

J. Org. Chem., 66, 8612-8615 (2002).

### Synthesis of Carbazoles from *N*-(*N,N*-Diarylamino)phthalimides with Aluminum Chloride via Diarylnitrenium Ions

Yasuo KIKUGAWA (菊川靖雄),\* Yutaka Aoki (青木豊), and Takeshi Sakamoto (坂本武史)

Faculty of Pharmaceutical Sciences, Josai University, 1-1 Keyakidai, Sakado, Saitama 350-0295, Japan

Generation of diarylnitrenium ions from *N*-(*N,N*-diarylamino)phthalimides by treatment with  $\text{AlCl}_3$  in benzene or in 1,2-dichloroethane leads to formation of carbazoles by intramolecular C-C bond formation. The reaction proceeds in synthetically useful yields.

