

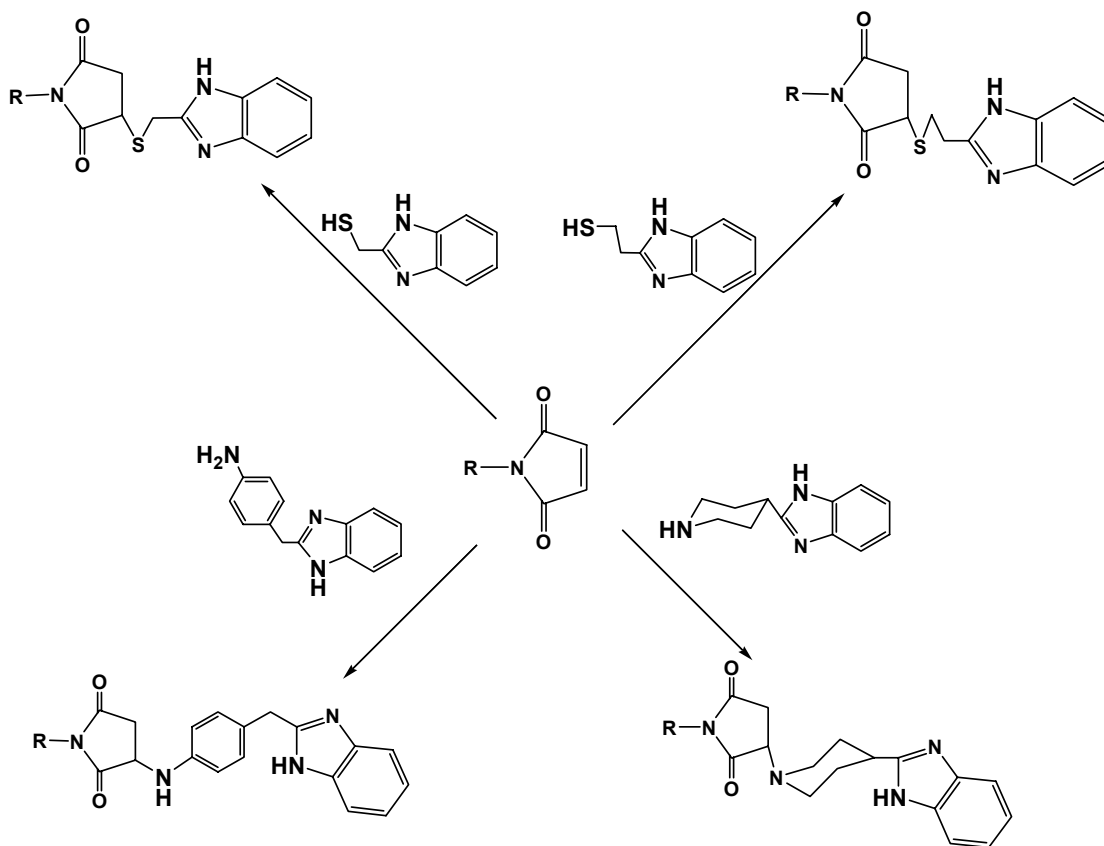
An Addition of the Bifunctional Benzimidazoles to N-Arylsubstituted Maleimides

Natalia M. Rakitina^a, Yurii A. Gesenzwey^a, Konstantin E. Polunin^b, Evgenii V. Polunin^b

^a Institute of Physical Chemistry, Russian Academy of Sciences
Leninskii prosp. 31, 119991 Moscow, Russia
e-mail: yuriku@rambler.ru

^b N.D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences
Leninskii prosp. 47, Moscow, Russia
e-mail: polunin-507@yandex.ru

Reaction of 2-(mercaptoalkyl)benzimidazol with N-arylsubstituted maleimides has been investigated. It has been shown that an addition of such benzimidazoles to the double C=C bond of N-arylmaleimides occurs by S atom of the mercaptoethyl group in the 2-position of benzimidazol. It has been shown for 2-(4-aminobenzyl)benzimidazol and 2-(4-piperidinyl)benzimidazole, that reaction with benzimidazoles bearing primary or secondary amino group in the substituent in 2-position occurs by nitrogen atom at the substituent in the second position and not by nitrogen atom of the imidazol ring.



R = C₆H₅; 4-MeOC₆H₄; 3-MeOC₆H₄; 4-PrOC₆H₄; 4-ClC₆H₄; 4-FC₆H₄; 4-BrC₆H₄; 3-FC₆H₄; 3-Cl,4-F(C₆H₃); 4-Cl,3-CF₃(C₆H₃)