

Bis-spiropyrans containing an arylazo group based on indolo[4,5-e]indole

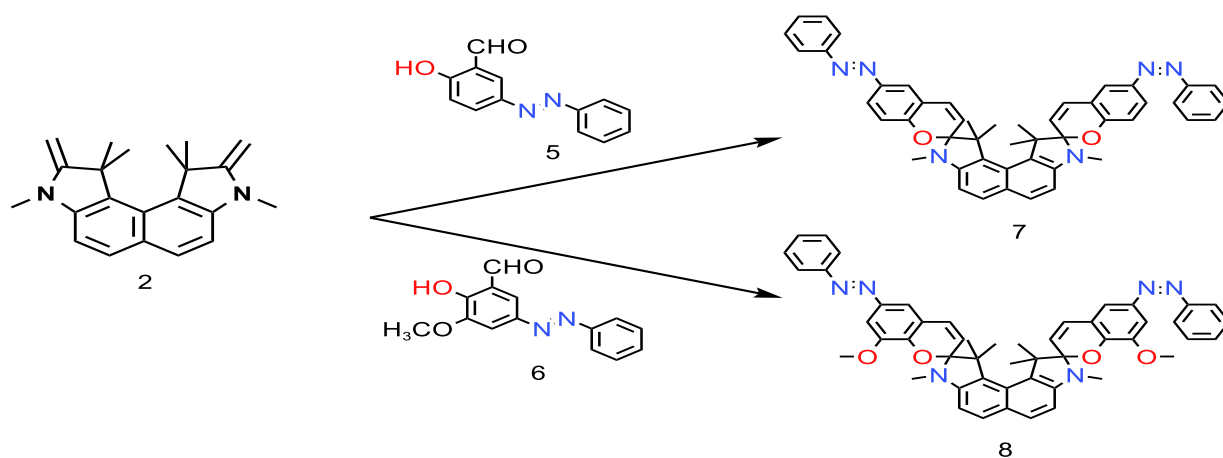
Goga Khubashvili

E-mail: goga.khubashvili613@ens.tsu.edu.ge

Department of Chemistry, Faculty of Exact and Natural Sciences, Ivane Javakhishvili Tbilisi State University, Chavchavadze Street 3, 0179 Tbilisi, Georgia

Spiropyrans are the most important class of organic photochromes, which have received much attention from researchers in recent years. The photochromic properties of spiropyrans are significantly influenced by various substituted groups in the hetarin part of the chromic fragment of the molecule.

One of the important problems of organic chemistry is the creation of stable and easily controlled photochromic systems that can be used to obtain new promising materials. The aim of the research was to obtain spirochromen, the molecule of which contained an additional chromophoric group, which should cause the extension of the conjugation chain and create an opportunity to improve the photochromic properties. We chose the bis-analogue of Fischer's base - dimethyleneindolino[4,5-e]indoline, which was previously synthesized at the department, as the object of the research, on the basis of which the synthesis of new bis-spirochromenes was carried out by condensation with phenylazo salicyl aldehydes.



References:

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