

# SYNTHESES OF $\alpha,\beta$ -CONJUGATED CARBODIIMIDES AND KETENIMINES AND THEIR CONVERSION TO SOME HETEROCYCLES

Shinichi MOTOKI, Takao SAITO, and Michio NAKANE

Department of Chemistry, Faculty of Science, Science University  
of Tokyo, Kagurazaka, Shinjuku-ku, Tokyo 162 JAPAN

Cycloaddition reactions of  $\alpha,\beta$ -conjugated heterocumulenes provide a variety of heterocycles because the cumulated systems have possibilities of interesting periselectivities. In the present study conjugated carbodiimides 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).

