

Laboratory for Green Chemistry & Ionic Liquids

Ionic liquids; Green chemistry; Synthesis; Properties; Molecular dynamics

The group deals with the synthesis, characterization, toxicity and application of ionic liquids in the analytical chemistry and separation techniques, then investigates the interactions, optimization and application of new electrolytes with improved safety in a new generations of lithium ion batteries, agriculture, food and pharmaceutical industry, as well as the reactions of association and complex formation in ionic liquids. Group members implemented several bilateral international projects in the field of ionic liquids and green chemistry and are open to any new scientific cooperation and challenges.



SELECTED PROJECTS

Title: *Sustainable and green chemistry approach for environmental friendly analytical methods and energy storage*

Type: Scientific project

Duration: 2011-2019

Project leader:

Prof. Dr Slobodan Gadžurić

Title: *New liquid formulations for the repair of the arable land structure and their impact on the growth and yield of selected plant species of importance for the sustainable development of the Autonomous Province of Vojvodina*

Type: Scientific project

Duration: 2018-2019

Project leader: Prof. Dr Milan Vraneš

Title: *Optimization of industrial and technological processes using solvents with improved safety*

Type: Scientific bilateral French-Serbian project

Duration: 2016-2017

Project leader:

Prof. Dr Slobodan Gadžurić

SELECTED EQUIPMENT

The group has valuable laboratory equipment necessary for analytics, characterization, synthesis and investigation of various newly synthesized substances and materials such as: HPLC, UV/VIS spectrophotometer, electrochemical measurement device VOLTA LAB, densimeter, conductometer, viscosimeter.

COLLABORATIONS

- Faculty of chemistry and chemical technology, Ljubljana, Slovenia (Prof. Dr Marija Bešter Rogač)
- Laboratory for spectroscopy, University of Lille, Lille, France (Prof. Dr Abdenacer Idrissi)
- Laboratory for ionic liquids, University of Aveiro, Aveiro, Portugal (Prof. Dr Mara G. Freire)



CONTACT PERSONS

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