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NEW SYNTHETIC PATHWAYS TO TRIFLUOROMETHYL SUBSTITUTED ISOQUINOLINES, HYDROXYISOQUINOLINES AND CYCLOHEPTATRIENO-[b] PYRROLES

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5-Benzoxy-4-trifluoromethyloxazoles 1 are thermolabile compounds. They rearrange to give 4-benzyl-4-trifluoromethyl-5(4H)-oxazolones 2 and 2-benzyl-4-trifluoromethyl-5(2H)-oxazolones 3, in certain cases at room temperature even in the crystalline state [1]. The rearrangement involves a benzyl group migration from oxygen to carbon. Mixed products in "crossing experiments" indicate that the rearrangement is not a sigmatropic process.

On thermolysis compounds 3 undergo a [3+2] cycloreversion process to yield nitrile ylides 4, which act as 1.3-dipoles or as carbenes, depending on the substituent pattern present at the benzylic moiety, to give 5, 6, and 7, respectively. Mechanistic aspects are discussed [2].

- 1 K. Burger, K. Gaa, K. Geith and Ch. Schierlinger, Synthesis in press.
- 2 K. Burger, Ch. Schierlinger, K. Gaa, K. Geith and N. Sewald, publication in preparation.