SYNTHESES OF a, & -CONJUGATED CARBODIIMIDES AND KETENIMINES AND THEIR CONVERSION TO SOME HETEROCYCLES

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Cycloaddition reactions of α,β -conjugated heterocumulenes provide a variety of heterocycles because the cumulated systems have possibilities of interesting periselectivities. In the present study conjugated carbodismides and ketenimines have been prepared by a Wittig-type reactions of conjugated imino- and methylene-phosphoranes with isocyanates, respectively.

These conjugated heterocumulenes underwent inter- and intramolecular cycloaddition reactions to give a variety of (hetero)cycles (Scheme).