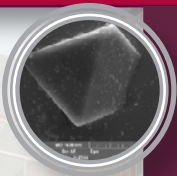


Department of Geology  
Seminar Series

# Are metamorphic microdiamonds from Bohemia forever?

**Location:**  
Science 408



**Tuesday,**  
**October 19**  
**1:00 pm**

**Jana Kotková** specializes in metamorphic and magmatic petrology, has experience in geochronology and geochemistry, and in use of micro-nano-analytical techniques to decipher petrogenesis of the rocks.

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**Jana Kotková**

**Czech Geological Survey, Prague,  
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Features of gem-quality octahedral metamorphic diamond forms rarely found in Central Europe provide important insights into nucleation and growth mechanisms of microdiamonds worldwide.

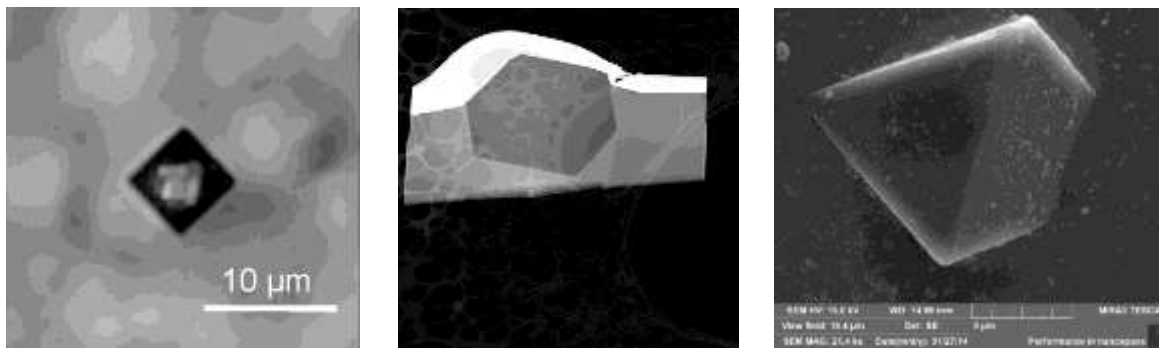


**Saint Mary's  
University**

SCIENCE

Dr. Jana Kotková, Czech Geological Survey, Prague, & Masaryk University, Brno, Czech Republic

Title: Are metamorphic microdiamonds from Bohemia forever?



### Abstract

Metamorphic diamonds occurring in ultrahigh-pressure metamorphic (UHPM) terranes provide evidence for a deep subduction of continental crust in convergent orogens and its exhumation to the Earth's surface. Microdiamonds are enclosed in peak metamorphic phases, i.e., garnet and kyanite, as well as zircon. Gem-quality octahedral diamond forms are common in Bohemia, Central Europe, while cubo-octahedra are characteristic of other UHPM terranes. The octahedral diamond features (morphology, resorption, carbon isotope composition), combined with P-T constraints from the metasedimentary host rocks, provide important insights into nucleation and growth mechanisms of microdiamonds worldwide. In addition, the Bohemian microdiamonds are well-preserved, without any surface graphitization, which has been reported elsewhere. Examination if and why they are "forever" is a target of our present study.

## Biography - Dr. Jana Kotková

Specializing in metamorphic and magmatic petrology, experience in geochronology and geochemistry, use of micro-nano-analytical techniques to decipher petrogenesis of the rocks.

- Graduated at Charles University in Prague, Czech Republic (eq. Mgr.)
- Studentship at ENS Lyon and BRGM, France.
- Obtained PhD from the Czech Academy of Sciences, Prague.
- British Council grant, Edinburgh University, UK.
- Europrobe Travel Grant, NIGL Keyworth, UK.
- Humboldt Scholarship, Ruhr-Universität Bochum and Potsdam University, Germany.
- Habilitation at Masaryk University in Brno (Assoc. Prof.).
- Member of the Science Advisory Group of the ICDP (2017-2021)
- Member of the Medal Committee, IMA (2016-2019)
- Editorial board member, Journal of Geosciences (2007-2017)
- Member of the Czech Geological Society (2001-2003 president)