

A Review Article on Chemistry, Synthesis and Therapeutic Importance of Thiazole Derivatives

Mr. Nitin Shivaji Pawar¹ and Marwah Chougale²

Department of Chemistry

Anjuman Islam Janjira Degree College of Science, Murud-Janjira, Raigad^{1,2}

Abstract: Thiazole is a heterocyclic compound containing nitrogen and sulphur atoms, and has very important applications in medicinal chemistry. It is necessary scaffold present in most of the natural and synthetic medicinal important compounds. Thiazole is an essential part of penicillin nucleus and its derivatives which have shown antimicrobial (sulfazole), antiretroviral (ritonavir), antifungal (abafungin), antihistaminic and antithyroid activities. Thiazole chemistry has developed after the pioneering work of Hofmann and Hantsch. Bogert and co-workers has significant contribution to expand this field. Mills gives the importance of thiazole nucleus in cyanine dyes which is used as photographic sensitizer. Benzothiazole, a fused derivative of thiazole has also commercial value. This review article gives the literature documents available on the methods of preparation of thiazole derivatives and their biological activities.

Keywords: Thiazole, Heterocyclic Compound, Medicinal Chemistry, Antimicrobial, Antifungal, Benzothiazole, etc.

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