

27th Meeting of the Petrology Group of the Mineralogical Society of Poland



UNIVERSITY OF SILESIA
IN KATOWICE

PROGRAMME

WRZOSY DUMP IN PSZÓW

October 20, 2022 Thursday

| | |
|-------------------------------------|---------------------|
| 17 ⁰⁰ – | accommodation |
| 19 ⁰⁰ – 21 ⁰⁰ | ice-breaking supper |

October 21, 2022 Friday

| | |
|-----------------------------------|-------------------|
| 8 ⁰⁰ – 8 ⁴⁵ | breakfast |
| 8 ⁴⁵ – 9 ⁰⁰ | posters' mounting |

Chairperson: **Leszek MARYNOWSKI**

| | | |
|-------------------------------------|--|---|
| 9 ⁰⁰ – 9 ¹⁵ | Justyna CIESIELCZUK, Jakub KIERCZAK | Opening of the 27 th Meeting of the Petrology Group of Mineralogical Society of Poland |
| 9 ¹⁵ – 9 ⁴⁵ | Joana RIBEIRO | Uncontrolled combustion of coal gangue: An overview of environmental impacts and potential solutions for reuse and rehabilitation in cases from Portugal |
| 9 ⁴⁵ – 10 ⁰⁰ | Monika J. FABIAŃSKA , Justyna CIESIELCZUK, Magdalena MISZ-KENNAN, Ádám NÁDUDVARI, Anna ABRAMOWICZ, Ewa SZRAM, Tomasz KRZYKAWSKI | The Anna-Pszów coal waste dump - the multilayered case of contamination |
| 10 ⁰⁰ – 10 ¹⁵ | Monika J. FABIAŃSKA , Ádám NÁDUDVARI, Magdalena MISZ-KENNAN, Justyna CIESIELCZUK, Anna ABRAMOWICZ, Karolina PASZCZA | Szarłota - the largest and hottest coal-waste dump in the Upper Silesia Coal Basin |
| 10 ¹⁵ – 10 ³⁰ | Ádám NÁDUDVARI, Anna ABRAMOWICZ | Using Remote sensing techniques for monitoring coal waste dump burning (Upper Silesia, Poland) |
| 10 ³⁰ – 11 ⁰⁰ | coffee break and poster session | |

Chairperson: **Monika J. FABIAŃSKA**

| | | |
|-------------------------------------|--|--|
| 11 ⁰⁰ – 11 ³⁰ | Zlatica MILAKOVSKA , Maya STEFANOVA, Georgi VLADISLAVOV | Geochemical study of dump samples from the Troyanovo-3 Mine (Maritsa Iztok Coalfield, Bulgaria) after 16 years of weathering |
| 11 ³⁰ – 11 ⁴⁵ | Krzysztof KUPCZAK , Rafał WARCHULSKI, Aleksandra GAWĘDA | Conditions prevailing during the formation of 14th-17th century metallurgical slags from Polichno near Chęciny, Poland |
| 11 ⁴⁵ – 12 ⁰⁰ | Leszek MARYNOWSKI , Magdalena GORYL, Michał BUCHA, Justyna SMOLAREK-ŁACH, Maciej RYBICKI, Ewa SZRAM, Jochen BROCKS, Bernd R.T. SIMONEIT | Hemicellulose detection in sedimentary organic matter using methanolysis-GC-MS |
| 12 ⁰⁰ – 12 ¹⁵ | Magdalena MISZ-KENNAN , Jolanta KUS, Deolinda FLORES, Claudio AVILA, Zeynep BÜÇKÜN, Nandita CHOUDHURY, Kimon CHRISTANIS, Johannes P. JOUBERT, Stavros KALAITZIDIS, Ali Ihsan KARAYIGIT, Marta MALECHA, Manuela MARQUES, Paulo MARTIZZI, Jen O'KEEFE, Walter PICKEL, Georgeta PREDEANU, Sławomira PUSZ, Joana RIBEIRO, Sandra RODRIGUES, Ashok SINGH, Isabel SUÁREZ-RUIZ, Ivana SÝKOROVÁ, Nicola WAGNER, Dragana ŽIVOTIĆ, ICCP | Petrographic classification system for organic particles affected by self-heating in coal waste (An ICCP Classification System, Self-heating Working Group – Commission III) |
| 12 ¹⁵ – 12 ³⁰ | Dariusz WIĘCŁAW , Krzysztof JUREK, Elżbieta BILKIEWICZ, Adam KOWALSKI, Monika J. FABIAŃSKA, Justyna CIESIELCZUK, Magdalena MISZ-KENNAN | Evaluation of the gaseous pollutants yields produced during the self-heating process of coal waste simulated by dry and hydrous pyrolysis |
| 12 ³⁰ – 13 ³⁰ | sightseeing of the Post-Cistercian Monastery and Palace Complex in Rudy | |
| 13 ³⁰ – 14 ³⁰ | lunch | |

Chairperson: **Dariusz WIĘCŁAW**

| | | |
|-------------------------------------|---|---|
| 14 ³⁰ – 15 ⁰⁰ | Eva GERŠLOVÁ , Dominik VOROŠ, Daniel BEDNÁŘ, Petr OTÁHAL | Element distribution as a tool to understand radionuclide behavior within a river system (study from CZ) |
| 15 ⁰⁰ – 15 ¹⁵ | Beata SMIEJA-KRÓL , Mirosława PAWLYTA | Cadmium immobilization mechanism in industrially contaminated wetland soils |

| | | |
|-------------------------------------|---|--|
| 15 ¹⁵ – 15 ³⁰ | Jolanta DĄBEK | Iron-rich minerals in lacustrine sediments as indicators of climatic changes as exemplified by the Anthracosia Shales from the Intra-Sudetic Basin |
| 15 ³⁰ – 15 ⁴⁵ | Bogusław BAGIŃSKI , Ray MACDONALD, Marcin STACHOWICZ, Petras JOKUBAUSKAS, Jakub KOTOWSKI, Witold MATYSZCZAK, Daniel HARLOW | Experimental synthesis of ThSiO ₄ by fluid-induced alteration of chevkinite-(Ce) |
| 15 ⁴⁵ – 16 ⁰⁰ | Tomasz BAJDA , Magdalena ANDRUNIK, Wojciech FRANUS, Agnieszka GRELA, Agnieszka KLIMEK, Joanna KUC, Jakub MATUSIK, Barbara MUIR, Santhana Krishna Kumar ALAGARSAMY, Mateusz SKALNY, Eugeniusz ŚWISTUŃ, Kamil URBAŃSKI | The application of fly ash chemical transformation products in environmental engineering |
| 16 ⁰⁰ – 16 ³⁰ | <i>coffee break and poster session</i> | |

Chairperson: **Tomasz BAJDA**

| | | |
|-------------------------------------|--|---|
| 16 ³⁰ – 16 ⁴⁵ | Kamil BULCEWICZ , Jacek SZCZEPAŃSKI, Sławomir ILNICKI | A vestige of high-pressure-low-temperature metamorphism in the Izera-Kowary Unit (Karkonosze-Izera Block, SW Poland) |
| 16 ⁴⁵ – 17 ⁰⁰ | Małgorzata NOWAK , Jacek SZCZEPAŃSKI, Marcin DĄBROWSKI | Metamorphic record preserved in the Nowa Wieś eclogite (Śnieżnik Massif, SW Poland): Combined phase diagram modelling, Grt-Cpx thermobarometry and quartz-in-garnet elastic barometry |
| 17 ⁰⁰ – 17 ¹⁵ | Jacek SZCZEPAŃSKI , Robert ANCZKIEWICZ, Dariusz MARCINIAK | P-T conditions and chronology of the Variscan collision in the easternmost part of the Saxothuringian crust (Bohemian Massif, Fore-Sudetic Block, Poland) |
| 17 ¹⁵ – 17 ³⁰ | Maria MŁYNARSKA, Iwona KLONOWSKA, Jarosław MAJKA | HP-LT metamorphism recorded by the Leszczyniec Unit, northern Bohemian Massif |
| 17 ³⁰ –17 ⁴⁵ | Riccardo CALLEGARI , Karolina KOŚMIŃSKA, Christopher J. BARNES, Iwona KLONOWSKA, Jarosław MAJKA | Geochronology and metamorphism of the Mårma Terrane, Kebnekaise region, northern Swedish Caledonides |
| 18 ⁰⁰ – 19 ⁰⁰ | <i>poster presentations and coffee/beer</i> | |
| 19 ⁰⁰ – | <i>supper and Silesian evening</i> | |

October 22, 2022 Saturday

| | |
|-----------------------------------|------------------|
| 8 ⁰⁰ – 8 ⁴⁵ | <i>breakfast</i> |
|-----------------------------------|------------------|

Chairperson: **Jakub CIAŻĘLA**

Session organized in collaboration with the Commission on Ore Mineralogy of the International Mineralogical Association

| | | |
|-------------------------------------|---|---|
| 9 ⁰⁰ – 9 ¹⁵ | Bartosz PIETEREK , Jakub CIAŻĘLA, Riccardo TRIBUZIO, Magdalena MATUSIAK-MAŁEK, Marina LAZAROV, Stefan WEYER, Ingo HORN, Izabella NOWAK | Missing metal reservoir: Sulfide enrichment at the Contact Series of the Balmuccia peridotite massif (Ivrea-Verbania Zone) |
| 9 ¹⁵ – 9 ³⁰ | Dariusz MARCINIAK , Jakub CIAŻĘLA, Ana JESUS, Jürgen KOEPKE, Bartosz PIETEREK, Harald STRAUSS, Zbigniew CZUPYT, Magdalena PAŃCZYK, Ewa SŁABY | Migration of chalcophile metals and isotope (S, Fe, Cu) fractionation through an oceanic crust-mantle transition zone (ICDP OmanDP) |
| 9 ³⁰ – 9 ⁴⁵ | Ludwik DE DOLIWA ZIELIŃSKI , Raphael KUHN, Larryn DIAMOND | Quartz-Hematite veins in the Oman Ophiolite: Syn-volcanic or syn-obduction origin? |
| 9 ⁴⁵ – 10 ⁰⁰ | Jakub CIAŻĘLA , Michał TOMCZAK, Agata KOZŁOWSKA-ROMAN, Bartosz PIETEREK, Arkadiusz TOMCZAK, Dariusz MARCINIAK, Eman ELSHERIF | Magma supply and other geological conditions for SMS formation along mid-ocean ridges: implications for ore prospecting along 26-33°N, Mid-Atlantic Ridge |
| 10 ⁰⁰ – 10 ¹⁵ | Marta CIAŻĘLA , Jakub CIAŻĘLA, Dariusz MARCINIAK, Felipe GOMEZ, Francesca MANCINI, Bartosz PIETEREK | The planetary field analog studies in the Rio Tinto mining area, Spain |
| 10 ¹⁵ – 10 ³⁰ | Maciej FITT , Jakub CIAŻĘLA, Magdalena LABAN, Dariusz MARCINIAK, Marine PAQUET, Marta CIAŻĘLA, Leszek LATA CZ, Konrad BLUTSTEIN, Beata MARCIANI AK-MALISZEWSKA, Ewa SŁABY, Marta PRELL | Petrographic description of ore-bearing martian meteorites: MIL 03346, NWA 5219, and NWA 13367 |
| 10 ³⁰ – 11 ⁰⁰ | <i>coffee break and poster session</i> | |

Chairperson: **Jarosław MAJKA**

| | | |
|-------------------------------------|--|---|
| 11 ⁰⁰ – 11 ³⁰ | Urs KLÖTZLI , Jolanta BURDA, Paul TIBULEAC | Petrochronology of the REE mineralization of Belcina, Ditrău Alkaline Massif, Eastern Carpathians, Romania |
| 11 ³⁰ – 11 ⁴⁵ | Marcin J. MIESZCZAK , Monika A. KUSIAK, Daniel J. DUNKLEY, Simon A. WILDE, Martin J. WHITEHOUSE, Keewook YI, Shinae LEE | Diversity in zircon preservation in Eoarchean rocks of the Itsaq Gneiss Complex, SW Greenland |
| 11 ⁴⁵ – 12 ⁰⁰ | Tanmay KELUSKAR , Monika A. KUSIAK, | A ca. 3.3 magmatic event in the Saglek Block, Labrador |

| | | |
|-------------------------------------|---|---|
| | Daniel J. DUNKLEY, Martin J. WHITEHOUSE, Simon A. WILDE, Keewook YI, Shinae LEE | |
| 12 ⁰⁰ – 12 ¹⁵ | Piotr KRÓL , Monika A. KUSIAK, Martin J. WHITEHOUSE, Daniel J. DUNKLEY, Simon A. WILDE | Evidence for emergent land on the early Earth recorded in low- $\delta^{18}\text{O}$ zircon signatures from the Napier Complex, East Antarctica |
| 12 ¹⁵ – 12 ³⁰ | Elizaveta KOVALEVA , Monika A. KUSIAK, Dennis VANDERLIEK, Harry BECKER, Franziska WILKE, Anja SCHREIBER, Richard WIRTH | Lunar zircon from Apollo 15 and 16: shock nanostructures and implications for geochronology |
| 12 ³⁰ – 12 ⁴⁵ | <i>coffee break and poster session</i> | |

Chairperson: **Jacek SZCZEPAŃSKI**

| | | |
|-------------------------------------|---|---|
| 12 ⁴⁵ – 13 ⁰⁰ | Jacek PUZIEWICZ | Reactive melt percolation in lithospheric mantle: What it is |
| 13 ⁰⁰ – 13 ¹⁵ | Jakub RYZNAR | Development of holistic exploration solutions enabling chromites with improved physicochemical parameters to be obtained for use in the production of high- alloy additives |
| 13 ¹⁵ – 13 ³⁰ | Alessia BORGHINI , Giulio BORGHINI, Silvio FERRERO | Granitic melt-mantle interaction during the subduction of continental crust at mantle depth constrained by reaction experiments |
| 13 ³⁰ – 13 ⁴⁵ | Sławomir ILNICKI , Jacek SZCZEPAŃSKI, Gabriela KASZUBA, Robert ANCZKIEWICZ | Metarhyolites from the Kamieniec Metamorphic Belt: geochemical and zircon isotopic constraints on the Early Palaeozoic magmatic event in the Saxothuringian |
| 13 ⁴⁵ – 13 ⁵⁵ | Daniel WOJNARSKI | Labsoft – sponsor presentation |
| 14 ⁰⁰ – 15 ¹⁵ | <i>photo & lunch</i> | |

Chairperson: **Justyna CIESIELCZUK**

| | | |
|-------------------------------------|--|---|
| 15 ¹⁵ – 15 ⁴⁵ | Bojan OTONIČAR | Speleogenesis vs. dedolomitization (cave "Mravljeto v Gošarjevih Rupah"; Rovte Hills, central Slovenia) |
| 15 ⁴⁵ – 16 ⁰⁰ | Jerzy CABAŁA , Andrzej TYC | Magnesium minerals in sulphate speleothems from the "Pomorzany" Zn-Pb ore mine |
| 16 ⁰⁰ – 16 ¹⁵ | Maciej GÓRKA , Agnieszka TRZYNA, Anita LEWANDOWSKA, Anetta DRZENIECKA-OSIADACZ, Beata MIAZGA, Justyna RYBAK, David WIDORY | The impact of seasonality and meteorological conditions on PM2.5 carbonaceous fractions: advantages, weaknesses and interpretation pitfalls |
| 16 ¹⁵ – 16 ³⁰ | Błażej CIEŚLIK , Jakub KIERCZAK, Anna PIETRANIK | Late Devonian magmatic and hydrothermal activity recorded in ultramafic rocks from the southern part of the Szklary Massif |
| 16 ³⁰ – 17 ⁰⁰ | <i>coffee break and poster session</i> | |

Chairperson: **Jacek PUZIEWICZ**

| | | |
|-------------------------------------|---|---|
| 17 ⁰⁰ – 17 ¹⁵ | Daniel BUCZKO , Jarosław MAJKA, Magdalena MATUSIAK-MAŁEK, Iwona KLONOWSKA | Orogenic peridotites of the Seve Nappe Complex, Scandinavian Caledonides – lithospheric mantle insight into Caledonian Wilson cycle |
| 17 ¹⁵ – 17 ³⁰ | Katarzyna WALCZAK , Christopher BARNES, Grzegorz ZIEMNIAK, Riccardo CALLEGARI, Jarosław MAJKA, Michał BUKAŁA | Extended continental-margin development and deformation recorded by the Upper Gneiss Unit in the northern Scandinavian Caledonides |
| 17 ³⁰ – 17 ⁴⁵ | Karolina KOŚMIŃSKA , Jarosław MAJKA | Monazite reaction history in an eclogite |
| 17 ⁴⁵ – 18 ⁰⁰ | Simon CUTHBERT | Brittle deformation microstructures in eclogites and granitoid HP gneisses, Norwegian Caledonides: Palaeoseismicity triggered by densification? |
| 18 ⁰⁰ – 18 ¹⁵ | Paweł SŁUPSKI , Bernardo CESARE, Omar BARTOLI, Jarosław MAJKA, Iwona KLONOWSKA, Lauren REMUSAT | Former melt inclusions in garnet from UHP gneisses of the Seve Nappe Complex, Scandinavian Caledonides |

| | | |
|-------------------------------------|--|---|
| 18 ¹⁵ – 19 ⁰⁰ | Justyna CIESIELCZUK, Sławomir ILNICKI | MEETING OF THE COUNCIL OF THE PETROLOGY GROUP OF THE PTMin |
| 19 ⁰⁰ – 19 ³⁰ | Jakub KIERCZAK | OPEN MEETING OF THE MINERALOGICAL SOCIETY OF POLAND |
| 20 ⁰⁰ – Sunday morning | <i>supper (evening dresses required)</i> <i>The Music of Bach and Schubert from the Guitar's Perspective: Marcin Ciesielczuk – bass-baritone & Waldemar Kerner – classical guitar</i> | |

October 23, 2022 Sunday

| | | |
|-------------------------------------|--|---|
| 7 ⁰⁰ – 8 ³⁰ | <i>breakfast</i> | |
| 8 ³⁰ – 13 ⁰⁰ | Monika J. FABIAŃSKA , Ádám NÁDUDVARI , Anna ABRAMOWICZ , Magdalena MISZ-KENNAN , Mariola JABŁOŃSKA , Justyna CIESIELCZUK | Field session: visiting the Anna and Szarlota coal-waste dumps in the Rybnik part of the Upper Silesian Coal Basin |
| 14 ⁰⁰ – 16 ⁰⁰ | Agnieszka CHEĆKO , Krzysztof SZOPA | Field session: lunch and sightseeing of the Geosfera in Jaworzno |

Partners and sponsors:



LABSOFT



21 October, 18.00 p.m. POSTER SESSION

All posters should be exposed from Friday, 9⁰⁰ a.m. till Saturday, 8⁴⁵ p.m.

| | | |
|----|---|---|
| 1 | Anna ABRAMOWICZ , Oimahmad RAHMONOV, Ryszard CHYBIORZ, Justyna CIESIELCZUK | The vegetation development on smoldering coal-waste dumps in Southern Poland |
| 2 | Wojciech BARTZ , Filip DUSZYŃSKI, Kacper JANCEWICZ, Anna POTYSZ, Andrzej KACPRZAK, Wioleta PORĘBNA | From arenisation to speleogenesis - mineralogical evidence from the Stołowe Mountains (Poland and the Czech Republic) |
| 3 | Michał BUCHA , Anna DETMAN, Sushmita DEB, Aleksandra CHOJNACKA, Dominika KUFKA, Anna SIKORA, Leszek MARYNOWSKI | Occurrence of nitrogen-fixing microorganisms in Polish lignites |
| 4 | Isabel S. M. CARTER , Simon CUTHBERT, Katarzyna WALCZAK, Jarosław MAJKA | Magmatism and metamorphism in the Köli Nappe Complex of Sweden: The tectonic evolution of oceanic terranes in Iapetus |
| 5 | Ludwik DE DOLIWA ZIELIŃSKI , Michał BUKAŁA, Jarosław MAJKA | Tackling the geochronological record of the Variscan metamorphism in the Western Tatras: Outline and perspectives |
| 6 | Eman ELSHERIF , Jakub CIAŻĘŁA, Piotr WOJTULEK, Anna KUKULA, Wojciech STAWIKOWSKI | Metal migration and ore formation in the slow-spreading oceanic lithosphere: an insight from the Central Sudetic Ophiolite, Poland |
| 7 | Krzysztof GAIDZIK , Andrzej TYC, Jerzy ŻABA, Justyna CIESIELCZUK, Andrzej PAULO | Geochemistry of thermal waters and seismogenic faults in the central Colca River basin, Western Cordillera, Peru |
| 8 | Magdalena GORYL , Bernd R. T. SIMONEIT, Leszek MARYNOWSKI | Novel biomarkers from Upper Cretaceous coals and siltstones from the North Sudetic Basin, Poland |
| 9 | Anna GRABARCZYK-GURBA | The first ion microprobe (SHRIMP) dating of zircons from the Sejny Gabbro-norite-Anorthosite Massif, Mazury Complex (NE Poland) |
| 10 | Anna GRABARCZYK-GURBA , Janina WISZNIEWSKA, Ewa KRZEMIŃSKA | Rapakivi-type quartz monzonite from the Pietkowo IG1 borehole, NE Poland: a new A-type granitoid occurrence in southernmost Fennoscandia |
| 11 | Dominik GURBA , Anna GRABARCZYK-GURBA, Ewa KRZEMIŃSKA | Late Paleoproterozoic sedimentation and Mesoproterozoic metamorphic event evidenced by integrated zircon- and monazite geochronology: A case study of Gdańsk IG1 paragneiss, N Poland |
| 12 | Maciej KAŁASKA , Janusz RECLAW, Paula SIERPIEŃ, George KAMENOV | The origin of lead artifacts from Novae – applications of Pb isotopes in research on the provenance of artifacts from N Bulgaria |
| 13 | Piotr LENIK, Jakub BAZARNIK , Sylwester SALWA | Preliminary studies of spinel group minerals in Neogene andesites from the Pieniny Klippen Belt (Poland) |
| 14 | Wioletta LIS , Eligiusz SZEŁĘG, Adam PIECZKA, Adam SZUSZKIEWICZ, Krzysztof NEJBERT | Gold from a NYF-type pegmatite from the Piława Górna quarry, Góry Sowie Block, SW Poland |
| 15 | Magdalena MATUSIAK-MĄLEK , Mallika JONNALAGADDA, Hubert MAZUREK, Theodoros NTAFLIOS, Jacek PUZIEWICZ, Ernesto BJERG, Dominika KOZDROWSKA | Chemical- and petrological heterogeneity of lithospheric mantle beneath N Patagonia (Argentina) - case study of Cerro Chenque xenoliths |
| 16 | Magdalena MISZ-KENNAN , Monika FABIĄŃSKA, Justyna CIESIELCZUK | Geochemical- and petrological investigations of coal wastes from the Rymer Cones dump (Upper Silesian Coal Basin, Poland) |
| 17 | Ádám NÁDUDVARI , Tomasz KRZYKAWSKI, Justyna CIESIELCZUK, Mariola JABŁOŃSKA, Leszek MARYNOWSKI | Composition of ravatite from the burning coal-waste dump near Bytom, Poland |
| 18 | Jerzy NAWROCKI, Justyna CIESIELCZUK , Dominik JURA, Monika J. FABIĄŃSKA, Magdalena MISZ-KENNAN | Dating of coal-seam fires provide insights on tectonic events |
| 19 | Magdalena PAŃCZYK , Jerzy NAWROCKI, Tomasz MALATA, Piotr DZIADZIO, Leszek BALICKI, Paweł DERKOWSKI | Late Cretaceous and Eocene detrital zircons from the Menilite and Krosno Beds in the Transdanubian Range and the Apuseni Mountains in the Polish Outer Western Carpathians |
| 20 | Artur PĘDZIWIATR , Jakub KIERCZAK, Anna POTYSZ, Anna PIETRANIK | Phytoavailability of Ni, Cr, Co and Mn in fertilized ultramafic soils |
| 21 | Anna POTYSZ , Alexey MAXIMENKO | X-ray absorption near edge structure (XANES) analysis of secondary phases formed during experimental bio-weathering of metal-bearing wastes |
| 22 | Anna POTYSZ , Artur PĘDZIWIATR, Jakub KIERCZAK | Accelerated mycorrhizal bioweathering of Cu-bearing metallurgical slags: Evidence from dissolution rates and weathering features |
| 23 | Arkadiusz PRZYBYŁO , Anna PIETRANIK, Christoph BREITKREUZ | Age differences between separate magma pulses in two laccoliths (Halle Volcanic Complex): Insight into processes of silicic magma formation |
| 24 | Maciej RYBICKI , Leszek MARYNOWSKI | Composition and sources of saccharides in street dust, topsoils and aerosols from Sosnowiec, southern Poland |
| 25 | Sylwester SALWA | Automorphic tourmaline in phyllite from Podmąchocice, Holy Cross Mountains, Poland |
| 26 | Marcin STACHOWICZ , Petras JOKUBAUSKAS, Bogusław BAGIŃSKI, Ray MACDONALD, Daniel E. HARLOW, Krzysztof WOŹNIAK | A revised crystal structure for the rare earth fluoride gagarinite-(Ce) from experimental synthesis by fluid-induced alteration of chevkinite-(Ce) |
| 27 | Dorota STANECEK , Rafał SZANIAWSKI, Leszek MARYNOWSKI | Oligocene burial effects on the magnetic fabric of the Huty Fm in the Orava-Podhale Paleogene Basins |
| 28 | Maciej SWĘD , Anna POTYSZ, Agata DUCZMAL-CZERNIKIEWICZ, Marcin SIEPAK, Wojciech BARTZ | Bacteria enhance dissolution of Zn- and Pb-bearing rocks: Experimental simulation of bioweathering |
| 29 | Marek SZCZERBA , Michał BANAŚ, Zuzanna CIESIELSKA, Aleksander SKAŁA, Hocine DJOUDER | Structure optimization and minimalization the effect of cross heating of samples during IR-laser argon extraction |