



Analytical chemistrygood laboratory practices and applications

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University of Niš (https://www.ni.ac.rs/en/)

Faculty of Science and Mathematics (https://www.pmf.ni.ac.rs/)

Department of Biology and Ecology

Department of Physics

Department of Geography

Department of Mathematics

Department of Computer Science

Department of Chemistry

Chair of Organic Chemistry
Chair of General and Inorganic Chemistry
Chair of applied and Environmental Chemistry
Chair of Analytical and Physical chemistry







Department of Chemistry (33 teachers and 2 teaching asistants)













Chair of Analytical and Physical chemistry

- Staff
- -11 teachers and 1 teaching assistant
- -10 PhD students





Serbian-Bavarian Higher Education Day, September 23rd and 24th, 2019, University of Bamberg







Current research projects

"Development of new and improvement of existing electrochemical, spectroscopic and flow injection (FIA) methods on environmental quality monitoring"

"Ethnopharmacological study of the region of South-Eastern Serbia"

"Natural products of plants and lichens: isolation, identification, biological activity and application"

"Combinatorial libraries of heterogeneous catalysts, natural products, modified natural products and analogues: The approach to new biologically active agents"









EQIPEMENT

Inductively coupled plasma atomic emission spectrometer (ICP-AES);
HPLC Agilent-1200 with UV-Vis DAD detector and Fluorescence Detector (FLD);
Spectrophotometer Agilent-8453;
Spectrophotometer UV-1800 Shimadzu
Spectrophotometer Spectra 2000
Lambda 15 UV/VIS Spectrophotometer
GC-MS-MS triple quadrupole system
Dplus freeze-dryer
MPLC Chromatography system









Main areas of interest

- investigation of a novel sorbents for environmental sample preparation for the determination of polycyclic aromatic hydrocarbons (PAHs) and other pollutants by GC-MS and LC-MS analysis;
- development and validation of the ICP-AES method for determination of elements in soil, water, plants, foods, etc.;
- identification and quantification of polyphenolic compounds in food and plants by HPLC chromatography;
- determination of total polyphenols, flavonoids and anthocyanins in food and plants using spectrophotometric methods;







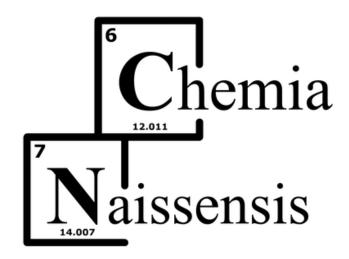
Main areas of interest

- Evaluation of food and plant antioxidant activity by spectrophotometric and electrochemical techniques
- Analysis of key characteristics of grapes&wines
- Chemometric characterization of food and plants according to their antioxidant activities, polyphenolic and metal contents;
- Investigation of the kinetics of the degradation of catechins and procyanidins during food storage and preparation
- Chemical analysis of essential oils and extracts of selected plant species and lichens











Department of Chemistry, Faculty of
Sciences and Mathematics, University of
Nis, Republic of Serbia established the
journal "Chemia Naissensis" which publishes
scientific and popular scientific papers in
chemistry or related disciplines of authors
from Republic of Serbia and abroad in English
with abstracts in Serbian, French and Russian
as well. Two issues have been planned to be
published annually.











- Articles in chemistry and related disciplines
- Abstracts in English, French, Russian and Serbian
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Dr Vesna Stankov Jovanović

Editor-in-Chief

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