LATVIJAS UNIVERSITĀTE

78. Latvijas Universitātes starptautiskā zinātniskā konference

Organiskā ķīmija

Piektdiena
2020. gada
6. martā
plkst. 11.00

LU Dabas māja
Jelgavas iela 1 – 202
Ķīmijas fakultāte

Programma

Sēdes vadītājs : Prof. Edgars Sūna

11.00 – 13.00	**Sekcijas darba sākums**
	ANTIBODY DRUG CONJUGATES **Vilnis Liepiņš**
	SYNTHESIS OF LUPAN BASED ISOXAZOLE DERIVATIVES AND THEIR CYTOTOXICITY **Māris Bazulis**
	SYNTHESIS OF SILYL SULFOLENES IN TANDEM TRANSORMATION FROM PROPARGYL SILANES IN LIQUID SO_2 **Rūdolfs Beļaunieks, Mikus Puriņš**
	ENANTIOBAGĀTINĀTU CIĀNOHIDRĪNU SINTĒZE **Artūrs Raimonds Feldmanis**
	RU(II)-CATALYZED SULFINATION OF BORONIC ACIDS: NOVEL MULTI-COMPONENT PROCEDURE TOWARDS SULFONES **Krista Gulbe**
	AZIDE-TETRAZOLE EQUILIBRIUM MEDIATED S_NAr REACTIONS OF ARYLTHIOPURINE DERIVATIVES **Andris Jeminejs**
	SYNTHESIS OF NOVEL ASPARTIC-PROTEASE INHIBITORS FOR TREATMENT OF MALARIA **Vadims Kovada**
13.00 – 13.30	**Pārtraukums**
13.30	**Sekcijas darba turpinājums**
	1,2,3-TRIAZOLES AS GOOD LEAVING GROUPS IN SNAr-ARBUZOV REACTION **Kārlis Ēriks Kriķis**
	HOMOALLYLHALIDE SYNTHESIS FROM CYCLOPROPYLIDENES IN LIQUID SO2 MEDIUM **Kristaps Leškovskis, Krista Gulbe**
	LINKER DESIGN ENABLES ULTRA-LONG PHOSPHORESCENCE **Artūrs Mazarevičs**
	SYNTHESIS OF α,β-UNSATURATED ARYLSULFONAMIDES **Linda Pudnika**
	SYNTHESIS AND PHOTOPYSICAL PROPERTIES OF SUBSTITUTED PURINE-CARBAZOLE CONJUGATES **Armands Sebris**
	FIVE-MEMBERED HETEROCYCLES AS LINKERS FOR CATIONIC AMPHIPHILIC LIPID ANALOUGES **Anda Sīpola, Ksenija Korotkaja**
	MEISENHEIMER COMPLEXES IN SYNTHESIS AND TRANSFORMATIONS OF AZIDOPURINE DERIVATIVES **Jānis Miķelis Zaķis, Kristers Ozols**

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ĶĪMIJAS sekcija
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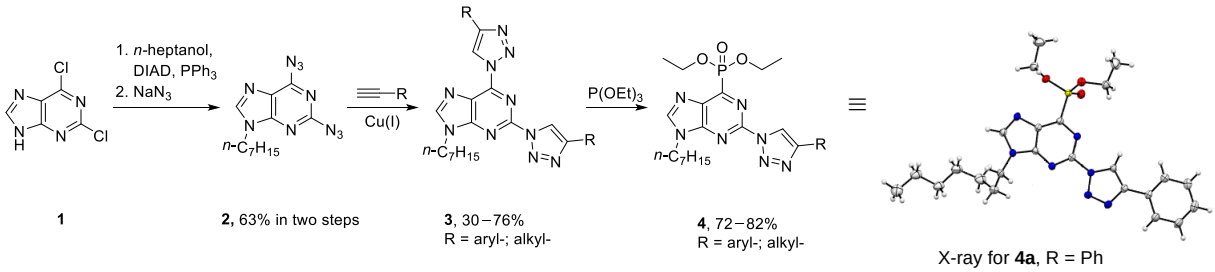
Kārlis Ēriks Kriķis

1,2,3-TRIAZOLES AS GOOD LEAVING GROUPS IN S_NAr-ARBUZOV REACTION

Faculty of Materials Science and Applied Chemistry, Riga Technical University, P.Valdena str. 3., Riga, LV 1048, Latvia
e-mail: Karlis-Eriks.Krikis@rtu.lv

Purine derivatives are widely studied due to their biological activity. Purines containing phoshonate moiety are known as antiviral drugs, representative example is tenofovir [1,2].

In this work C6-phosphonated purine derivatives have been obtained using S_NAr-Arbuzov reaction between 2,6-bistriazolylpurine derivatives and phosphites. Staring material **2** was synthesized in two steps using Mitsunobu reaction and substitution of Cl atoms with azides. Then 2,6-diazidopurine derivative **2** was used in CuAAC reactions with different alkynes, giving products **3** in yields up to 76%. Structure and regioselectivity of C6-phosphonated purine derivatives **4** were proved by X-ray analysis.



Supervisor: Dr. chem. I. Novosjolova.

Acknowledgements: Dr. phys. A. Mishnev for X-ray analysis.

This work was supported by the Latvian Council of Science grant No LZP-2018/2-0037.

References:

[1] Razonable, R. R. *Mayo. Clin. Proc.* **2011**, *86* (10), 1009–1026.
[2] Kalda, A.; Yu, L.; Oztas, E.; Chen, J. F. *J. Neurol. Sci.* **2006**, *248* (1–2), 9–15.