

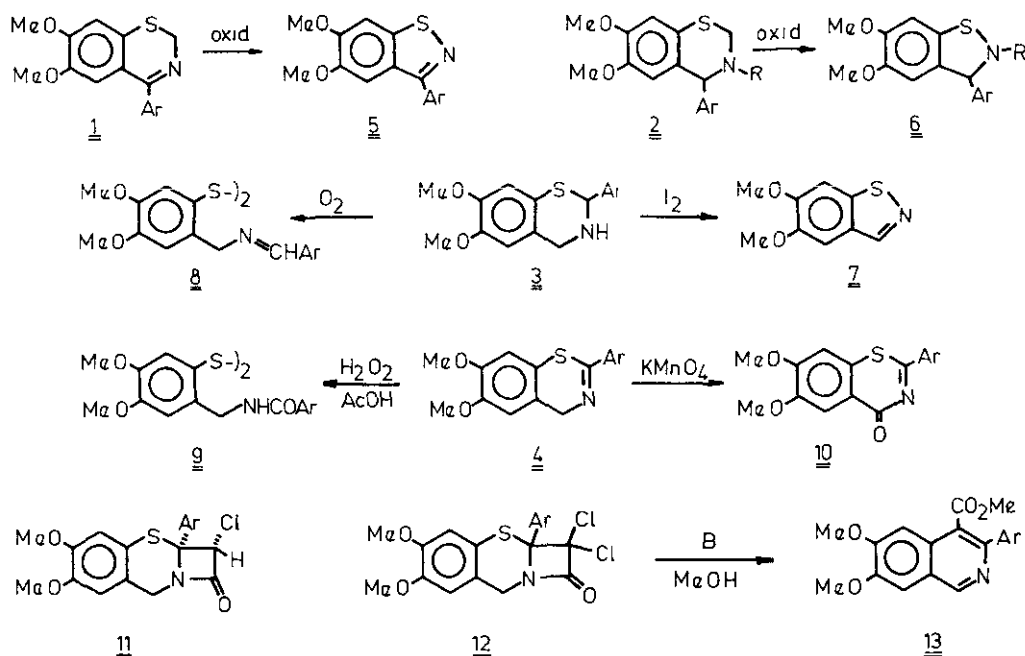
SOME UNEXPECTED OXIDATION REACTIONS OF 1,3-BENZOTHAZINES. A NEW ISOQUINOLINE
SYNTHESIS BY RING TRANSFORMATION OF 1,3-BENZOTHAZINE- β -LACTAMS

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In a study of the oxidation of benzothiazines 1-4, some unexpected reactions were observed: 1 and 2 gave 1,2-benzothiazole derivatives 5 and 6 through ring contraction, 3 underwent ring opening and dimerization to give 8 or ring contraction to give 7, while in the case of 4 formation of a dimer (9) or an oxo compound (10) was observed.



Ar = Ph; *o*-ClC₆H₄; *p*-ClC₆H₄; *p*-MeOC₆H₄; 3,4-(MeO)₂C₆H₃; *p*-MeC₆H₄

We previously showed¹ that the monochloro- β -lactam derivative 11 gave a 1,4-benzothiazepine derivative under basic conditions in methanol. We have now found that the dichloro- β -lactam 12 under similar conditions furnished 3-aryl-4-methoxycarbonyl-6,7-dimethoxyisoquinolines 13. Mechanisms for these unexpected reactions will be given.

1. L. Fodor, J. Szabó, G. Bernáth, L. Párkányi, P. Sohár: Tetrahedron Letters **22**, 5077 (1981)