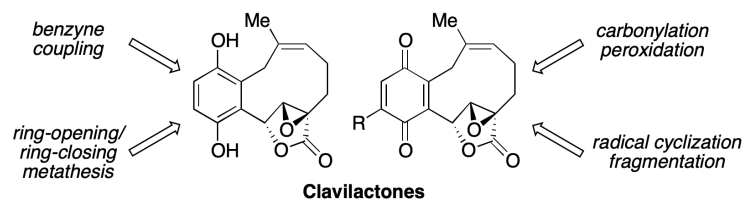


■ REVIEW

1355 Recent Advances in the Total Synthesis of Clavilactones

Akihiro Ogura and Ken-ichi Takao*

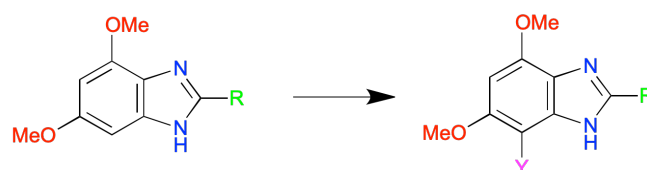


Benzyne Coupling Metathesis Carbonylation Radical Cyclization Natural Product

■ PAPERS

1371 Reactivity of 4,6-Dimethoxy Activated Benzimidazoles

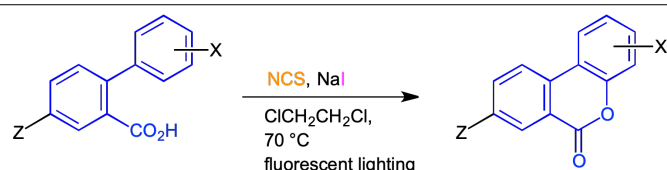
Mahiuddin Alamgir, Glenn C. Condie, Vesna Martinovic, Joanne Wood, Mohan Bhadbhade, Naresh Kumar, and David StC. Black*


 Y = CHO, COMe, COCF₃, CPh, CO₂H, NO₂, Br, CH=CHNO₂, 2-benzimidazolyl

Benzimidazole Bisbenzimidazole Acylation Nitration Cyclization

1405 Facile Preparation of 3,4-Benzocoumarins from 2-Arylbenzoic Acids with NCS and NaI

Momoko Nakamura and Hideo Togo*


 X = H, Me, Bu^t, OMe, F, Cl, etc.

 Z = H, Br, NO₂, Ph, C₆H₄Me-*p*, C₆H₄Bu^t-*p*

 NCS/NaI 20 examples,
(NIS 20 examples)
up to 99% yield

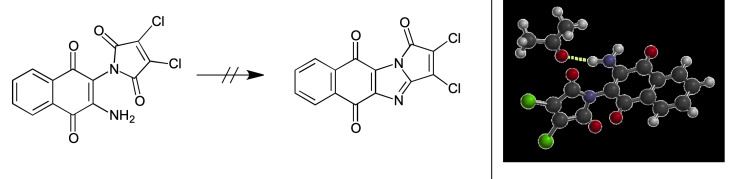
Transition-metal Free

Much less expensive reagents than NIS

 Benzocoumarin *o*-Arylbenzoic Acid *N*-Chlorosuccinimide Sodium Iodide Carboxyl Radical

 1426 Structural and DFT Study of 1-(3-Amino-1,4-dioxo-1,4-dihydronaphthalen-2-yl)-3,4-dichloro-1*H*-pyrrole-2,5-dione: Hypothesis for the Ring Closure

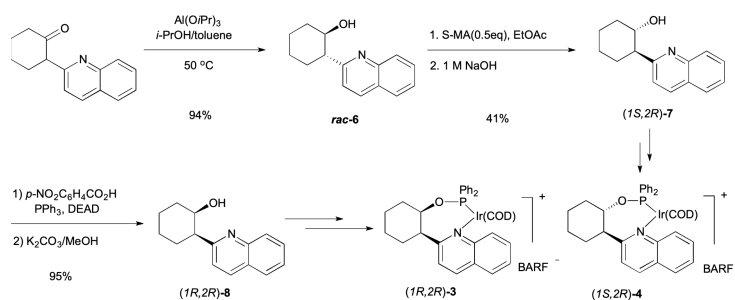
Bader A. Salameh* and Murad A. AIDamen*



Naphthoquinone 2,3-Diaminonaphthoquinone 2,3-Dichloromaleic Anhydride

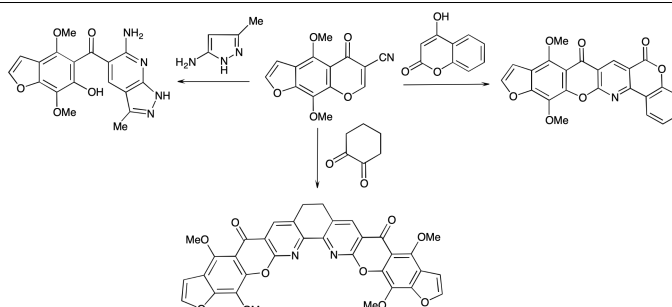
■ SHORT PAPERS

- 1441 Improved Synthesis of Cyclohexane-Backbone Iridium-Complexes of Quinoline-Phosphine and Their Applications in Asymmetric Hydrogenation**
Qibin Liu*



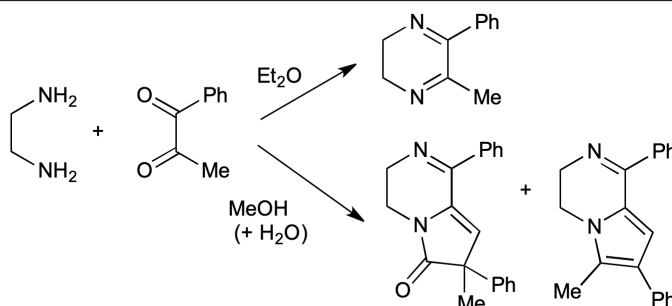
Iridium-Complex Cyclohexane-Backbone Quinoline-Phosphine Asymmetric Hydrogenation Improved Synthesis

- 1450 Synthetic Approach for Building Heteroannulated Furo-[3,2-g]chromenes Using 4,9-Dimethoxy-5-oxo-5H-furo[3,2-g]chromene-6-carbonitrile and Cyclic Carbon Nucleophiles**
Magdy A. Ibrahim,* Sami A. Al-Harbi, and Esam S. Allehyani



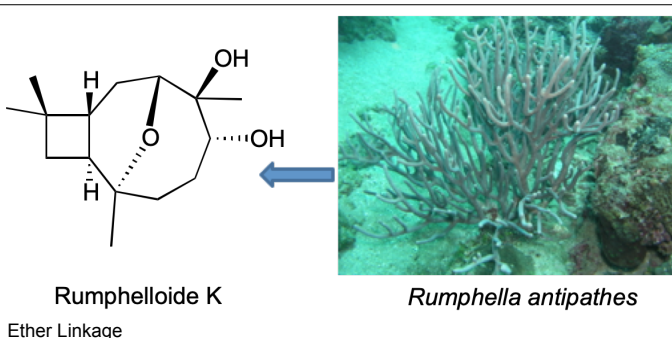
Khellin-6-carbonitrile Carbon Nucleophile Annulated Furo[3,2-g]chromene Pyrido[2,3-d]pyrimidine [1,10]Phenanthroline

- 1463 Reactivity of the Enamine Tautomer of a Cyclic 1,4-Diazadiene with a Diketone**
Kazuhide Nakahara,* Koki Yamaguchi, and Hisao Kansui



Cyclic 1,4-Diazadiene Imine–Enamine Tautomerization Aza–Ene Reaction X-Ray Analysis Molecular Orbital Calculation

- 1473 Rumphelloide K, a Novel C-3/8 Ether Linkage Caryophyllane from *Rumphella antipathes***
Hsu-Ming Chung, Yu-Ming Chang, Wei-Hsien Wang, Jih-Jung Chen, Tsong-Long Hwang,* and Ping-Jyun Sung*



Rumphelloide *Rumphella* Caryophyllane Sesquiterpenoid Ether Linkage

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 1479 Polyketides
 - 1480 Aromatics
 - 1482 Terpenes
 - 1485 Alkaloids
 - 1494 Miscellaneous
-

■ BRUSH UP YOUR HETEROCYCLES

- 1497 Brush Up Your Heterocycles
-

**Contributors
To This Issue**

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1473 Chen, Jih-Jung
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1371 Condie, Glenn C.
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1450 Ibrahim, Magdy A.
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1371 Wood, Joanne
1463 Yamaguchi, Koki