

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-001/22			Názov predmetu (Course): Crystal Chemistry of Minerals		
Druh, rozsah a metóda vzdelávacích činností (Study design): Lectures and seminar, weekly, 2 hours lecture / 1 hour seminar, 39 hours per semester. Method of study: full time, combined.					
Počet kreditov (Number of credits earned): 4					
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 graduate will gain an overview of the crystal chemistry for several classes of minerals, the recalculation of chemical analyses, the variability of chemical composition, classification and substitutions.					
Stručná osnova predmetu (Syllabus): Introduction to crystal chemistry, chemical bond and its properties, coordination bodies, Pauling's rules; Substitutions, Goldschmidt rules and substitution vectors, classification and substitution diagrams; Elements, sulphides - calculation of chemical analyses of minerals to a fixed number of atoms; Oxides - calculation of chemical analyses of minerals to a fixed number of cations; Carbonates; Sulphates; Phosphates; Silicates – pyroxenes, amphiboles; micas, chlorites - calculation of chemical analyses of minerals to a fixed number of anions; Clay minerals; Zeolites; Feldspars.					
Odporúčaná literatúra (Suggested readings): (1) Fejdi P., 1997: Všeobecná mineralógia : Štruktúrna kryštalografia a základy kryštalochémie. Univerzita Komenského, Bratislava; (2) Fejdi P., 2004: Kryštalochémia horninotvorných minerálov. Univerzita Komenského, Bratislava; (3) Klein C., 2006: Mineralógia. Oikos-Lumon, Bratislava, 666 s.; (4) Šucha V. 2001: Íly v geologických procesoch. Acta Geologica Univ. Com. Séria Monografie, Bratislava, 159 s.					
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	0	0	1	0
Vyučujúci (Professor): Assoc. Prof. Peter Bačík, PhD., Assoc. Prof. Peter Uhlík, PhD., Prof. Pavel Uher, PhD., M.Sc. Daniel Ozdín, PhD., Assoc. Prof. Jana Fridrichová, PhD.					
Dátum poslednej zmeny (Last update): 24. April 2023					
Schválil (Approved by): prof. RNDr. Monika Huraiová, PhD.					