the Blatné depression of Danube basin: Trakovice 1 and Trakovice 4 well case study Rybár S., Šarinová K., Šujan M., Halásová E., Hudáčková N., Kováč M. & Kováčová M.	78
Geology of the Eastern Alps – summary and open questions Schuster R.	79
New airborne geophysical maps of the E-part of the Krušné hory Mts. Sedlák J., Gnojek I., Skácelová Z. & Mlčoch B.	80
Deformation sequence of the Izera metamorphic complex close to the Intra-Sudetic Fault Zone (West Sudetes, Poland) Sikora R.	81
Lower Palaeozoic tectonometamorphic evolution of the Bij formation, Hovd Zone, western Mongolia Soejono I., Čopjaková R., Čáp P., Buriánek D. & Verner K.	82
Comparison of thrusting in two distinct orogens Sokol L., Marhanský T. & Melichar R.	83

Segmented normal fault geometries interpreted in the “Dogger quarry”, Gerecse Hills, Hungary Soós B. & Fodor L.	84
3D modelling of the Variscan granites in the Erzgebirge-Vogtland-Fichtelgebirge area Stephan T., Hallas P. & Kroner U.	85
Linking zircon ages to P–T paths through textural position and REE patterns: The eclogite- mafic granulite to intermediate granulite transition from the Blanský les, Bohemian Massif Štípská P., Hacker B. R., Powell R., Holder R. & Kylander-Clark A.	86
Intermediate granulite produced by transformation of eclogite at a felsic granulite contact in Blanský les, Bohemian Massif Štípská P., Powell R., Racek M. & Lexa O.	87
Fracturation mechanisms on Mokrsko Deposit Švagera O. & Lexa O.	88
Grain-scale pressure variations in metamorphic rocks: implications for the interpretation of petrographic observations Tajčmanová L.	89
Late- to post-Variscan thermal evolution of the Mid-German Crystalline Rise and Rotliegend in Thuringia (central Germany) by means of fission-track and U-Pb LA-ICP-MS dating on zircon and apatite Thieme M., Ustaszewski K., Fügenschuh B. & Linnemann U.	90
Using of lidar-derived digital elevation model in geological mapping: examples from Magura Unit, Polish Outer Carpathians Tomaszczyk M.	91
Paleozoic evolution of Kock Fault Zone: Lublin Basin (central–east Poland) Tomaszczyk M. & Jarosiński M.	92
Magnetic fabrics as markers of emplacement strain in shallow magma chambers and lava domes, Štiavnica volcano-plutonic complex, Western Carpathians Tomek F., Žák J., Chadima M., Holub F. V. & Verner K.	93
Mineral chemistry of Pt ₃ –C ₁ ? metabasite intercalations and marble lenses within the Stronie Fm. from W flank of the Orlica-Śnieżnik Dome Twyrdy M.	94
Accessory REE-Th-U minerals: a key to unravel Alpine fluid-driven alterations in granitic orthogneisses (the Veporic Unit, Western Carpathians) Uher P., Ondrejka M., Putiš M. & Pukančík L.	95
The role of preexisting fractures and their reactivation potential on the design of a hot dry rock geothermal reservoir in the Mid-German Crystalline Rise (central Germany) Ustaszewski K., Kasch N., Knörrich T., Navabpour P. & Thieme M.	96
Sarmatian to Quaternary evolution of palaeostress field in the northeastern part of Danube Basin (Slovakia) Vojtko R., Klučiar T., Pelech O., Šujan M., Rybár S., Hók J. & Králiková S.	97
New constraints on the Cretaceous–Quaternary tectonic and thermal evolution of the Tatra Mts. (Western Carpathians): depicted from structural, sedimentary, geomorphological, and fission track data Vojtko R., Králiková S., Sliva L., Minár J., Fügenschuh B., Hók J. & Kováč M.	98

P–T evolution of high pressure micaschists and gneisses from Erzgebirge Mountains (Bohemian Massif)	
Waldner M., Hasalová P., Štípská P., Závada P., Racek M., Jeřábek P. & Schulmann K.	..99
Thermal structure of Orava-Nowy Targ Basin (Western Carpathians): results of vitrinite/huminite studies	
Waliczek M., Świerczewska A., Tokarski A. K. & Solecki M.100
Tectonometamorphic evolution of the Rehamna massif (Morocco, Variscan belt)	
Wernert P., Chopin F., Štípská P., Schulmann K., Bosch D., Bruguier O., El Houicha M., Corsini M. & Ghienne J.-F.101
Deformation enhanced melt migration of extruding orogenic lower crust: an example from the Eger Crystalline Unit	
Závada P., Jeřábek P., Hasalová P., Racek M., Konopásek J. & Lexa O.102
The Trans-European Suture Zone in Variscan times: a granite perspective	
Żelaźniewicz A., Oberc-Dziedzic T. & Fanning C. M.103
Nature and timing of the Cadomian magmatism in the Brunovistulian Domain of the Eastern Bohemian Massif: new U–Pb zircon and Sr–Nd isotopic evidence	
Žáčková E., Soejono I., Janoušek V., Sláma J., Konopásek J., Machek M. & Hanžl P.	..104
The Podolsko complex, Bohemian Massif: a (U)HP suture zone assemblage or metamorphic core complex in the footwall of a large supracrustal detachment?	
Žák J., Sláma J., Faryad S. W. & Burjak M.105