

A Facile Synthesis of New 5-Substituted Pyridine-2-carboxamide Derivatives

Prabu Dharman¹, Visagamoorthy Babu¹, K. Anver Basha^{2*}

¹Research and Development Centre, Bharathiar University, Coimbatore, Tamil Nadu, India

²Department of Chemistry, C. Abdul Hakeem College, Melvisharam, Tamil Nadu, India

ABSTRACT Various new 5-substituted pyridine-2-carboxamides were designed and synthesized using 1-[*Bis*(dimethylamino)methylene]-1*H*-1,2,3-triazolo[4,5-*b*]pyridinium 3-oxide hexafluorophosphate and *O*-(benzotriazol-1-yl)-*N,N,N',N'*-tetramethyluronium tetrafluoroborate as an uranium coupling agent in satisfactory yields. The present work describes a simple, rapid, and efficient synthesis of compounds **2a-2h** in good yield under mild reaction condition. Their structures were confirmed by ¹H-NMR, ¹³C-NMR, and liquid chromatography–mass spectrometry.

KEYWORDS Pyridine, Carboxamides; 1-[*Bis*(dimethylamino)methylene]-1*H*-1,2,3-triazolo[4,5-*b*]pyridinium 3-oxide hexafluorophosphate, *O*-(benzotriazol-1-yl)-*N,N,N',N'*-tetramethyluronium tetrafluoroborate.

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