

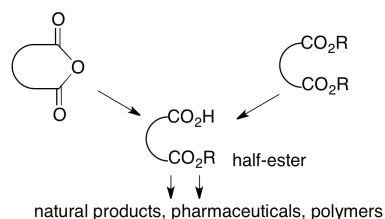
■ ANNOUNCEMENT

- 1 **Heterocycles Award**  
HETEROCYCLES Announcement\*

■ REVIEWS

- 3 **Recent Advancements in the Synthesis of Half-Esters and Their Applications**

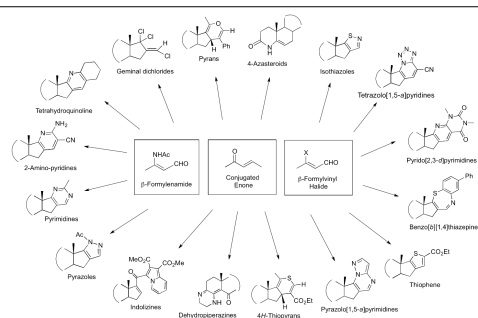
Jianjun Shi and Satomi Niwayama\*



Half-Ester    Building Block    Desymmetrization    Organic Synthesis    Cost-Effective Methodology

- 19 **Divergent Synthesis of Steroid Analogs from Steroidal  $\beta$ -Formylenamides, Conjugated Enones and  $\beta$ -Formylvinyl Halides**

Geetmani S. Nongthombam and Romesh C. Boruah\*

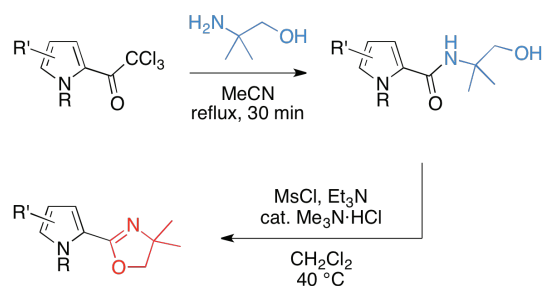


Azasteroid     $\beta$ -Formylenamide    Conjugated Enone     $\beta$ -Formylvinyl Halide    Heterosteroid

## ■ PAPER

## 63 Synthesis of 4,4-Dimethyl-2-(2-pyrrolyl)-2-oxazolines

Kentaro Okano,\* Kazuki Morii, Daichi Mari, and Atsunori Mori

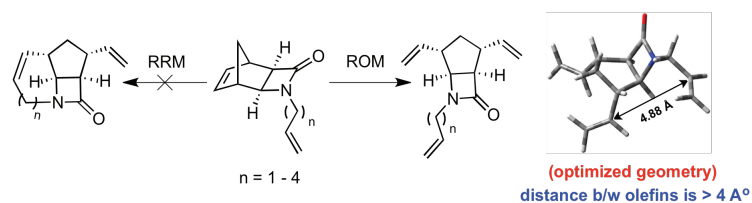


Oxazoline    Pyrrole    Indole

## ■ SHORT PAPERS

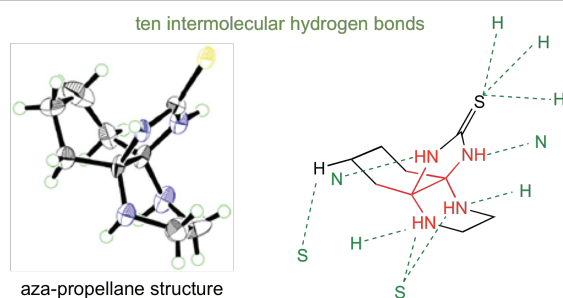
 79 Ring-Opening Metathesis of *N*-Alkenyl  $\beta$ -Lactams

Sambasivarao Kotha,\* Sunil Pulletikurti, and Yuvaraj Dommaraju


 $\beta$ -Lactam    *N*-Alkenylation    Metathesis    Optimization

## 88 Reaction of 2,3,5,6,7,8-Hexahydroquinoxaline with Thiourea Derivatives: Analysis of the Structure and Conformational State of [4.4.3]Propellane

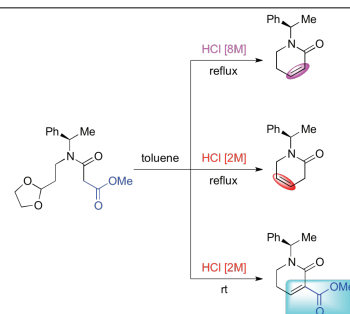
Kazuhide Nakahara,\* Koki Yamaguchi, and Hisao Kansui



Tetraazaindene    X-Ray Analysis    Molecular Orbital (MO) Calculation    [4.4.3]Propellane    Dihydropyrazine

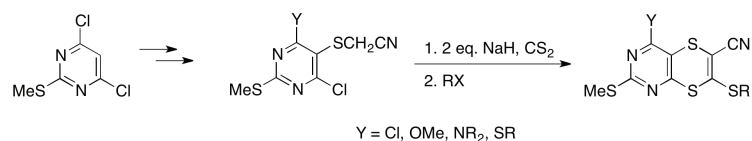
 96 Divergent Synthesis of 5,6- and 3,6-Dihydropyridin-2(1*H*)-one via Intramolecular Knoevenagel Condensation

Arturo Bocado-Bautista, María L. Orea, Jorge R. Juárez, Dino Gnecco, David M. Aparicio,\* and Joel L. Terán\*


 5,6-Dihydropyridin-2(1*H*)-one    3,6-Dihydropyridin-2(1*H*)-one    Methyl 3-Oxo-1,2,5,6-tetrahydropyridine-3-carboxylate    Knoevenagel Condensation

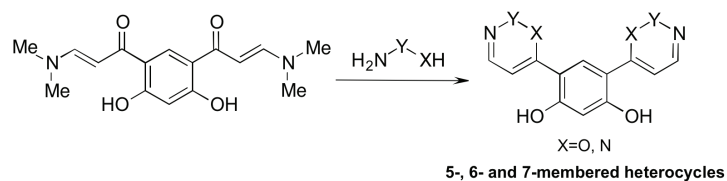
**105 Synthesis of [1,4]Dithiino[2,3-*d*]pyrimidine-6-carbonitrile Derivatives via the Reaction of 2-[(4-Chloropyrimidin-5-yl)sulfanyl]acetonitriles with Carbon Disulfide**

Kazuhiro Kobayashi,\* Kota Yamasaki, Daiki Fujiwara, Kazuma Nozaki, Hidetaka Hiyoshi, and Kazuto Umezumi


 [1,4]Dithiino[2,3-*d*]pyrimidine    4,6-Dichloro-2-(methylsulfanyl)pyrimidine (DCSMP)    Lithiation    Carbon Disulfide    Sulfur

**114 4,6-Diacetylresorcinol in Heterocyclic Synthesis Part II: Synthesis of Some Novel 4,6-Bis(azolyl/azinyl/azepinyl)-resorcinols**

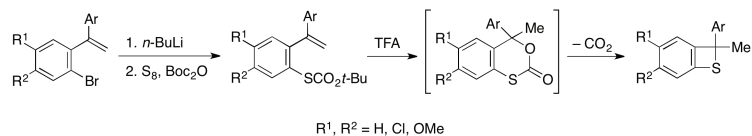
Mohammed A. Assiri, Tarik E. Ali,\* Magdy A. Ibrahim, E. M. El-Amin, and I. S. Yahia



Resorcinol    Bis-Enaminone    Nitrogen Heterocycle

**126 Synthesis of 2*H*-Benzo[*b*]thietes by TFA-Mediated Cyclization of *O*-*tert*-Butyl *S*-(2-Vinylphenyl) Carbonylthioates via 4*H*-3,1-Benzoxathiin-2-one Intermediates**

Kazuhiro Kobayashi\* and Takuma Ueyama


 2*H*-Benzo[*b*]thiete    2-(1-Arylethenyl)phenyllithium    Sulfur    4*H*-3,1-Benzoxathiin-2-one    Decarboxylation

**■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS**

- 137 Polyketides
- 139 Aromatics
- 145 Terpenes
- 147 Alkaloids
- 152 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

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155 Brush Up Your Heterocycles

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## Contributors To This Issue

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