■ CURRICULUM VITAE

■ PREFACES

■ PUBLICATIONS

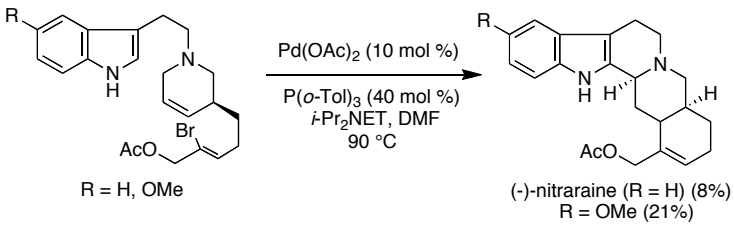
13 **List of Publications**

Shô Itô*

■ COMMUNICATIONS

43 **Cascading Single-step Stereoselective Construction of the α-Alloyohimbine Framework: A New Synthesis of (-)-Nitraraine**

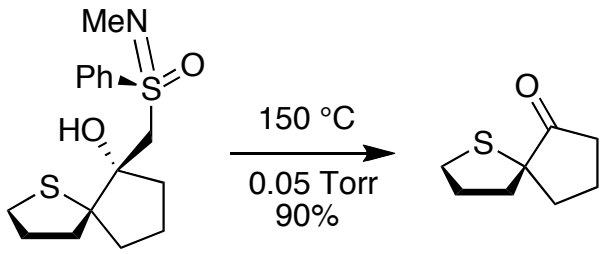
Hideki Sakagami and Kunio Ogasawara*



α-Alloyohimbine Heck Reaction Cascade Reaction Chiral Synthesis Diastereoselective Cyclization

49 **Resolution and Absolute Configurational Assignments to 1-Oxa- and 1-Thia-6-ketospiro[4.4]nonanyl Platforms**

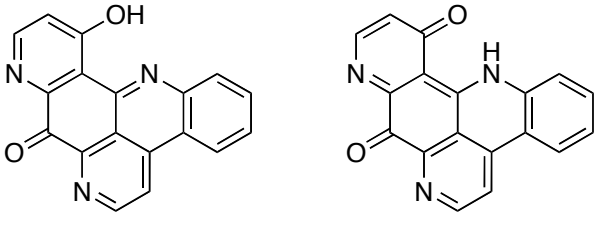
Miriam Alvarez, Richard Todd Bibart, Fabrizio Fabris, Dafydd R. Owen, James C. Lanter, and Leo A. Paquette*



Spirocycle Bromonium Ion Sulfoximine Absolute Configuration X-Ray Crystallography

55 **Solvent Effects on Relative Stability of Meridine and Its Tautomer: MO Calculations**

Masahiro Kataoka and Tsuguo Sato*

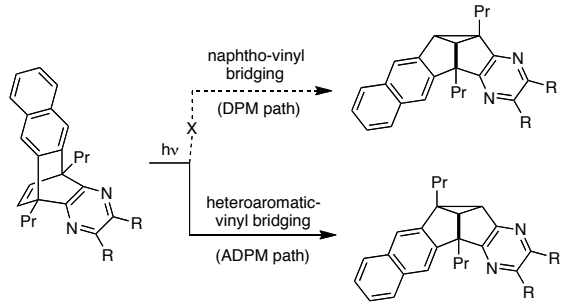


meridine (**1**) meridin-12(13*H*)-one (**2**)

Alkaloid AM1 Method COSMO Method Tautomerism

61 **Photochemistry of Pyrazino- and Quinoxalino-fused Naphthobarrelenes**

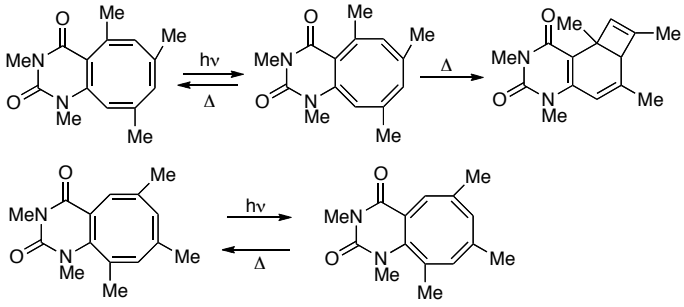
Rama Krishna Peddinti, Chuan-Hung Chou, and Chun-Chen Liao*



Heteroaromatic Barrelene Aza-di-π-methane Rearrangement Naphthopyrazinosemibullvalene Naphthoquinoxalinosemibullvalene

65 **Photochemical Synthesis and Characterization of the Tautomers of 1,3,5,7,9- and 1,3,6,8,10-Pentamethyl-cyclooctapyrimidine-2,4-diones**

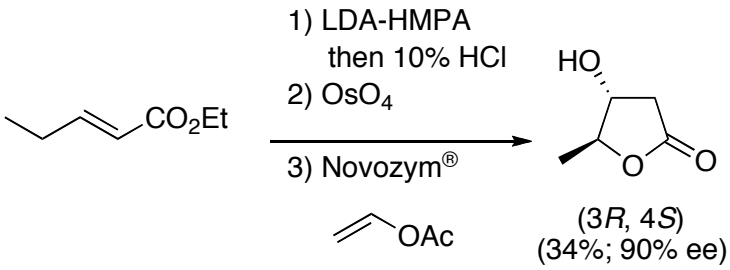
Akiyo Sakushima, Shun Uchiyama, Ken-ichi Nishijima, Kazue Ohkura, and Koh-ichi Seki*



Pentamethylcyclooctapyrimidine-2,4-dione Bond-Switching Photolysis Tautomeric Isomer

69 **Concise Synthesis of (3*R*,4*S*)-3-hydroxy-4-methyl-γ-butyrolactone**

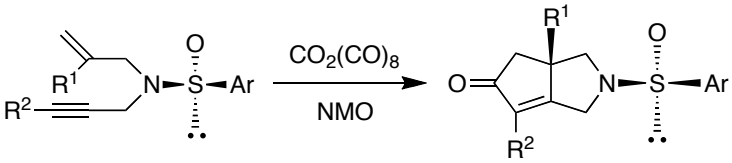
Yoshiharu Iwabuchi, Tomoyuki Esumi, Toshiko Nishioka, Takashi Nishiyama, and Susumi Hatakeyama*



γ-Butyrolactone Lipase-catalyzed Acetylation Blastmycinone

73 **Asymmetric Pauson-Khand Reactions of Chiral Sulfinamides: Asymmetric Synthesis of 3-Azabicyclo-[3.3.0]oct-5-en-7-one Derivatives**

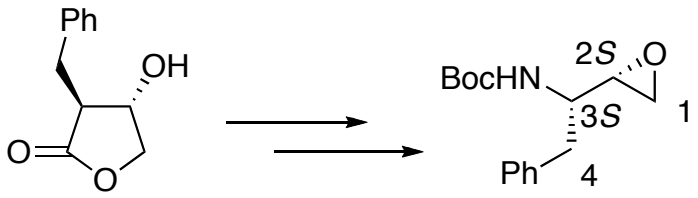
Takashi Watanabe and Kunio Hiroi*



Chiral Organosulfur Group Diastereoselectivity Cobalt Catalyst 2-Cyclopentenone

77 **Synthesis of *N*-Boc-3-amino-1,2-epoxy-4-phenylbutane from (3*S*)-Hydroxy-γ-butyrolactone by Means of the Hofmann Rearrangement**

Yoshiro Furukawa, Yoshiko Monden, Kazuya Nakagawa, Kazumasa Hinoue, Masahiro Murakami, and S higeo Katsumura*



Alkylamino Epoxide Core Part of Protease Inhibitor Stereocontrolled Oxazolidinone Formation Intramolecular Trap of Isocyanate

81 **Efficient and Stereoselective β-Epoxidation of the 16(17)-Double Bond of Gibberellic Acid Derivatives with an Acylperoxy Radical Generated by Irradiation of α-Diketones and Oxygen**

Shigeo Yoshida, Takeshi Shimizu, Toshio Suenaga, Shozo Fujioka, Mikio Hoshino, and Hideharu Seto*

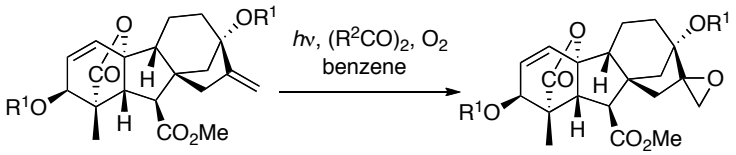
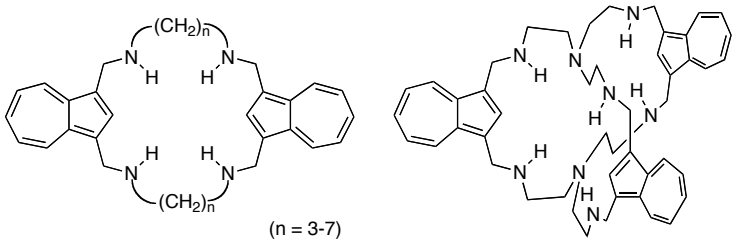


Photo-Epoxidation Radical Reaction Benzil Stereoselectivity

87 **Syntheses and Properties of Tetraazaazulenocoronands and Octaazaazulenocryptand1**

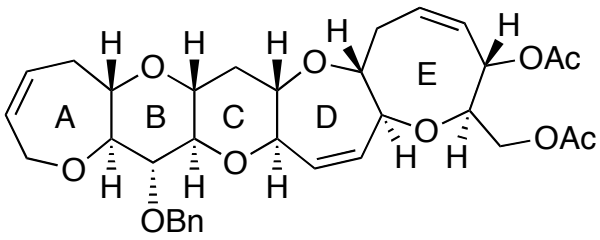
Tetsuo Nozoe, Teruo Kurihara, and Hidetsugu Wakabayashi*



Macrocycle Azulenocoronand Cryptand Azulenoid α,ω-Alkanediamine

93 **Convergent Strategy for Synthesizing Polycyclic Ether Marine Toxins: Synthesis of the ABCDE Ring Fragment of Ciguatoxin CTX3C**

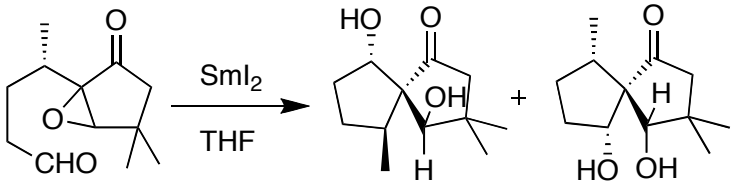
Hiroki Oguri, Tohru Oishi, Kenji Maeda, Megumi Maruyama, and Masahiro Hirama*



Intermolecular Alkylation Ring-closing Metathesis Grubbs' Catalyst Tetrahydrooxepin Tetrahydrooxocin

101 **Samarium(II) Iodide-mediated Intramolecular Aldol-type Cyclization**

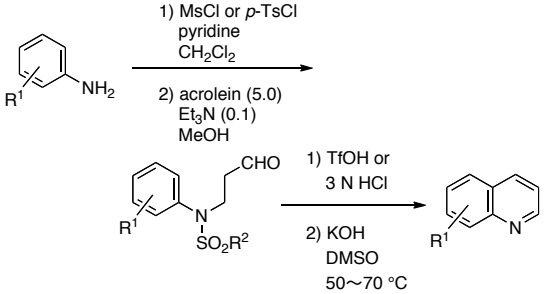
Shigeru Takaoka, Katsuyuki Nakashima, Yasuyo Nakashiba, Masakazu Sono, and Motoo Tori*



Cyclization Hydrindanone Radical Reaction Epoxide Spiro Compound

105 **A Practical Route to Quinolines from Anilines**

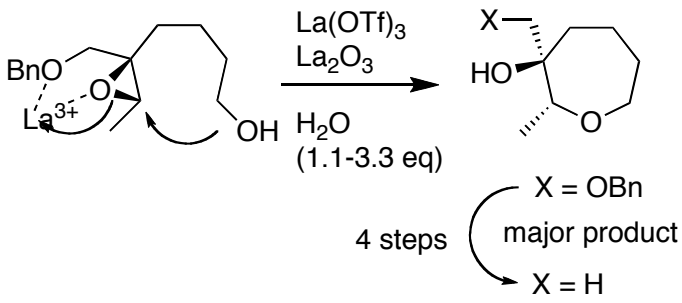
Toshihiro Ueda, Masashi Sato, Hidetoshi Tokuyama, and Tohru Fukuyama*



Quinoline Dehydroquinoline Aniline Sulfonamide Cyclization

109 **Benzyloxymethyl Group as a Convertible Internal Ligand for La(OTf)$_3$-Catalyzed 7-*endo* Ring-openig of Hydroxy Epoxide**

Tetsuo Tokiwano, Hiroshi Morishita, Kenshu Fujiwara, and Akio Murai*

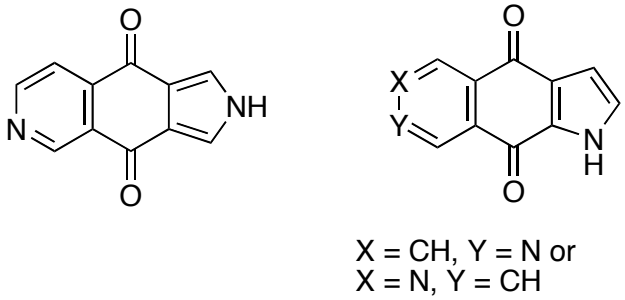


7-*endo* Ring-Opening of Hydroxy Epoxide Lewis Acid Catalyzed Cyclization Hemibrevetoxin B Lanthanum Trifluoromethanesulfonate

■ **PAPERS**

111 **Synthesis of Azanaphthoquinone Annelated Pyrroles**

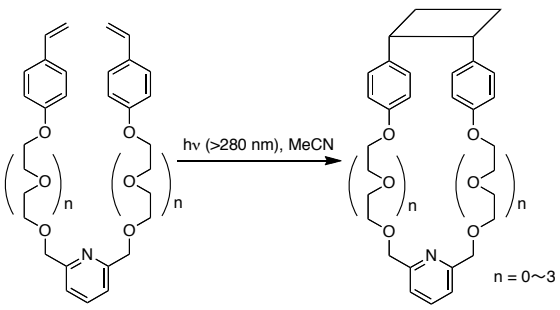
Petra Szieber, Ulrike Parrer, Petra Krenn, Alexandra Koulouri, Rita Slanz, Martin Kratzel, Wolfgang Holzer, Andrea Pichler, and Helmut Spreitzer*



Anticancer NMR Spectroscopy Selective Acylation

123 **Synthesis of Pyridinocrownophanes Exhibiting High Ag^+-Affinity**

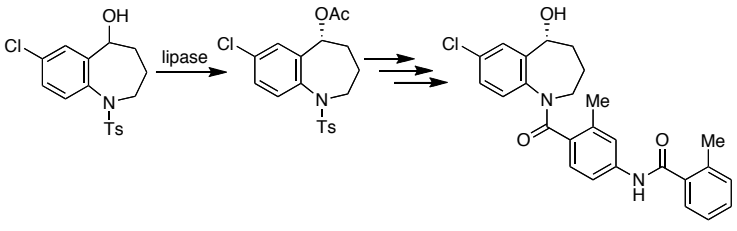
Takashi Funaki, Koichi Kimura, Seiichi Inokuma, and Jun Nishimura*



[2+2] Photocycloaddition Crownophane Pyridinocrown Ether Liquid-Liquid Extraction Cation Complexation

131 **An Efficient Synthesis of Optical Isomers of Vasopressin V_2 Receptor Antagonist OPC-41061 by Lipase-catalyzed Enantioselective Transesterification**

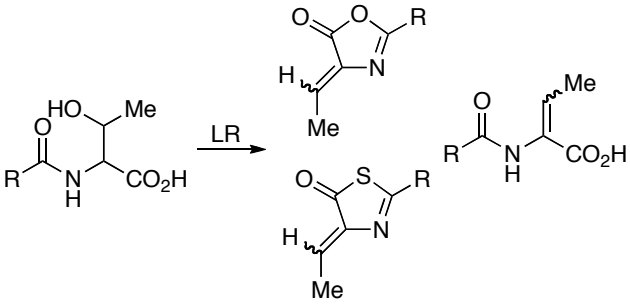
Fujio Tabusa, Minoru Uchida, Masaru Kido, Masahiko Bando, Yoshikazu Kawano, Tadaaki Ohtani, Kazuyoshi Kitano, Kenji Otsubo, Hiroshi Yamashita, Seiji Morita, and Jun Matsubara*



Kinetic Resolution 5-Hydroxybenzazepine Enantioselectivity Enantiomeric Excess Vinyl Acetate

201 **Thionation of *N*-Acylthreonine and Its Methyl Ester with Lawesson's Reagent: Synthesis of 5-Oxazolones, 5-Thiazolones and Thiazolines**

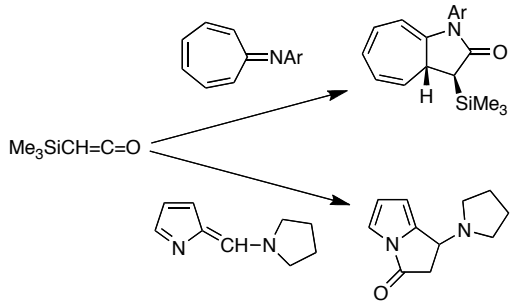
Mayuko Ori and Takehiko Nishio*



Thionation *N*-Acylthreonine 5-Oxazolone 5-Thiazolone Thiazoline

209 **Cycloaddition Reactions of Trimethylsilylketene with 8-Azaheptafulvenes and 6-Amino-1-azafulvenes**

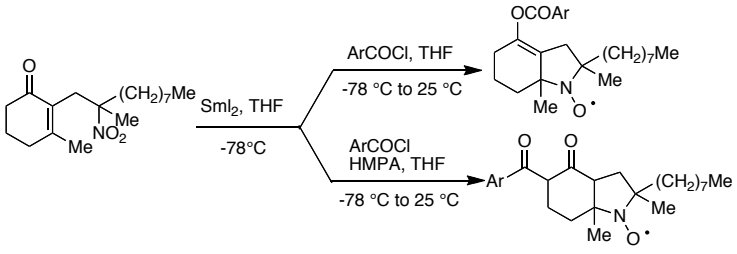
Takayuki Shioiri, Kiyo Takaoka, and Toyohiko Aoyama*



Trimethylsilylketene [8+2] Cycloaddition 1-Azaazulen-2(1*H*)-one [6+2] Cycloaddition 1*H*-Pyrrolizin-3(2*H*)-one

217 **Synthesis of α,α'-Asymmetric Nitroxide Radicals by *C*- or *O*-Acylation of Radical-enolate Intermediates Generated by Reduction of Homoallylic Nitro Enones with Samarium(II) Iodide**

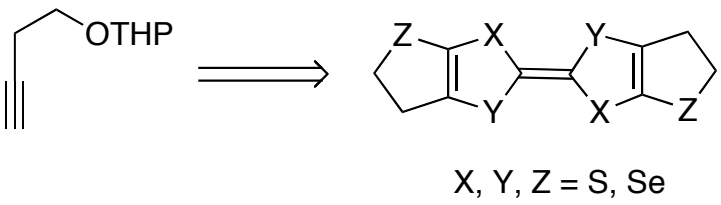
Ken-ichi Hirao, Kasuke Fujita, Satoshi Shimono, and Rui Tamura*



Asymmetric Bicyclic Nitroxide Nitro Compound Isomerization MO Calculation $S_{RN}1$ Reaction

225 **BIS(ethylenethio)tetraselenafulvalene and Related Hybrid Diselenadithiafulvalenes as Novel Electron Donors Forming Highly Conductive Complexes with 7,7,8,8-Tetracyanoquinodimethane**

Yoshio Aso, Kazuo Takimiya, Tetsuya Jigami, Satoshi Murakami, Mie Kodani, and Tetsuo Otsubo*

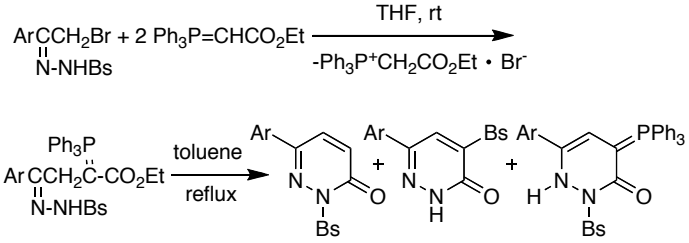


X, Y, Z = S, Se

TTF Heterocycle Sulfur Selenium Transalkylation

237 **Thermolysis of Ethoxycarbonyl[2-phenyl-2-(phenylsulfonylhydrazono)ethyl]methylenetriphenylphosphoranes. Formation of Substituted Pyridazinones**

Ikuko Shibazaki, Kyoko Okada, Akikazu Kakehi, and Suketaka Ito*

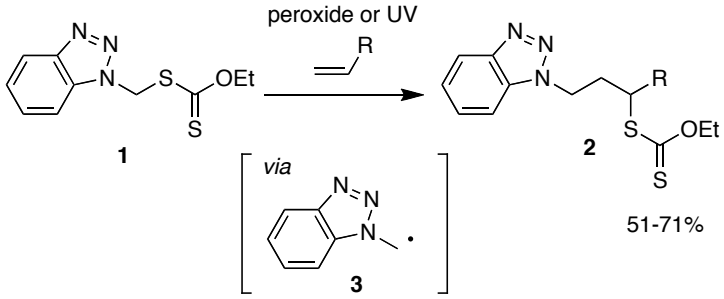


Ar = C_6H_4X-*p*; X = H, Br, Cl, Me, OMe; Bs = $PhSO_2$

Phenylsulfonylhydrazone α-Bromoacetophenone Crystallograph 3(2*H*)-Pyridazinone 1,4-Dihydro-3(2*H*)-pyridazinone

301 **Xanthate Mediated Generation of the Benzotriazol-1-yl-methyl Radical and Its Subsequent Addition to a Variety of Olefins**

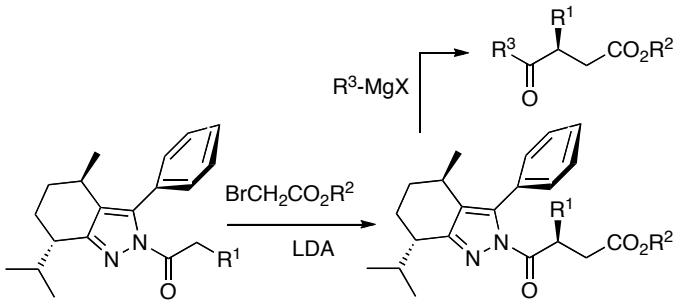
Sergey N. Denisenko, Martin A. C. Button, and Alan R. Katritzky*



Xanthate Benzotriazole Radical Dithiocarbonate

309 **Preparation of β-Substituted γ-Keto Esters by the Grignard Reaction on *N*-Acylpyrazoles**

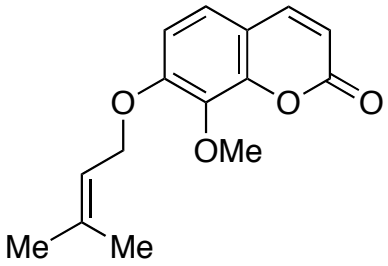
Yoshihiro Tsukamoto, Yoshie Shirahata, and Choji Kashima*



α-Alkylation of *N*-Acylpyrazole Chiral β-Substituted γ-Keto Ester 3-Phenyl-l-menthopyrazole Grignard Reaction

319 **Revision of the Structure of a New Coumarin Isolated from *Artemisia carviforia* Wall**

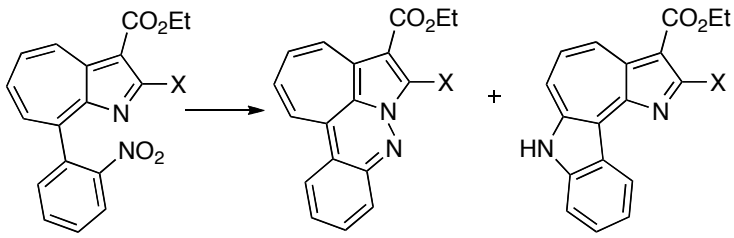
Yasuo Takeuchi, Hitoshi Abe, Masako Fujii, Yoshitaka Nishita, Keiko Katsuno, and Takashi Harayama*



Salicylaldehyde Wittig Reaction Coumarin Synthesis Methoxylated Prenyloxycoumarin Structure Revision

329 **Reductive Cyclization of 8-(2-Nitrophenyl)-1-azaazulene Derivatives; Formation of 6a,7-Diazanaphth[3,2,1-*cd*]-azulene and 7*H*-1,7-Diazaindeno[1,2-*e*]azulene Systems, a New DNA Intercalater**

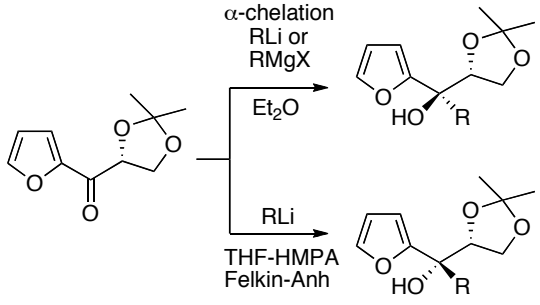
Takeo Konakahara, Yuichi Kageura, Akikazu Kakehi, Hiroyuki Fujii, Maki Nabeshima, and Noritaka Abe*



Fused 1-Azaazulene Mesomeric Betaine X-Ray Structure Analysis MO Calculation Binding Constant

341 **Diastereoselective Addition of Organometallic Reagents to (*R*)-2,3-Isopropylidenedioxy-1-(2-furyl)-1-propanone Yielding Chiral Tertiary Furyl Carbinols**

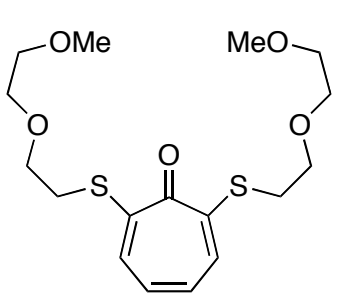
Naohiro Tarumoto, Masayoshi Tsubuki, and Toshio Honda*

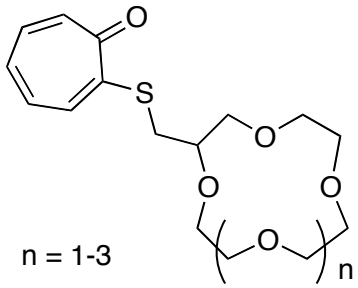


Tertiary Furyl Carbinol Nucleophilic Addition Organolithium Grignard Reagent

351 **Synthesis and Mercurophilic Properties of Acyclic and Thiolariat Ethers Having a Tropone Pendant**

Akira Mori and Kanji Kubo*

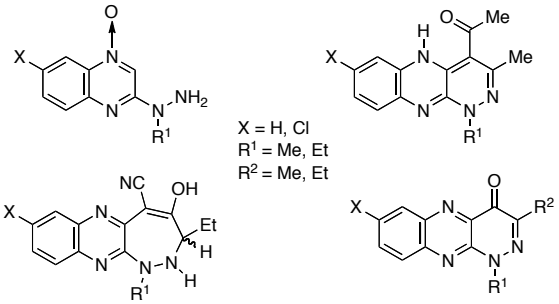




Troponoid Podand Armed Crown Ether Mercury(II) Ion Liquid Membrane

359 **Quinolone Analogues 3. Synthesis of 1,3-Dialkyl-4-oxo-1,4-dihydropyridazino[3,4-*b*]quinoxalines**

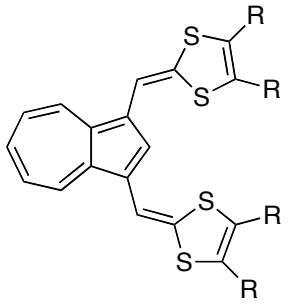
Ho Sik Kim, Yoshihisa Okamoto, Miharu Ogura, Yaeko Kishimoto, Shinichi Ohshima, and Yoshihisa Kurasawa*



Quinolone Analogue Quinoxaline *N*-Oxide Pyridazino[3,4-*b*]quinoxaline Antibacterial Activity Oxidation

377 **Preparation, Structure, and Properties of 1,3-Bis(1,4-dithiafulven-6-yl)azulenes**

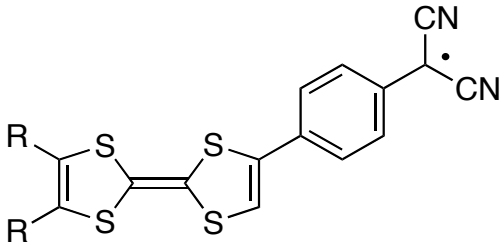
Yoshiro Yamashita, Naoki Fujisawa, Kyoko Yamaguchi, Akira Ohta, and Kunihide Fujimori*



1,3-Dithiole Electron Donor Cyclic Voltammetry Spectroelectrochemistry X-Ray Analysis

387 **Generation and Amphoteric Redox Properties of Novel Neutral Radicals with the TTF-TCNQ Hybrid Structure1**

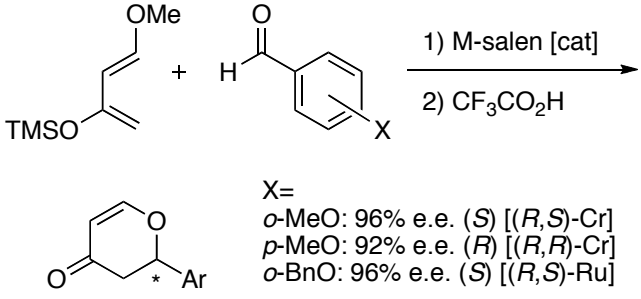
Takashi Tsuji, Masakazu Ohkita, Masahiro Yamada, and Takanori Suzuki*



Electron Donor Electron Acceptor Charge-Transfer Organic Conductor Electron-Transfer

395 **Lewis Acid Catalysis of Second-generation Metallosalen Complexes: An Explanation for Stereochemistry of Asymmetric Hetero Diels-Alder Reaction**

Ryo Irie, Tatsuya Uchida, Kohsuke Aikawa, Jun Mihara, and Tsutomu Katsuki*

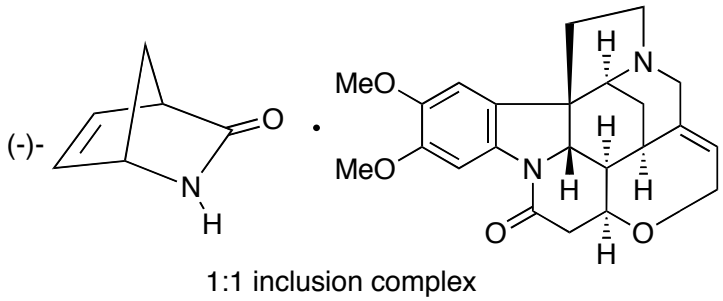


(Salen)chromium Complex (Salen)ruthenium Complex Danishefsky's Diene *cis*-β-Structure

■ NOTES

405 **Optical Resolution of 2-Azabicyclo[2.2.1]hept-5-en-3-one by Inclusion Complexation with Brucine**

Masako Kato, Koichi Tanaka, and Fumio Toda*

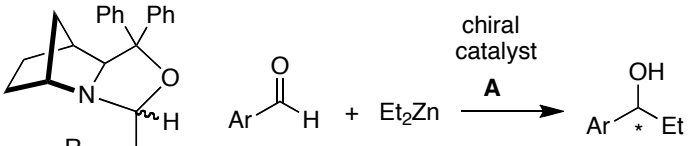


1:1 inclusion complex

Optical Resolution Chiral Recognition Inclusion Complex 2-Azabicyclo[2.2.1]hept-5-en-3-one Brucine

411 **Synthesis of New Chiral Catalysts, 2-Azanorbornyl-oxazolidines, for Enantioselective Addition of Diethylzinc to Aldehydes**

Kazuto Iwasa, Yuko Okuyama, Hiroto Nakano, and Hiroshi Hongo*



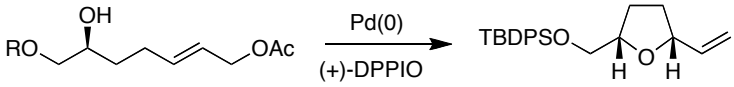
R = OH, CH_2OH

A

Chiral Oxazolidine β-Amino Alcohol Catalytic Asymmetric Synthesis 2-Azanorbornylmethanol Chiral Secondary Alcohol

419 **Synthesis of 2,5-Disubstituted Tetrahydrofurans Catalyzed by Palladium(0)**

Youji Sakagami, Yasumasa Hamada, Kazushige Fujii, and Osamu Hara*



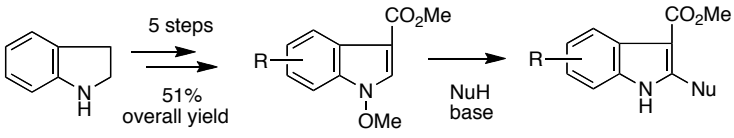
R=TBDPS

cis trans = 81 : 19

Allylic Substitution Reaction Reagent Control Chiral Ligand

425 **Syntheses of Wasabi Phytoalexin (Methyl 1-Methoxy-indole-3-carboxylate) and Its 5-Iodo Derivative, and Their Nucleophilic Substitution Reactions**

Toshiharu Ohta, Fumio Yamada, Hitomi Orita, Asuka Tanimoto, and Masanori Somei*

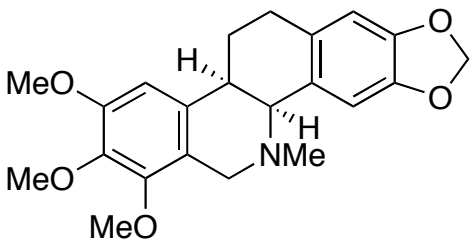


R = H or 5-I; Nu = methylthio, indol-1-yl, imidazol-1-yl, etc.

1-Methoxyindole-3-carboxylate 5-Iodo-1-methoxyindole-3-carboxylate 5-Iodoindole-3-carboxylate 6-Iodoindole-3-carboxylate

433 **Alternative Synthesis of B/C-*cis* Hexahydrobenzo[*c*]-phenanthridine from 2-Phenyl-1-tetralone**

Toshiko Watanabe, Makoto Yoshida, and Tsutomu Ishikawa*



Reductive Amidation Formenamide Bischler-Napieralski Reaction Hydride Reduction

■ REVIEWS