(SAMPLE ABSTRACT)

ABSTRACT

Synthetic Studies Towards the Luzopeptins:

New Aminocid Synthons Through the Aza-Achmatowicz Reaction

by

Toshio Schimizu

A new method for the enantioselective synthesis of unusual amino acids has been developed. The chemoenzymatic aza-Achmatowicz rearrangement of appropriate furylglycine derivatives provided nitrogenous synthons that were readily converted to amino acid building blocks. An application of the new chemistry to the snythesis of the unique pyridazine carboxylic acid component of luzopeptins is presented. Luzopeptin C has potent inhibitory activity towards the reverse transcriptase of HIV as the causative agent of AIDS.