Synthesis of New 2,5-Diamino-1,3-thiazole and 2-Thiohydantoin Derivatives by Condensation of *N*-(2-Aryl-1-chloro-2-oxoethyl) Carboxamides with Thioureas

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Abstract—*N*-(2-Aryl-1-chloro-2-oxoethyl) carboxamides react under mild conditions with thiourea, *N*-alkyl- and *N*-arylthioureas, and various *N*,*N*′-disubstituted thioureas, following the Hantzsch reaction scheme. The reactions are selective, and the resulting 2,5-diamino-1,3-thiazole derivatives undergo recyclization acid followed by hydrolysis to give substituted 2-thiohydantoins on heating with hydrochloric acid in ethanol.

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