生理活性天然物合成への 6π電子系電子環状反応の活用に関する研究

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Synthetic Studies of the Bioactive Natural Products by Using the Thermal Electrocyclic Reaction of 6π Electron Systems

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ABSTRACT: Synthetic studies of bioactive natural products by three types of electrocyclic reactions (E. R.) of 6π electron systems have been described as follows; 1) the synthesis of highly-substituted carbazole alkaloids based on the allene-mediated E. R. involving the indole 2,3-bond, 2) the synthesis of β-carboline alkaloids and isoquinoline-5,8-quinone alkaloids based on the thermal E. R. of an 1-aza 6π-electron system involving the indole 2,3-bond or benzene 1,2-bond, and 3) the synthesis of grossuralines-1 and -2 based on the thermal E. R. of an 2-aza 6π-electron system including the indole 2,3-bond.

抄録　三種の6π電子系電子環状反応の活用により、それぞれ設定した標的分子の基本構造の構築ができ、全合成を達成した内容を総説とした（平成12年度日本薬学会中国四国支部奨励賞の講演内容）。