

**B.Sc. Semester-IV
Core Course-IX (CC-IX)
Organic Chemistry-III**



III. Heterocyclic Compounds 6. Madelung Synthesis

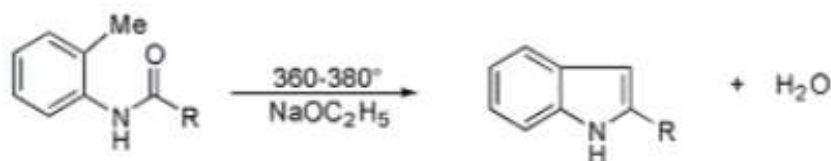


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Madelung Synthesis

W. Madelung, *Ber.* **45**, 1128 (1912).

Formation of indole derivatives by intramolecular cyclization of an *N*-(2-alkylphenyl)alkanamide by a strong base at high temperature:



R. K. Brown in *The Chemistry of Heterocyclic Compounds*, A. Weissberger, Ed., *Indoles, Part I*, W. J. Houlihan, Ed. (Wiley, New York, 1972) pp 385-396; W. J. Houlihan *et al.*, *J. Org. Chem.* **46**, 4511, 4515 (1981). Under mild conditions: W. Verboom *et al.*, *Tetrahedron Letters* **26**, 685 (1985); *idem*, *Tetrahedron* **42**, 5053 (1986); E. O. M. Orlemans *et al.*, *ibid.* **43**, 3817 (1987).

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