
Assoc. prof. Dr. Jindřich Kynický

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Born: 08/02/1980 in Hustopece, Czech Republic; Nationality: Czech; Sex: male

RESEARCH EXPERIENCE

Mendel University in Brno, Czech Republic - Head of department, Department of Geology and Pedology	Since 01/2015-now
Brno University of Technology, Czech Republic – researcher (part time job, 0,2)	2012 –2017
University of Brighton, Great Britain – 1-3 weeks researcher and visiting scientist	2012-2017
University of Manitoba, Canada – 1-3 weeks researcher and visiting scientist	2006, 2010, 2013
University of Peking, Peoples Republic of China – yearly, researcher and visiting scientist, repeated 1-2 month researcher and visiting scientist, School of Earth & Space Sciences	Since 2007 - now
University of Science and Technology, Mongolia — yearly, 1 month researcher and visiting scientist	Since 2006 - now)
Mendel University in Brno, Czech Republic - Ph.D. student	09/2003 – 12/2006
Masaryk University, Czech Republic - MS student	09/1998 – 05/2003

SELECTED PROJECTS

Investigator

- IGA- LDF_PSV_2017008 Development of new soil substrates using micro- and nano-sorbents of nutrients for forest nurseries and planting material in Czech Republic 2017-19
- H2020 (No. 689909), New geomodels to explore deeper for High-Technology critical raw materials in Alkaline rocks and Carbonatites 2016-2020

Participation in projects

- Czech Ministry of Industry and Trade of the Czech Republic (TH03030319) - Promoting the functional diversity of soil organisms by applying classical and modified stable organic matter while preserving the soil's production properties 2018-2022
 - Czech Ministry of Industry and Trade of the Czech Republic (TH02030169) - Effect of biologically transformed organic matter and biochar application on the stability of productive soil properties and reduction of environmental risks 2017-2020 2018-2022
 - Major State Basic Research Development Program of China (No. 2013CB429800) "The tectonic superposing and large-scale mineralization in the Xing'anling-Mongolian orogenic belts" 2013-2017
 - Chinese National Science Foundation (No. 41173033) The comparative study of the carbonatite-complex in North China Craton and their geodynamic background 2012-2016
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AWARDS AND APPRECIATIONS

- Head of Committee, Critical Metals meeting (CM2018), Skalní mlýn, Czech Republic 2018
- Head of Committee, Critical Metals meeting (CM2017), Ulaanbaatar, Mongolia 2017
- Committee member, Critical Metals meeting (CM2017), Miass, Russian Federation 2017
- Head of Committee, Critical Metals meeting (CM2016), Ulaanbaatar, Mongolia 2016
- Head of Committee, Critical Metals meeting (CM2015), Apatity, Russian Federation 2015
- Head of Committee, Critical Metals meeting (CM2013), Ulaanbaatar, Mongolia 2013
- Head of Committee, Critical Metals meeting (CM2012), Peking, China 2012
- IAGOD WG CM Secretary post, International Association on the Genesis of Ore Deposits 2012-2013
- The best scientific project WOA, 2003 2003
- Editor, handling editor of special issues in *Ore Geology Reviews*, *Mineral, Minerals* —
Open Access Journal of Mining & Mineral Processing
- Invited speaker/expert of 35 international conferences, workshops and expert meetings
- Head or invited expert of twenty five international geological excursions and expeditions
(Africa, Asia, Europe, Greenland, South and North America)- total duration ≥ 30 months

SCIENTIFIC INTERESTS

- Carbonates, phosphates, carbonatites, alkaline rocks and associated weathered crusts and soil
- Critical metals, REE deposits, ore geology, mineralogy, petrology, geochemistry
- Natural and soil organic matter, clay and soil analysis, dissolved organic matter, biodegradation
- Microscopy (PL, CL, SEM, TEM), nanomaterials, nanoparticles and application of modern methods in nano-, micro-, macro-, remote sensing research and all possible applications

RECENT PAPERS

1. **Kynicky J.**, Smith M.P., Song W., and others (2018, accepted): The role of carbonate-fluoride melt immiscibility in shallow REE deposit evolution. ***Geoscience Frontiers***.
2. Smith M.P., **Kynicky J.**, Cheng X., and others (2018, accepted): The Origin of secondary heavy Rare Earth Element enrichment in carbonatites: Constraints from the evolution of the Huanglongpu district, China, ***Lithos***.
3. **Kynicky J.**, Milosavljevic V., Jelinkova P., and others (2018, accepted): Europium and terbium Schiff base peptide complexes as potential antimicrobial agents against *Salmonella typhimurium* and *Pseudomonas aeruginosa*. ***Chemical Papers***.
4. Cheng X., **Kynicky J.**, Song W., and others (2018, accepted): Cold deep subduction recorded by remnants of a Paleoproterozoic 2 carbonated slab. ***Nature Communications***.
5. Song W., Cheng X., Smith M., and others (2018, accepted): Genesis of the world's largest rare earth element deposit, Bayan Obo, China: protracted mineralization evolution over ~1 billion years. ***Geology***.
6. Cheng X., **Kynicky J.**, Tao R., and others (2017): Recovery of an oxidized majorite inclusion from Earth's deep asthenosphere. ***Science Advances*** 3/4, doi:10.1126/sciadv.1601589.
7. Cheng X., **Kynicky J.**, Smith M.P., and others (2017): Origin of heavy rare earth minerali South China. ***Nature Communications*** 8: 14598, doi:10.1038/ncomms14598.