〔Tetrahedron, **46**, 3211, 1990〕

Biomimetic, Chemical, and Spectroscopic Evaluations for the Radiosensitizing Potential of N1- and N2-Substituted Derivatives of 3-Nitro-1,2,4-triazole Toward Hypoxic Cells in the Riadiotherapy: Remarkably Different Substitution Effect.

YOSHIMITU NAGAO, SHIGEKI SANO, MASAHITO OCHIAI*

N1- and N2-Derivatives of 3-nitro-1,2,4-triazole were subjected to the non-biological evaluation methods involving biomimetic, chemical, and spectroscopic procedures for the radiosensitizing potential. The N1-derivatives of 3-nitro-1,2,4-triazole were suggested to be more promising radiosensitizers to hypoxic cells *in vivo* than the N2-derivatives.

〔Tetrahedron, **46**, 6361, 1990〕

Diastereoselective Alkylation of Chiral Tin(II) Enolates onto Cyclic Acyl Iminium Ions. Asymmetric Total Syuthesis of (-)-Supinidine.

YOSHIMITU NAGAO, WEI-MIN DAI, MASAHITO OCHIAI*, MOTOO SHIRO

The scope and mechanism of the asymmetric alkylation of chiral tin(II) enolates of 3-acyl-4(*S*)- or 3-acyl-4(*R*)-isopropyl-1,3-thiazolidine-2-thiones with a cyclic acyl iminium ion generated from 1-methyl-5-acetoxy-2-pyrrolidinone. An application of the reaction to the asymmetric synthesis of (−)-supinidine was achieved.

〔Tetrahedron Lett., **31**, 2419 (1990)〕

Addition-Elimination Strategy for Asymmetric Induction: A Chiral Sulfoxide as a Leaving Group.

KAORU FUJI, MANABU NODE, HITOSHI ABE, AKICHIKA ITOH*, YUKIO MASAKI, MOTOO SHIRO

The efficient chiral induction based on the addition-elimination reaction of an optically active β-nitro-α, β-unsaturated sulfoxide was developed. The reaction with six-membered lactam enolates afforded the α-(2-nitroalkenyl)-δ-lactams in good yields with high enantiomeric excesses. The reaction would involve Michael type addition of the lactam enolates to the unsaturated sulfoxide at the α-position, followed by elimination of the chiral sulfinyl group.