

In memory of Prof. Victor Sniečkus

July 3-6, 2022 Vilnius, Lithuania

PROGRAM AND ABSTRACT BOOK



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SYNTHETIC APPROACHES TOWARD C-C BONDED TRIAZOLYLPURINES FOR USE IN MATERIALS SCIENCE

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Purine-triazole conjugates belong to the push-pull systems and possess fluorescent properties which can be potentially used in OLED technology and in cell imaging. Our group synthesized C-C bonded triazolylpurine derivatives **1-2** from 2,6-dichloropurine, using the sequence of Mitsunobu, Sonogashira, CuAAC and $\rm S_{\rm N}Ar$ reactions and studied their photophysical properties. Quantum yields reached up to 91% in DCM and 98% in DMSO solutions. Recently C-N bonded triazolylpurine **3** was designed. Further THP group can be substituted with various alkyl groups.

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References:

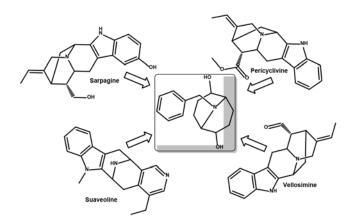
- 1. Šišuļins, A.; Bucevičius, J. *et al. Beilstein J. Org. Chem.* 2019, 15, 474–489.
- 2. Traskovskis, K.; Sebris, A. et al. J. Mater. Chem. C, 2021, 9, 4532-4543.

ENANTIOMERICALLY PURE AZABICYCLO[3.3.1] NONANES FOR THE SYNTHESIS OF SARPAGINE FAMILY ALKALOIDS

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The sarpagine family of alkaloids, traditionally known for their phytochemical applications, constitute a group of monoterpenoid indole alkaloids in great demand for their potential pharmaceutical activity. While naturally very scarce, these alkaloids have been synthesized by Cook's group in the late 1990s - early 2000s employing Pictet – Spengler type chemistry¹.

We suggest a different approach towards the total synthesis of sarpagine family alkaloids from enantiomerically pure azabicyclo[3.3.1] nonanes (Fig. 1). The proposed synthetic approach opens up the way for the large scale synthesis of both enantiomers of sarpagine family alkaloids and enables their further developments for pharmaceutical applications.



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References:

1. Hamaker, L. K. & Cook, J. M. doi:10.1016/B978-0-08-042089-9.50009-7.

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