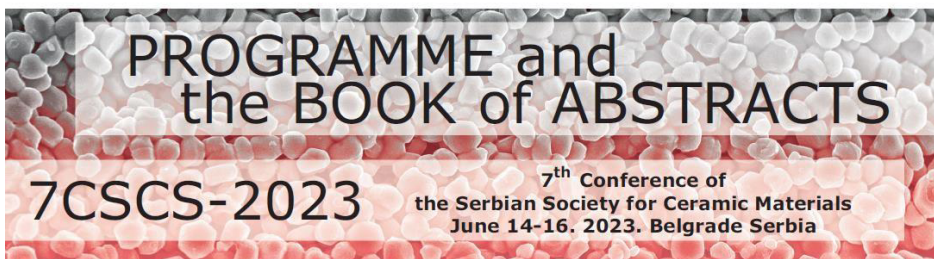


The Serbian Society for Ceramic Materials  
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Institute of Physics, University of Belgrade  
Center of Excellence for the Synthesis, Processing and Characterization of  
Materials for use in Extreme Conditions "CEXTREME LAB" - Institute of  
Nuclear Sciences "Vinča", University of Belgrade  
Faculty of Mechanical Engineering, University of Belgrade  
Center of Excellence for Green Technologies, Institute for Multidisciplinary  
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# **PROGRAMME AND THE BOOK OF ABSTRACTS**

**7<sup>th</sup> Conference of The Serbian Society for  
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**June 14-16, 2023**  
**Belgrade, Serbia**  
**7CSCS-2023**

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P-41

**EFFECT OF CoMoO<sub>4</sub> NANOPOWDERS SYNTHESIZED BY GLYCINE NITRATE PROCEDURE AND CALCINATED AT 450 °C ON BRIGGS-RAUSCHER OSCILLATORY DYNAMICS**

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Cobalt molybdate is of importance for the development of mobile telecommunication systems, such as mobile phones and high-quality microwave dielectric ceramics for high resonant frequency selectivity in microwave devices. Due to their special catalytic properties, cobalt molybdates have been used as catalysts in many chemical and petrochemical processes. The CoMoO<sub>4</sub> nanoparticles were synthesized in a simple, quick, and inexpensive way, by using a glycine nitrate procedure (GNP), with and without calcination at 450 °C [1], and investigated by applying the Briggs-Rauscher oscillatory reaction method [2]. The complex oscillatory BR reaction is sensitive to different insoluble analyte addition [3]. This feature of BR oscillatory reaction is used to investigate effect of different masses of GNP synthesized (with and without calcination at 450 °C) CoMoO<sub>4</sub> samples on oscillatory dynamics. These two samples give the complete different effects in BR reaction. Obtained results strongly suggest that BR oscillatory reaction could be used for distinguishing these two samples, opening new direction in the investigation of ceramics materials.

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