

Informačný list predmetu (Course description)

Vysoká škola (University): Comenius University in Bratislava					
Fakulta (Faculty): Faculty of Natural Sciences					
Kód predmetu (Code): PriF.KMPLG/N-mMPL-013/22			Názov predmetu (Course): Laboratory methods in mineralogy, petrology and economic geology		
Druh, rozsah a metóda vzdelávacích činností (Study design): Seminar, weekly, 3 hours seminar, 39 hours per semester. Method of study: full time, combined.					
Počet kreditov (Number of credits earned): 3					
Odporúčaný semester/trimester štúdia (Recommended semester): 1. Winter semester					
Stupeň štúdia (Degree): II. Degree					
Podmieňujúce predmety (Prerequisite courses): none					
Podmienky na absolvovanie predmetu (Grading policy): To obtain an A rating, it is necessary to demonstrate 92-100% of the required knowledge; to obtain a B rating 84-91%, for a C rating 76-83%, for a D rating 68-75% and for an E rating 61-67% of the required knowledge.					
Výsledky vzdelávania (Course objectives): The course includes the basics of methodology and practical use of electron-optical (electron microanalysis, scanning electron microscopy (SEM), transmission microscopy (TEM), cathode luminescence (CL)), diffraction (powder and single-crystal X-ray diffraction, EBSD - diffraction in backscattered electrons) and spectroscopic instruments (Mössbauer spectroscopy, IR - infrared spectroscopy, Raman spectroscopy, Optical absorption spectroscopy).					
Stručná osnova predmetu (Syllabus): Introduction to electron microscopy; Scanning electron microscopy, electron probe microanalysis; Transmission microscopy; Diffraction methods; Diffraction in backscattered electrons; X-ray diffractometry; Luminescence methods; Spectroscopic methods; Mössbauer spectroscopy; Infrared spectroscopy; Raman spectroscopy; Optical absorption spectroscopy; Computer microtomography.					
Odporúčaná literatúra (Suggested readings): (1) Krištín, J., Bobák, M., 2005: Elektronovo optické metódy. Univerzita Komenského, Bratislava; (2) Bačík P., Fejdi P., 2013: Prášková rtg. difraktometria. Univerzita Komenského, Bratislava; (3) Bačík, P., Fridrichová, J., 2018: Spektroskopické metódy v mineralógii. Univerzita Komenského, Bratislava.					
Jazyk, ktorého znalosť je potrebná na absolvovanie predmetu (The course is held in): English					
Poznámky (Other course information):					
Hodnotenie predmetov (Grading history)					
A	B	C	D	E	FX
0	0	1	0	0	0
Vyučujúci (Professor): Assoc. Prof. Peter Bačík, PhD., Assoc. Prof. Peter Uhlík, PhD., Assoc. Prof. Jana Fridrichová, PhD., M.Sc. Daniel Ozdín, PhD., Assoc. Prof. Peter Ružička, PhD., Assoc. Prof. Marek Osacký, PhD.					
Dátum poslednej zmeny (Last update): 24. April 2023					
Schválil (Approved by): prof. RNDr. Monika Huraiová, PhD.					