The Serbian Society for Ceramic Materials
Institute for Multidisciplinary Research (IMSI), University of Belgrade
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 Research, University of Belgrade

Faculty of Technology and Metallurgy, University of Belgrade

PROGRAMME and the BOOK of ABSTRACTS

7CSCS-2023

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THE INFLUENCE OF TECHNOLOGICAL PROCESS ON THE CONTENT OF NATURAL ACTIVE PRINCIPLES FROM FRUIT WINES AND ITS BENEFICIAL HEALTH EFFECTS

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Natural active principles are present in the fruit and during its processing pass into the final products. Among many natural active principles it is important to emphasize those which exhibit beneficial health effect on human organism. Beneficial health effect of those compounds is result of antioxidant properties. Wine is fruit derived product which is rich source of those compounds. The aim of this study was to investigate the influence of technological process on the phenolic profile, antioxidant properties and activity of antioxidant protection enzymes in vitro. Fruit wines were produced in controlled conditions during microvinifications. Phenolic profile of fruit wines were obtained by UPLC MS/MS, while antioxidant properties and enzymatic activity determined by spectrophotometric methods. The content of phenolic compounds in fruit wines was significant. It is important to highlight that different applied technology during the production, influenced on the content of above mentioned compounds. Flavonoids and phenolic acids were the most important. Also fruit wines showed ability to activate enzymes of antioxidant protection, which could be used in the protection against free radicals and prevention of oxidative stress.