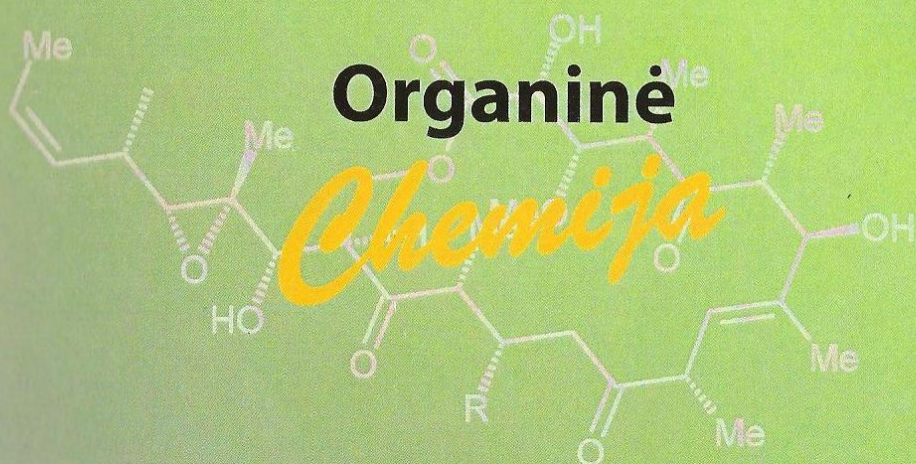


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Proceedings of Scientific Conference

TURINYS

I. Novosjolova, Ē. Bizdēna, M. Turks 2,6-Bis-(1,2,3-triazolyl)-purine nucleosides and their reactivity towards different nucleophiles	7
E. Rolava, V. Rodins, S. Belyakov, M. Turks Synthetic pathway for carbohydrate-based spiro-oxazolidinone derivatives	12
I. Novosjolova, Ē. Bizdēna, M. Turks Synthesis and photophysical studies of N^6 -substituted-2-triazolyl adenine derivatives	17
V. Rjabovs, D. Zeļencova, E. Liepinsh, M. Turks Insight into possible secondary structures of glucose-derived carbopeptoids by NMR and CD spectroscopies.....	18
J. Lugiņina, M. Turks Construction of novel sugar derivatives via Michael/1,3-dipolar addition sequence	19
D. Posevins, V. Rjabovs, M. Turks Synthesis of linear homooligomers from novel furanoid sugar amino acids.....	20
K. Ozols, Ē. Bizdēna Synthesis and reactions of 2,6-diazidopurine deoxynucleoside.....	21
V. Pozņaks, M. Turks Stereoselective synthesis of GABA derivatives from diacetone-D-glucose.....	22
K. Vēze, D. Vasiljevs, J. Lugiņina, M. Turks Synthesis and applications of 3-C-nitromethyl derivatives of hexafuranoses	23
E. Rolava, U. Peipiņš, M. Turks Synthesis and applications of (-)-(S)-3-aminoquinuclidine derivatives.....	24
V. Zvarych, R. Musyanovych, O. Stanko, M. Stasevych, V. Novikov, V. Mickevičius, K. Anusevičius Synthesis of new 3,3'-[(4-R-phenyl)azanediy]- bis(<i>N</i> -(9,10-dioxo-9,10-dihydroanthracen-1-yl)propanamide).....	25
R. Jančienė, G. Mikulskienė, A. Vektarienė 1-(2-Nitrobenzoi)-1,5-benzdiazepin-2-ono ir 6,7-dihidrochinazolino- [3,2- <i>a</i>][1,5]benzdiazepino darinių struktūros ypatybių tyrimas.....	27
T. Javorskis, D. Podėnienė, S. Palaikienė, R. Asakavičiūtė, Z. Maknickienė 1,5-Pakeistų 1,3,4,5-tetrahidro-2 <i>H</i> -1,5-benzdiazepin-2-ono darinių poveikis siauralapių lubinų (<i>Lupinus angustifolius</i> L.) augimui	30

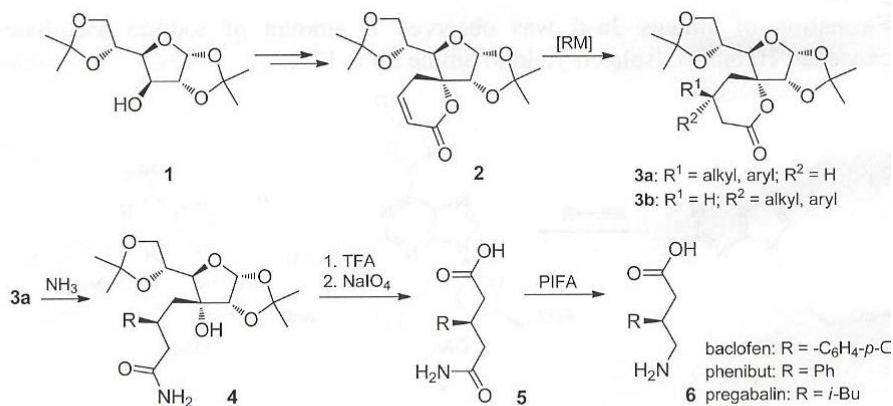
STEREOSELECTIVE SYNTHESIS OF GABA DERIVATIVES FROM DIACETONE-D-GLUCOSE

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We present an approach to synthesis of enantiomerically enriched 3-substituted γ -aminobutyric acid derivatives. This class of compounds includes well-known CNS drugs baclofen, phenibut and pregabalin.

The proposed key reaction is diastereoselective Michael addition^{1,2} on α,β -unsaturated lactone **2** (Scheme 1) which contains sugar moiety as chiral auxiliary. The latter is obtained in a four step synthesis from diacetone-D-glucose **1**, an inexpensive and commercially available compound.



Scheme 1. Synthetic pathway towards GABA derivatives.

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