

# Research Group for the Synthesis of Natural Products and Medicinal Chemistry

*Antitumour agents, Styryl lactones, tiazofurin, analogues, cytotoxicity*

Basic research directed to the development of novel routes for the total synthesis of natural cytotoxic lactones and their analogues, as well as for the de novo synthesis of potential bioisosteres of antineoplastic C-nucleoside tiazofurin. In addition, the evaluation of in vitro anti-tumour activity of synthesized compounds toward the selected human neoplastic cell lines is currently under way.



## SELECTED EQUIPMENT

- Bruker 400 MHz NMR spectrometer,
- BUCHI Laboratory Vacuum System,
- BUCHI 510 Melting Point apparatus,
- JULABO FT902 Immersion Cooler.



## COLLABORATIONS

- Oncology Institute of Vojvodina, Sremska Kamenica (evaluation of antitumour activity),
- Institute for Oncology and Radiology of Serbia, Belgrade (detection of apoptosis),
- Department of Chemistry ICTM, Belgrade (HR mass spectra, elemental microanalysis).

## SELECTED PROJECTS

**Title:** *Synthesis and biological testing of new mimics or derivatives of selected cytotoxic lactones, antitumor agent tiazofurin and natural naphthenic acids.*

**Type:** Basic research

**Duration:** 2011-2019

**Contact person:** Velimir Popsavin  
(velimir.popsavin@dh.uns.ac.rs)

**Title:** *Synthesis and biomedical evaluation of anticancer agents obtained from naturally abundant monosaccharide*

**Type:** Project of strategic interest for AP Vojvodina.

**Duration:** December 2012 – December 2013

**Contact person:** Mirjana Popsavin  
(mirjana.popsavin@dh.uns.ac.rs)

**Title:** *Synthesis and application of novel chemotherapeutics based on natural products and metal complexes*

**Type:** Strategic project of the Serbian Academy of Science and Arts.

**Duration:** 2019-2021

**Contact person:** Velimir Popsavin  
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## CONTACT PERSON

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