



**Serbian Ceramic Society Conference
ADVANCED CERAMICS AND APPLICATION IX
New Frontiers in Multifunctional Material Science and Processing**

**Serbian Ceramic Society
Institute of Technical Sciences of SASA
Institute for Testing of Materials
Institute of Chemistry Technology and Metallurgy
Institute for Technology of Nuclear and Other Raw Mineral Materials**

PROGRAM AND THE BOOK OF ABSTRACTS

**Serbian Academy of Sciences and Arts, Knez Mihailova 35
Serbia, Belgrade, 20-21. September 2021.**

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Book title: Serbian Ceramic Society Conference - ADVANCED CERAMICS AND APPLICATION IX Program and the Book of Abstracts

Publisher:

Serbian Ceramic Society

Editors:

Prof.dr Vojislav Mitić

Dr Lidija Mančić

Dr Nina Obradović

Technical Editors:

Ivana Dinić

Marina Vuković

Printing:

Serbian Ceramic Society, Belgrade, 2021

Edition:

100 copies

CIP - Каталогизacija y publikaciji
Народна библиотека Србије, Београд

666.3/.7(048)

66.017/.018(048)

SRPSKO KERAMIČKO DRUŠTVO. CONFERENCE ADVANCED CERAMICS AND APPLICATION : NEW FRONTIERS IN MULTIFUNCTIONAL MATERIAL SCIENCE AND PROCESSING (9 ;2021 ; BEOGRAD)

Program ; and the Book of abstracts / Serbian Ceramic Society Conference Advanced Ceramics and Application IX : New Frontiers in Multifunctional Material Science and Processing, Serbia, Belgrade, 20-21. September 2021 ; [organized by Serbian Ceramic Society ... [et al.] ; [editors Vojislav Mitić, Lidija Mančić, Nina Obradović]. - Belgrade : Serbian Ceramic Society, 2021 (Belgrade : Serbian Ceramic Society). - 93 str. : ilustr. ; 30 cm

Tiraž 100.

ISBN 978-86-915627-8-6

а) Керамика -- Апстракти б) Наука о материјалима -- Апстракти в) Наноматеријали -- Апстракти

COBISS.SR-ID 45804553

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THE SEM/EDS ANALYSIS OF ZEOLITE MINERALS

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The SEM/EDS analysis is one of the most important methods for characterizing and determining the morphology of minerals. In scanning electron microscopy (SEM), a highly energetic and focused electron beam scans the sample and normally provides an extremely enlarged image of the morphology of the sample, as well as information on its chemical composition using an energy dispersive spectrometer (EDS) detector. In this paper are presented the SEM/EDS investigation of natural zeolit deposit Igros and Zlatokop.

P

STRUCTURAL AND CHEMICAL PROPERTIES OF ZEOLITE FAU-TOPOLOGY

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Zeolite FAU is a synthetic product formed by various process of synthesis. The unit cell of zeolite of FAU topology contains 192 (Si, Al) O₄ - tetrahedra, it has tesseral symmetry and the unit cell parameter is ~ 25 Å Key words: feldspar, hyalophane, crystallochemical properties. The FAU aluminosilicate network consists of a series of β-cages, which are tetrahedrally connected via D6R secondary building units. On this paper are presented the results of structural and crystallochemical analysis zeolite FAU topology. The SEM/EDS methods and X-ray powder diffraction analysis are useful for analysis.