



20th HSKIKi

**28th CROATIAN MEETING
OF CHEMISTS & CHEMICAL
ENGINEERS**

6th SYMPOSIUM VLADIMIR PRELOG

MARCH 28–31, 2023
HOTEL LONE • ROVINJ
CROATIA

**BOOK OF
ABSTRACTS**



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& CHEMICAL ENGINEERS**

MARCH 28–31, 2023 • ROVINJ, CROATIA

6th Symposium Vladimir Prelog

Book of Abstracts

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Insights into green techniques for the extraction of bioactive compounds: Current research and future challenges

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Recent trends in the extraction field are to use eco-friendly techniques to extract bioactive compounds. The focus is mostly on finding solutions that minimize the use of harmful solvents and allow the use of alternative, so-called "green" solvents, as well as to develop more "sustainable" processes that ensure safe and high-quality extracts/products. The mostly used organic solvents have major drawbacks such as the insufficient recovery of extracts, long extraction time, high amounts of by-products and waste, and high energy consumption. With the green and creative extraction techniques, the extract is produced in such a way so as to have as little negative impact on the environment as possible (reduced energy usage and solvent usage, *etc.*).

A brief overview of the up-to-date knowledge regarding selected green extraction techniques (such as supercritical/subcritical extraction, ultrasound-assisted extraction, *etc.*) will be presented, with special emphasis on the specific examples of the extraction of plant bioactive compounds provided at the Faculty of Food Technology Osijek.

In this presentation, special emphasis will be put on the possible commercial valorization of the research results and on the actual application of these results, with further insights into future trends.

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