

PROGRAM AND ABSTRACT BOOK

Riga, Latvia
3-6 July, 2016

www.boschem.eu



SYNTHESIS OF (1-ARYL-1,2,3-TRIAZOL-4-YL)-7-DEAZAPURINES AND PURINES

K. Karpavicius^a, J. Bucevicius^a, A. Sisulins^b, M. Turks^b, S. Tumkevicius^a

^a Department of Organic Chemistry, Vilnius University

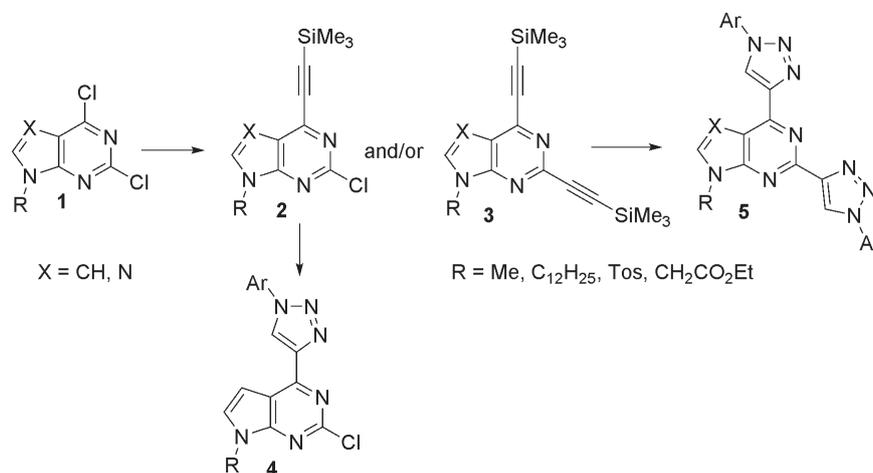
Naugarduko 24, LT-03225 Vilnius, Lithuania

^b Faculty of Materials Science and Applied Chemistry, Riga Technical University

P. Valdena Str. 3/5, Riga LV-1048, Latvia

karolis.karpavicius@chf.vu.lt

Adjacent bis-heterocycles are an important structural motif in natural products and ligands for transition metals. Many heterocycles containing embedded 1,2,3-triazole core possess a wide range of biological activity. In addition, 1,2,3-triazole-(deaza)purine conjugates exhibit valuable photoluminescence properties.¹ In this context, we report herein on the synthesis of (1-aryl-1,2,3-triazol-4-yl)-7-deazapurines and purines.



For the construction of the target molecules, the Sonogashira coupling of 2,6-dichloro(deaza)purines **1** with trimethylsilylacetylene and following CuAAC reaction of **2**, **3** with aryl azides has been used.

Acknowledgement

The research was funded by a grant from the Research Council of Lithuania (proj. no. TAP-LLT-01/2015).

References

1. a) Bucevicius, J.; Skardziute, L.; Dodonova, J.; Kazlauskas, K.; Bagdziunas, G.; Jursenas, S.; Tumkevicius, *RSC Adv.* **2015**, *5*, 38610; b) Koval, A.; Novosjolova, I.; Bizdena, E.; Bizane, I.; Skardziute, L.; Kazlauskas, K.; Jursenas, S.; Turks, M. *Tetrahedron Lett.* **2013**, *54*, 850.