





Osnovno razumevanje rentgenske difrakcije in elektronske mikroskopije.	Basic understanding of X-ray diffraction and electron microscopy.
<u>Uporaba</u> Načrtovanje ciljnega spreminjanja lastnosti trdnin. Identifikacija prisotnih faz v polikristalinični zmesi. Uporaba rezultatov elektronske mikroskopije za karakterizacijo trdnin.	<u>Application</u> The planning of changing of properties of solids. Phase identification of polycrystalline mixtures. The application of results of electron microscopy for the characterisation of solids.
<u>Refleksija</u> Identifikacija problemov, ki so rešljivi z uporabo kristalografskih metod ali elektronske mikroskopije ali kombinacije obojega.	<u>Analysis</u> The identification of problems, which can be solved by the application of crystallographic methods or by electron microscopy or by the combination of both.
<u>Prenosljive spretnosti</u> Samostojno in skupinsko delo za doseg določenega cilja (rezultata). Samostojno iskanje podatkov in virov znanja v literaturi, bazah podatkov in na spletu.	<u>Skill-transference Ability</u> Individual and group work for achieving results. Individual search for data and sources of knowledge in the literature, databases and world wide web.

**Metode poučevanja in učenja:**

Predavanja, vaje (samostojne in v paru), prostovoljne individualne naloge.

**Learning and Teaching Methods:**

Lectures, tutorials (individual and in pairs) and voluntary individual exercises.

Delež (v %) /

Weight (in %) **Assessment:**

**Načini ocenjevanja:**

- Pisni izpit (izpit je mogoče opraviti tudi s pozitivno oceno dveh pisnih testov, ki se pišeta sredi in ob koncu semestra). Pogoji za pristop k pisnemu izpitu so opravljene vaje, vključno s pozitivnim kolokvijem iz vaj.	<b>60</b>	- Written exam (written exam can be accomplished also by achieving positive grades from two written tests). Positive grade of tutorial work (including with positive colloquium) is necessary before writing the exam.
-Kolokvij iz vaj.	<b>40</b>	- Colloquium from tutorial work.
-Testi pripravljenosti na vaje.		- Tests of preparedness for tutorial work.
- Ocena: 6-10 (pozitivno) in 1-5 (negativno)		- Grade: 6-10 (positive) and 1-5 (negative)

**Reference nosilca / Lecturer's references:**

- **GOLOBIČ, Amalija\***, ŠKAPIN, Srečo D., SUVOROV, Danilo, MEDEN, Anton. Solving structural problems of ceramic materials. *Croatica chemica acta*, ISSN 0011-1643, 2004, vol. 77, no. 3, str.

435-446.

- KASUNIČ, Marta, MEDEN, Anton, ŠKAPIN, Srečo D., SUVOROV, Danilo, **GOLOBIČ, Amalija\***.  
Order-disorder of oxygen anions and vacancies in solid solutions of  $\text{La}_2\text{TiO}_5$  and  $\text{La}_4\text{Ga}_2\text{O}_9$ . *Acta crystallogr., B Struct. sci.*, 2009, vol. B65, no. 5, str. 558-566.

- KASUNIČ, Marta, MEDEN, Anton, ŠKAPIN, Srečo D., SUVOROV, Danilo, **GOLOBIČ, Amalija\***.  
Structure of  $\text{LaTi}_2\text{Al}_9\text{O}_{19}$  and reanalysis of the crystal structure of  $\text{La}_3\text{Ti}_5\text{Al}_{15}\text{O}_{37}$ . *Acta crystallogr., B Struct. sci.*, 2011, vol. B67, no. 6, str. 455-460.

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