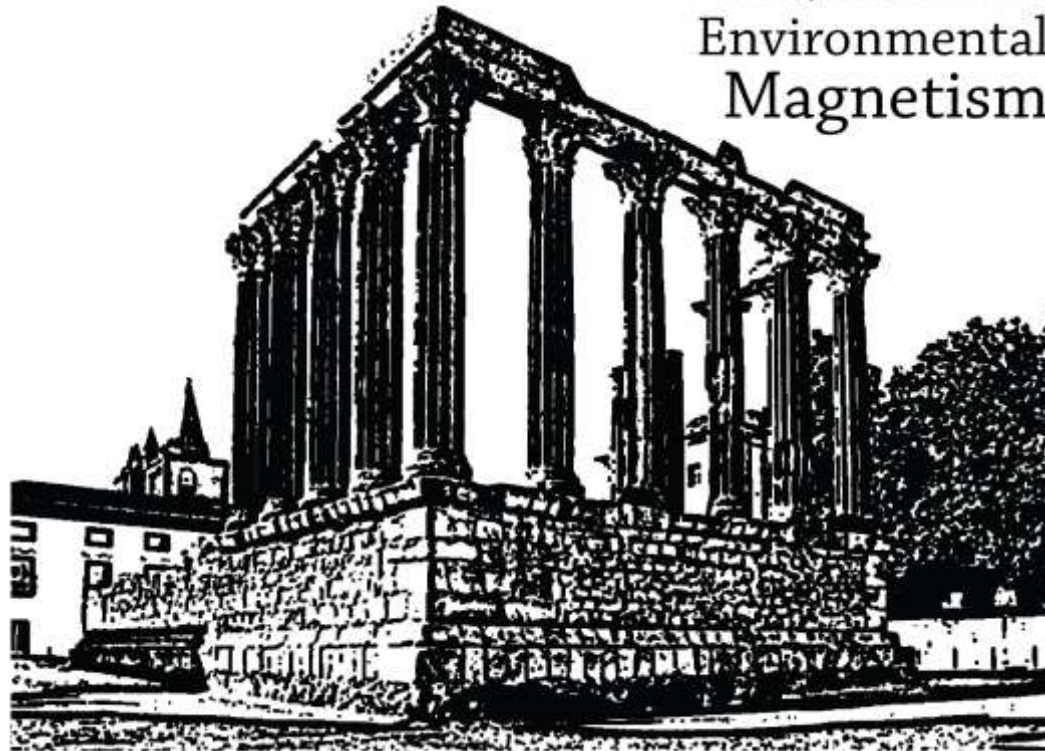


14TH CASTLE MEETING

ÉVORA, PORTUGAL
31 August - 6 September 2014

New trends on
Paleo, Rock and
Environmental
Magnetism



General program

| Castle Meeting | Sunday August 31 | Monday September 1 | Tuesday September 2 | Wednesday September 3 | Thursday September 4 | Friday September 5 | Saturday September 6 |
|----------------|---|------------------------|---------------------------------------|---|-------------------------|--|--|
| 7:30 - 8:30 | | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast |
| 8:30 - 10:00 | | Presentations | Presentations | Presentations | Presentations | Presentations | Departure to Lisbon airport at 8:30 |
| 10:00 - 10:30 | | Coffee Break | Coffee Break | Coffee Break | Coffee Break | Coffee Break | |
| 10:30 - 12:30 | | Presentations | Presentations | Presentations | Presentations | Presentations | |
| 12:30 - 14:00 | | Lunch Time (Buffet) | Lunch Time (Buffet) | Lunch Time (Buffet) | Lunch Time (Buffet) | Lunch Time (Buffet) | |
| 14:00 - 15:30 | | Presentations | Presentations | Alqueva Dam (boat trip), Monsaraz Village and dinner | Posters session | Concurs to define the next Castle meeting organizer | |
| 15:30 - 16:00 | | Coffee Break | Coffee Break | | | Visit to a winery, wine tasting and farewell dinner | |
| 16:00 - 17:30 | Departure from Lisbon Airport to Évora (16:30) | Presentations | Presentations | | | | |
| 17:00 - 19:30 | Hotel Check-in | Free Time | Free Time | | MAGIBER workshop | | |
| 19:30 | Welcome drink and Dinner | Dinner | Dinner | | Dinner | | |
| 21:30 | | | Concert at Salvador Church | | | | |

Program of accompanying persons

| Castle Meeting | Sunday August 31 | Monday September 1 | Tuesday September 2 | Wednesday September 3 | Thursday September 4 | Friday September 5 | Saturday September 6 |
|----------------|--|---|------------------------------------|--|--|---|-------------------------------------|
| 7:30 - 8:30 | | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast |
| 9:00 - 12:30 | | Évora (Sé, Capela dos Ossos, Templo Romano) | Visit to the Village of Beja | Free Time | Visit to Vila-Viçosa (Paço Ducal and Castle) | Free Time | Departure to Lisbon airport at 8:30 |
| 12:30 - 14:00 | | Lunch Time (Buffet at hotel) | Lunch Time (Beja) | Lunch Time (Buffet at hotel) | Lunch Time (Elvas - Centro Histórico) | Lunch Time (Buffet at hotel) | |
| 14:00 - 15:30 | | Free Time | | | | Free Time | |
| 15:30 - 16:00 | | Évora hystorical center with wine and regional sweets tasting | S. Cucufate Roman Ruins | Alqueva Dam (boat trip), Monsaraz Village and dinner (Jantar no Sem-Fim) | Elvas (Roman Aqueduct, Forte da Graça) | Free Time | |
| 16:00 - 18:00 | Departure from Lisbon Airport to Évora | | | | | | |
| 18:00 - 19:30 | Hotel Check-in | Free Time | Free Time | | Free Time | Visit to a winery, wine tasting and farewell dinner | |
| 19:30 | Welcome drink and Dinner | Dinner at hotel | Dinner at hotel | | Dinner at hotel | | |
| 21:30 | | | Concert at Salvador Church (Évora) | | | | |

Program of oral communications

| Monday (01/09) | |
|---------------------------|---|
| Session M1 | Conveners: Muxworthy, A., and Kumari, M. |
| 8:30 | Madureira, P., (invited Talk) Searching mineral resources in ocean domains – the Portuguese case study |
| 9:00 | Carlut, J., (invited Talk) Interpreting the magnetic signature of serpentinized peridotites from Mid-Oceanic Ridges and ophiolites |
| 9:30 | Miranda J.M. and Luis J. (invited talk) Improved magnetic methods for plate kinematics |
| 10:00 | Coffee Break |
| Session M2 | Conveners: Van der Voo, R. and Neres, M. |
| 10:30 | Silva, PF., Thermomagnetic analyses of oceanic basalts - Testing a new approach to differentiate oxidation degree from the primitive composition of titanomagnetites |
| 10:50 | Kontny, A., Magnetic properties and microstructures of ferrimagnetic minerals from impact structures and shock experiments |
| 11:10 | Halia, L.O.N., Magnetic properties of Sulawesi Ultrabasic Complex |
| 11:30 | Kletetschka, G., Paleomagnetism of Impact Glass |
| 11:50 | Alva Valdivia. L., Rock-magnetism, microscopy and quantitative magnetic interpretation of Las Truchas iron-ore mining district, Michoacan, Mexico |
| 12:30 | Lunch Time |
| Session M3 | Conveners: Chadima, M., and Silva, PF |
| 14:00 | Georgiev, N. (Henry, B.), Emplacement and fabric-forming conditions of plutons from structural and magnetic fabric analysis: A case study of the Plana pluton (Central Bulgaria) |
| 14:20 | Moreira, M., Magma flow pattern in dykes of the Azores revealed by the anisotropy of magnetic susceptibility |
| 14:40 | Kusbach, V., Modeling of anisotropy of magnetic susceptibility: example from serpentinized peridotite |
| 15:00 | Machek, M., Complex flow in granite crystal mush evidenced by AMS, rock magnetism and microstructure (Castle Crags pluton, California) |
| 15:20 | Coffee Break |
| Session M4 | Conveners: Henry, B. and Machek, M. |
| 16:00 | Hrouda, F., Modelling the AMS of SD Ferromagnetic Fraction: Significance for Inverse Magnetic Fabrics |
| 16:20 | Chadima, M., Safyr - a software for complex treatment of magnetic susceptibility data: from acquisition to presentation |
| 16:40 | Schmidt, V., Magnetic properties and anisotropy of Permian salt deposits in the North German Basin |
| 17:00 | Neres, M., Magnetic fabric in a Cretaceous sill (Foz da Fonte, Portugal): flow model and implications for regional magmatism. |
| 17:20 | Parés, J.M., Anisotropy of Magnetic Susceptibility (AMS) unlocks synsedimentary deformation kinematics at Pico del Aguila, Pyrenees, Spain |
| 19:30 | Dinner |

**Tuesday
(02/09)**

Session T1 Conveners: Coe R., and Sánchez E.M.

- 8:30 **Van der Voo, R., (invited Talk)** Paleomagnetism and global plate kinematics: reliability assessments and promising possibilities to augment the database
- 9:00 **Brown, L.**, 900 Ma Pole for Southwestern Baltica: Paleomagnetism of the Bjerkeim Sokndal Layered Intrusion, Rogaland Igneous Complex, Norway
- 9:20 **Sánchez, E.M.**, A paleomagnetic and rock-magnetic study of Pliocene and Pleistocene lava flow sequences from the Lesser Caucasus (Southern Georgia)
- 9:40 **Jelenska, M.**, Paleomagnetic and rock magnetic study of Lower Devonian sediments from Podolia, SW Ukraine: remagnetization problems

10:00 Coffee Break

Session T2 Conveners: Bonhel, H., and Font, E.

- 10:30 **Henry, B.**, Paleomagnetic dating of continental geological formations: Strong diachronism evidenced in the Saharan platform and geodynamical implications
- 10:50 Berndt, T. (**Ruiz, VC**), New constraints on the evolution of the Gibraltar Arc from palaeomagnetic data of the Ceuta and Beni Bousera peridotites (Rif, northern Africa)
- 11:10 **Calvin, P.**, New paleomagnetic study on Jurassic Gabbroic Rocks from the Central High Atlas (Morocco): structural implications
- 11:30 **Merabet, N.**, Emplacement conditions, from geophysical investigations and field observations, of the Paleoproterozoic Tingicht pluton (Yetti domain, Eglab shield, Algeria)
- 11:50 Moussaid, A.B. (**Villalain, J.**), Paleomagnetic and AMS study of the Taghleft inverted basin. Evidences of early compressional events in the High Atlas belt (North Africa).

12:30 Lunch Time

Session T3 Conveners: Goguitchaichvili, A., and Satolli, S.

- 14:00 **Beamud, E.**, Magnetostratigraphic constraints on the timing of deformation in Frontal Fars Arc (Zagros Folded Belt, Iran)
- 14:20 **Böhnel, H.**, Paleomagnetic dating of lava flows from Ceboruco volcano and surroundings, western Transmexican Volcanic Belt
- 14:40 **Herrero-Bervera, E.**, Reversal records recorded on long volcanic sequences along the Hawaiian Island chain: past, present and future perspectives
- 15:00 **Pruner, P.**, Palaeogeography of Prague Basin in Silurian times (Wenlock–Ludlow): data from palaeomagnetic and geochemical research

15:20 Coffee Break

Session T4 Conveners: Aidona, E. and Arneitz, P.

- 16:00 **Shcherbakov, V.P.**, TCRM Induction And Thellier Experiments with Titanomagnetites
- 16:20 **Poidras, Th.**, FURÉMAG: A very fast-heating furnace dedicated to absolute paleointensity with the MSP-DSC protocol.
- 16:40 **Volk, M.**, Effect of Pressure on Paleointensities
- 17:00 **Goguitchaichvili, A.**, Variation of the Earth's Magnetic Field Strength in South America During the Last Two Millennia, New results from Historical Buildings of Buenos Aires and Re-evaluation of Regional Data

19:30 Dinner

**Wednesday
(03/09)**

Session W1 Conveners: Hirt, AM., and Chadimova, L.

- 8:30 **Appel, E.**, Low-temperature oxidation of magnetite reveals humidity variation in paleoclimate records of the Tibetan Plateau
- 8:50 **Herb, C.**, Magnetic properties of late Pliocene-Pleistocene lacustrine sediments of the western Qaidam Basin (NE Tibetan Plateau): their use for detecting paleoenvironmental changes
- 9:10 **Savian, J.F.**, Environmental magnetic expression of the MECO event in different oceanic basins
- 9:30 **Font, E.**, Ocean acidification during the Deccan Phase-2
- 9:50 **Moreno, E.**, Magnetic properties of marine sediments from the Bengal Fan: record of climatic changes during Holocene and turbiditic activity from the Gange-Brahmapoutre system
- 10:10 Coffee Break

Session W2 Conveners: Appel, E., and Grison, H.

- 10:30 **Fabian, K.**, The GEMAS European background data set for magnetic susceptibility in agricultural soil
- 10:50 **Szuskiewicz, M.**, Magnetic properties of soil profiles – combination of geogenic, pedogenic, and anthropogenic signal
- 11:10 **Cao, L.**, Quantification of map similarity to demonstrate the efficiency of magnetic pre-screening for heavy metal pollution assessment in top soil.
- 11:30 **Dytlow, S.K.**, The use of magnetic method to study the spread of anthropogenic pollution in model soil profiles – preliminary results.
- 11:50 **Magiera, T.**, Characteristics of technogenic magnetic particles from different sources of industrial and urban emissions
- 12:10 **Górka-Kostrubiec, B.**, Indoor dust granulometry in aspect of magnetic properties of anthropogenic pollution.
- 12:30 Lunch Time
- 14:00 **Departure to Monsaraz and Alqueva dam. Dinner**

**Thursday
(04/09)**

Session Th1 Conveners: Spassov, S., and Moreira, M.

- 8:30 **Rey, D.**, Geochronological value of environmagnetism in the study of late Pleistocene to Holocene near-slope marine sedimentary sequences of the NW Iberian Margin
- 8:50 **Frančičković-Bilinski, S.**, Initial magnetic susceptibility measurements in sediments of Croatian and Slovenian rivers
- 9:10 **Lévêque, F.**, High resolution 3D magnetic survey: limitations and archaeological applications
- 9:30 **Silva, S.**, Magnetic field characterization for object detection – study case of Ocean Revival Park in Portimão, South Portugal
- 9:50 **Lisé-Pronovost, A.**, Rock-magnetic and paleomagnetic study from the ancient harbor of Rome (Italy) during the first millennium AD

10:10 Coffee Break

Session Th2 Conveners: Villalain, J., and Volk, M.

- 10:40 **Aidona, E.**, Middle Neolithic Period: New archaeomagnetic and thermoluminescence data from a pottery kiln at Magoula Imvrou Pigadi, SW Thessaly, Greece
- 11:00 **Ech-chakrouni, S.**, Comparison of archaeomagnetic and ¹⁴C datings of fireplaces discovered in a cremation necropolis of funerary urns in Belgium
- 11:20 **Kapper, L.**, First archeointensity results from four types of ancient kilns excavated in Burkina Faso (West Africa)
- 11:40 **Rodriguez-Ceja, M. (Camps, P.)**, Archeointensity determinations on Pre-Columbian potteries from La Ceiba and Santa Marta shelter-caves (Chiapas, Mexico).
- 12:00 **Baptista, M.A., (invited Talk)** Tsunamis - Challenges for tsunami research in Europe

12:30 Lunch Time

14:00 – 17:30 **Poster Session – Conveners (Camps, P., and Herb, C.)**

17:30 – 19:00 **MAGIBER Workshop**

19:30 **Dinner**

| Friday (05/09) | |
|---------------------------|--|
| Session F1 | Conveners: Fabian, K., and Bogalo, M.F. |
| 8:30 | Muxworthy, A. , Understanding the effect of chemical alteration on palaeomagnetic signals |
| 9:00 | Petrovsky, E. , Simplified core-shell model in assessing the size of superparamagnetic maghemite/magnetite particles |
| 9:20 | Hirt, A.M. , Quantitative methods to analyse superparamagnetic and single domain mixtures of magnetite |
| 9:40 | McEnroe, S. , Magnetism at Depth: Magnetic properties of granulite-facies rocks and rocks exhumed from the eclogite facies (> 120km). What do their properties tell us about magnetization in the deep crust? |
| 10:00 | Coffee Break |
| Session F2 | Conveners: McEnroe, S., and Michels, A. |
| 10:30 | Fabian, K. , Magnetic high-field studies of nanostructures in natural and synthetic ilmenite-hematite solid solutions |
| 10:50 | Robinson, P. , Lamellar Magnetism in the Rhombohedral Oxides: How does it work? |
| 11:10 | Coe, R. , The crucial role of continuous thermal demagnetization in the demise of the rapid-field-change hypothesis at Steens Mountain |
| 11:30 | Church, N.S. , Needles in cumulate stacks: characterising magnetic recorders in layered intrusions |
| 11:50 | Spassov, S. , Characterisation of viscous magnetisation with the induction coercivity meter |
| 12:15 | Lunch Time |
| 14:00 | Concurs to define the organizer of Castle Meeting 2016 |
| 15:30 | Departure to the vineyard and dinner |

Program of poster presentations

| Thursday (04/09) Poster Session (14:30 – 17:30) - Conveners (Camps, P., and Herb, C.) | |
|---|---|
| P1 | Aidona, E. , Magnetic properties of sediment cores from Anthemountas basin (N. Greece) and their significance to the environmental history of the area |
| P2 | Álvarez Posada, C. , Paleomagnetic analysis of river terraces of the Arlanza, Arlanzón, and Duero rivers (N Spain) and chronological context |
| P3 | Arneitz, P. , Comparison of direct and indirect geomagnetic records |
| P4 | Bayou, B. , Possible relationship between magnetic properties and heavy metal (HVs) pollution induced by the Pb-Zn mining at Boucaid, Tissemsilt, Algeria. |
| P5 | Bogalo, M.F. , New rock magnetic results from Galería cave in the Atapuerca palaeoanthropological site (northern Spain). Influence of solar irradiation in the edaphic generation of superparamagnetic grains? |
| P6 | Brown, L.L. , Rock Magnetic Properties of the Chipman Dike Swarm, Athabasca Granulite Terrain, Canada: Possible Target for Paleomagnetic Studies? |
| P7 | Bučová, J. , Paleomagnetic results of Jurassic sediments in the Central Western Carpathians (Slovakia) |
| P8 | Caccavari, A. , A paleomagnetic and paleointensity study of a Miocene polarity transition in La Gomera (Canary Islands, Spain) |
| P9 | Calvo-Rathert, M. , Paleointensity results from Lanzarote (Canary Islands) obtained with two different techniques |
| P10 | Cao, L. , Environmental study for pollution at Linfen and its change-magnetic monitoring of leaves and soil |
| P11 | Chadimova, L. , Frequency-dependent magnetic susceptibility of limestones: a case study from the Late Silurian shallow-water limestones (Teplá-Barrandian Unit, Prague Synform, Czech Republic) |
| P12 | Das, P.K. , Spatial pollution screening of the road-dusts within “The Bombay Arc”, India: Magnetometry as a pollution proxy |
| P13 | Das, P.K. , Evaluation of rock-magnetic properties for the determination of metal pollution in the sedimentary core of the Kolleru lake, East coast of India |
| P14 | Derder, M.E.M. , First Moscovian paleomagnetic pole, age-constrained by a fold test, from In Ezzane area in the Murzuq basin (Algeria, Stable Africa): Improvement of the Gondwana APWP |
| P15 | Drago, T., (Silva PF) , On the search of mass transport deposits on Southern Portuguese Margin - preliminary results |
| P16 | Gendler, T.S. , Magnetic and Mossbauer study of Fe-compounds in relicts of Iron Age slags in Denmark (reconstruction of historical iron smelting process) |
| P17 | Gogorza, C.S.G. , New Rock Magnetic and Paleomagnetic Information Obtained for southern Patagonia (Argentina) |
| P18 | Gogorza, C.S.G. , A multiproxy approach to reconstruct the environmental changes in Lago Toncek (Patagonia, Argentina): Preliminary studies |
| P19 | Goguichaichvili, A. , Full vector archaeomagnetic dating of a medieval limekiln at Pinilla del Valle (Madrid, Spain) |
| P20 | Grison, H. , Magnetic and geochemical characterization of volcanic soils developed on basalts in the Massif Central, France |
| P21 | Heinrich, F.C. , Magnetic properties and their mineralogical origin of salt rocks |
| P22 | Herrero-Bervera, E. , Full Vector (i.e. directional and relative paleointensity) results of the geomagnetic signature of the Pringle Falls excursion (ca 211+/-13 ka) recorded at Pringle Falls, Oregon USA |
| P23 | Herrero-Bervera, E. , Magnetostratigraphy and rock magnetic characterization of Baltic Sea IODP Expedition 347 Sites M0059 and M0060 |
| P24 | Irurzun, M.A., (Gogorza, C.S.G.) Preliminary Results of Relative Paleointensity Record of Sediments from Tajamar Formation, Valle De Lerma, Salta, Argentina |
| P25 | Jeleńska, M. , The role of organic matter in pollution catching in indoor dust |
| P26 | Kapička, A. , Magnetism of soils applied for estimation of erosion at morphologically diverse area |
| P27 | Kubisova, L. , Archeomagnetic investigation in Slovakia |

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- P28 **Kumari, M.**, Is 135° Ridge on The Lower Half of The First Order Reversal Curve Diagram an artifact?
- P29 **Lévêque, F.**, Magnetic enhancement of clay materials by heat treatment: role of environmental conditions
- P30 **Lopes, A.**, Assessing climatic changes through environmental magnetic analyses of three sedimentary columns of the North Atlantic Ocean (between 29°N and 35°N)
- P31 **Lurcock, P.C.**, Palaeomagnetic dating of a Quaternary sediment core from the Tyrrhenian Sea
- P32 **Makaroğlu, Ö** , Mineral Magnetic and Geochemical Properties of Kucukcekmece Lagoon (Western Anatolia)
- P33 **Mendakiewicz, M.**, Technogenic magnetic particles in soils as an evidence of historical human activity
- P34 **Menshov, O.**, Magnetic investigations in Carpathian Foredeep of Ukraine
- P35 **Michels, A.**, Characterization of the magnetic properties of the Leka Ophiolite Complex
- P36 **Mohamed K.J.**, Controls on the magnetic properties of sediments from the NW Iberian Margin
- P37 **Necula, C.**, Reconstruction of superparamagnetic particles grain size distribution from Romanian loess using frequency dependent magnetic susceptibility and low temperature Mossbauer spectroscopy
- P38 **Oliva-Urcia, B.**, Magnetic proxies in continental records; what are they telling about environmental changes?
- P39 **Panaiotu, C.G.**, Paleosecular variation in the last 6 Ma recorded by lava flows from the East Carpathians (Romania)
- P40
- P41 Roxerová, Z. (**Machek, M.**) AMS of deformed hematite in torsion
- P42 **Satolli, S.**, Jurassic magnetostratigraphy from the Northern Apennines (Italy)
- P43 **Shcherbakova, V.V.**, Estimating the Variations in Paleointensity from the Siberian Traps of Maimecha-Kotui and Norilsk Region
- P44 **Silva, P.F.**, Paleomagnetic and magnetic study of Faial-Pico ridge (Azores Archipelago)
- P45 **Silva, S.**, Heading Error of Andrómeda's class hydrographic survey vessels
- P46 Soler-Arechalde, AM., (**Goguichaichvili, A.**) A Detailed Record of Brunhes-Matuyama Geomagnetic Reversal in Tlalpan Paleosols (Central Mexico)
- P47 Tema, E., (**Goguichaichvili, A.**) Dating of ancient baked clays: A combined archaeomagnetic and thermoluminescence analysis applied to a brick workshop at Kato Achaia, Greece.
- P48 Tema, E., (**Camps, P.**) Full geomagnetic field determination of two brick kilns, Osterietta (Northern Italy).
- P49 **Veselovskiy, R.**, Paleomagnetism and geochronology of the Devonian dykes, Kola Peninsula
- P50 **Veselovskiy, R.**, New constraints on duration and rate of the Siberian traps volcanism based on a new high detailed paleomagnetic data
- P51 **Villalain, J.J.**, New paleomagnetic records of the Cretaceous remagnetizations in eastern Iberia (Maestrat Basin).
- P52 **Werner, T.**, Synfolding remagnetization of Permian redbeds and synfolding magnetization of Jurassic limestones and tectonic reconstructions in Permian and Jurassic rocks in Dinarides (Croatia)
- P53 **Werner, T.**, Effects of the coring and sampling techniques on the palaeomagnetic record and magnetic fabric in the Tertiary and Quaternary preglacial sediments (Różce profile, Grójec area, Mazovian, Poland) – preliminary interpretations
- P54 **Yang, T.**, Rock magnetic properties of fault rocks from the rupture of the 2008 Wenchuan earthquake, China and their implications for seismic faulting
- P55 **Zhidkov, G.V.**, To the determinations of absolute paleointensity on contemporaneous flows from Kamchatka and Antarctica
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