Thematic Section: Preparative Chemistry. **Full Paper**
Subsection: Organic Chemistry. *Registration Code of Publication:* 13-34-5-11
Publication is available for discussion in the framework of the on-line Internet conference "*Butlerov readings*".
http://butlerov.com/readings/
Contributed: April 15, 2013.

Synthesis of dibazole derivatives

© **Natalia V. Meshcheryakova**, **Sergey I. Bobrovsky**,
Zoya P. Belousova,*+ **Yury P. Zarubin**, and **Pyotr P. Purygin**
Department of Organic, Bioorganic and Medicinal Chemistry. Samara State University. Akad. Pavlov St., 1. Samara, 443011. Samara region. Russia. Phone: +7 (846) 334-54-59. E-mail: zbelousova@mail.ru

*Supervising author; +Corresponding author

Keywords*: dibazole, 4-(2-benzyl-1H-benzimidazole-1-ylmetyl)phenol, 2-(2-benzyl-1H-benzimidazole-1-ylmethyl)phenol, 4-(2-benzyl-1-benzimidazole-1-ylmethyl)phenyl-2,3,4,6-tetra-O-acetyl-β-D-glucopyranoside.*

Abstract

The synthesis of dibazole derivatives: 2-(2-benzyl-1*H*-benzimidazole-1-ylmethyl)phenol, 4-(2-benzyl-1*H*-benzimidazole-1-ylmethyl)phenol, 4-(2-benzyl-1*H*-benzimidazole-1-ylmethyl)phenyl-2,3,4,6-tetra-*O*-acetyl-β-*D*-glucopyranoside was implemented. The structure of the compounds was confirmed by IR and ^{1}H NMR spectroscopy. Using the program *HyperChem 7.52* we built the models of molecules of synthesized derivatives of benzimidazole and calculated their physicochemical properties. According to the estimation of the alleged biological activity by the program *PASS Professional 2007* the synthesized compounds may possess some types of biological action useful in pharmacology.