

SUMMARY

Various thiazoles exhibit pharmacological activity, e.g., antimicrobial, antihistaminic, antiparasitic, antihelminthic, antipyretic, and antiviral. Such medicines as Sulfathiazole, Phthalylsulfathiazole, and related compounds are widely used in medical practice. Thiazole ring is a structural component of natural compounds, e.g., Vitamin B1 (thiamine), penicillin, and carboxylase. Thiazole derivatives are widely used as antioxidants for petrochemical products, vulcanization accelerators, and photochromic substances.

In this study, a series of 2-amino-4-arylthiazoles were synthesized (TH₁, TH₂, TH₃, TH₄, TH₅).

Compounds were prepared by reactions of acetophenon, 2-acetyl-naphtalene, 4-methyl-acetophenon, 4,-nitro-acetophenon ve 4-hydroxy- acetophenon with thiourea in the presence of iodine. Reactions of 2-amino-4-arylthiazoles with 2-hydroxy-benzaldehyde, teraphthaldehyde ve isonitrosoacetophenon afforded the corresponding Schiff bases (L₁H, L₂H, TO). Complex formation of the latter with nickel and cobalt salts (NiCl₂, CoCl₂) was studied.

The structures of ligand and complexes were determined by ¹H-NMR, ¹³C-NMR and IR spectroscopy techniques.