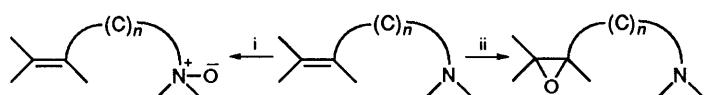


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- 293 Use of Dioxiranes for the Chemoselective Oxidation of Tertiary Amines bearing Alkene Moieties

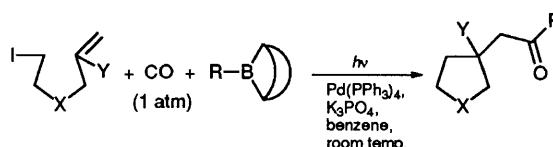


i, DMD-acetone, 0 °C;

ii, $\text{BF}_3\text{-Et}_2\text{O}$, -70 °C then DMD or TFMD, CH_2Cl_2 -acetone, 0 °C; then KHCO_3

Marta Ferrer, Francisco Sánchez-Baeza, Angel Messeguer, Anna Diez, Mario Rubiralta

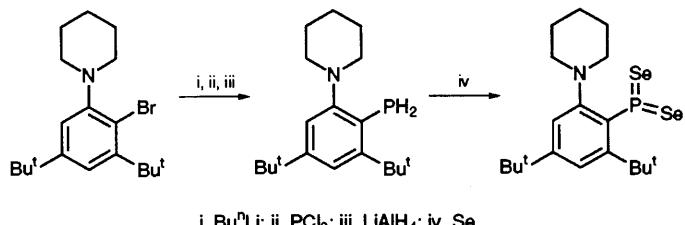
- 295 Synthesis of Ketones from Iodoalkenes, Carbon Monoxide and 9-Alkyl-9-borabicyclo[3.3.1]nonane Derivatives via a Radical Cyclization and Palladium-Catalysed Carbonylative Cross-coupling Sequence



Tatsuo Ishiyama, Miki Murata, Akira Suzuki, Norio Miyaura

X = CH_2 ; Y = H, X = O; Y = H, X = NTs; Y = Me
Oxidative addition through a radical process provides cyclized ketones.

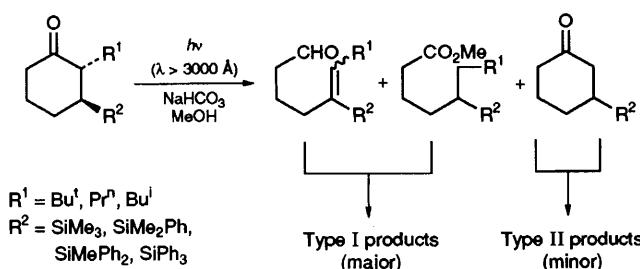
- 297 2,4-Di-*tert*-butyl-6-piperidinophenyl as a Sterically and Electronically Stabilizing Group and X-Ray Analysis of the Corresponding Diselenoxophosphorane



Masaaki Yoshifuji, Shinya Sangu, Kazunori Kamijo, Kozo Toyota

i, Bu_3Li ; ii, PCl_5 ; iii, LiAlH_4 ; iv, Se

- 299 Influence of β -Silyl Groups in Cycloalkanones on the Norrish Type I and Type II Cleavages



Jih Ru Hwu, Buh-Luen Chen, Li Wen Huang, Tu-Hsin Yang

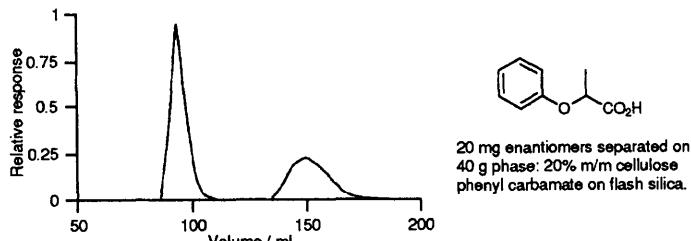
 $R^1 = \text{Bu}^t, \text{Pr}^n, \text{Bu}^i$
 $R^2 = \text{SiMe}_3, \text{SiMe}_2\text{Ph}, \text{SiMePh}_2, \text{SiPh}_3$

Type I products (major)

Type II products (minor)

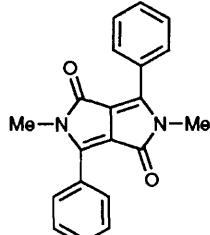
301 Flash Chiral Chromatography using Carbohydrate Carbamate-coated Silica

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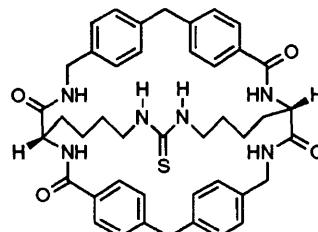
303 Excited State Electron and Energy Transfer of a Highly Fluorescent Heterocyclic Dye: a Laser Flash Photolysis Study of 2,5-Dimethyl-3,6-diphenylpyrrolo[3,4-c]pyrrole-1,4-dione

V. J. P. Srivatsavoy, M. Eschle, J.-E. Moser, M. Grätzel



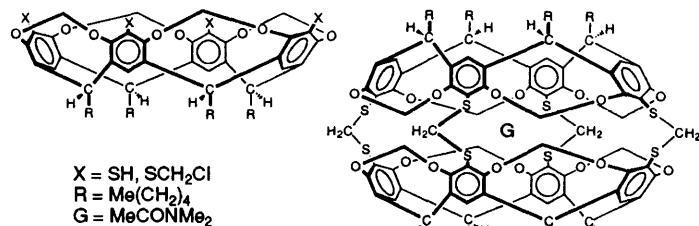
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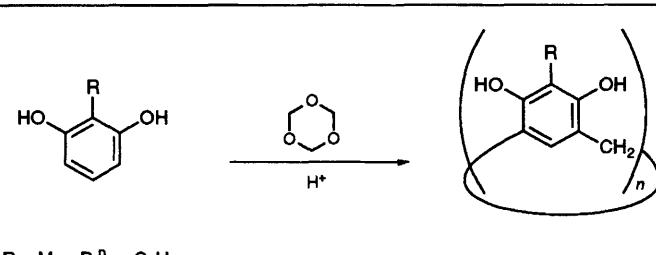
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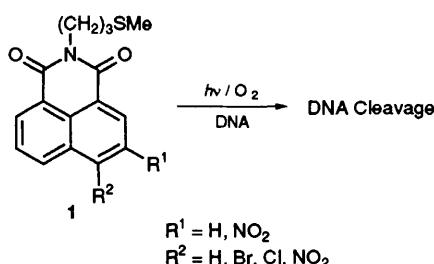
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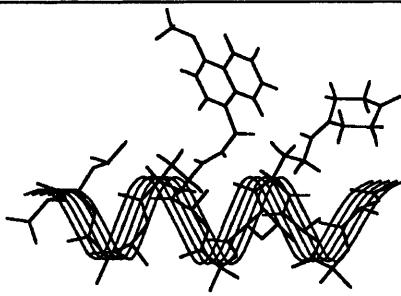


311 2-(3-Methylthiopropyl)-1*H*-benz[*d,e*]-isoquinoline-1,3(2*H*)-dione Derivatives as Novel Photo-induced DNA Cleavers

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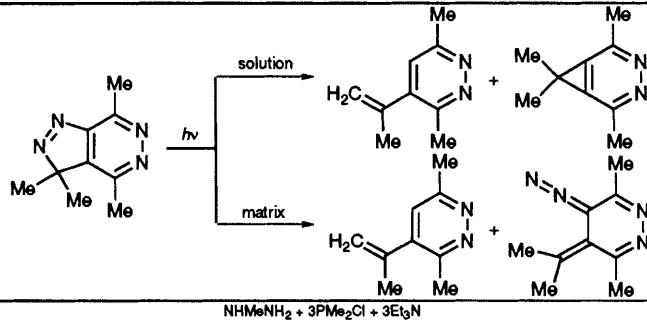


- 313 Thermal Control over the Extent of Photoinduced Electron Transfer in Helical Oligopeptides



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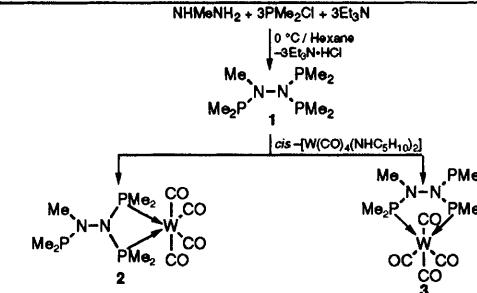
- 315 Photochemical Transformations of 3,3,4,7-Tetramethylpyrazolo[3,4-*d*]pyridazine in Solution and Frozen Gas Matrices



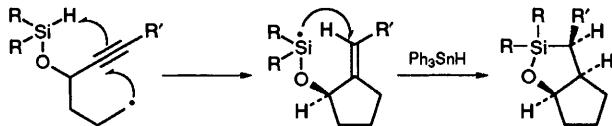
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- 317 Methyl Hydrazine as a Building Block for a Bridge Between Phosphinoamine [$R_2P-N(R)-PR_2$] and Phosphorus Hydrazide [$R_2P-N(R)-N(R)-PR_2$]. Synthesis and Coordination Chemistry of a Novel Triphosphine [$(Me_2P)_2N-N(Me)(PMMe_2)$]

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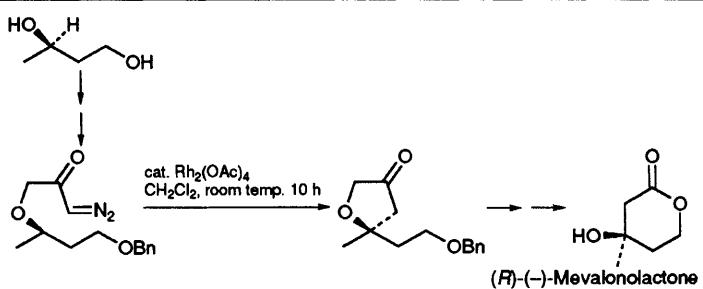
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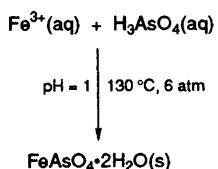
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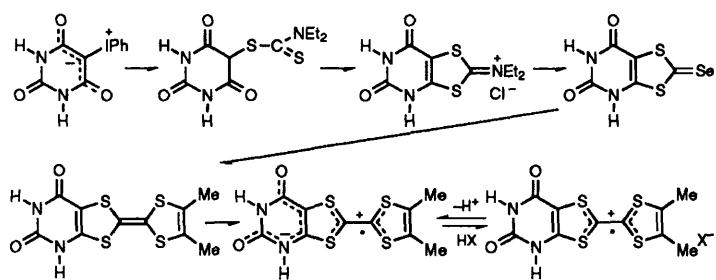


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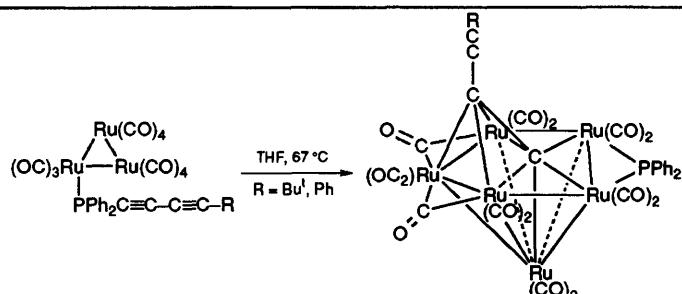


- 325 Synthesis and X-Ray Crystal Structure of a Novel Tetrathiafulvalene Dimethyl[2,4-dioxo(1*H*,3*H*)-pyrimido]tetrathiafulvalene, able to form Intermolecular Hydrogen Bonds of Nucleic Acid Base-pair Type



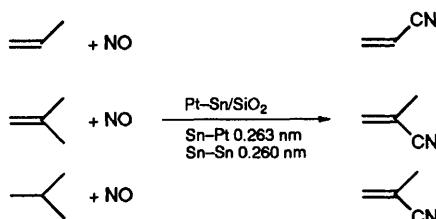
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- 327 From Butadiynyl ($-C\equiv C-C\equiv CR$) Ligands to Alkylidyne-Carbides: Synthesis and Characterisation of the Unusual Hexanuclear Ruthenium Carbido Clusters $[Ru_6(CO)_{13}(\mu-CO)_2(\mu-PPPh_2)(\mu_5-C)(\mu_3-C-C\equiv CR)]$ ($R = Bu^t, Ph$)



Peter Blenkiron, Nicholas J. Taylor, Arthur J. Carty

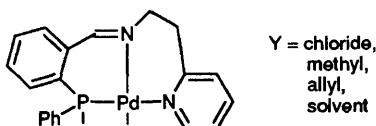
- 329 Catalytic Synthesis of Unsaturated Nitriles from NO-Alkane or NO-Alkene on Pt-Sn/SiO₂



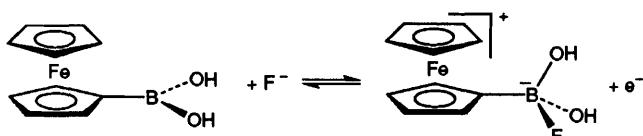
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- 331 Stable Palladium(0) and Palladium(II) Complexes Containing a New, Multifunctional and Semi-labile Phosphorus-Bisnitrogen Ligand

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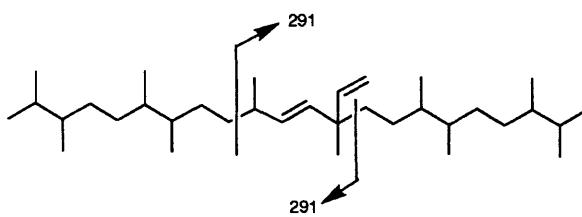


- 333 Selective Fluoride Recognition with Ferroceneboronic Acid



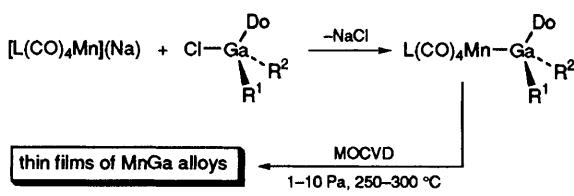
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- 335 Identification of 1,6,17,21-Octahydrobotryococcene in a Sediment



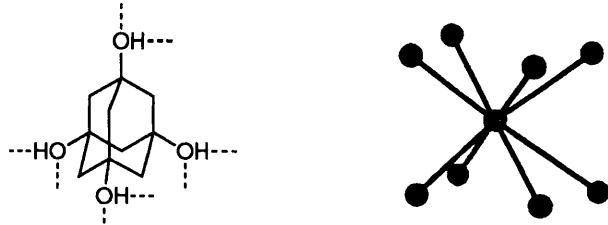
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- 337 First Volatile Alkylgallyl Manganese Complexes; Structure of $[(CO)_5Mn]_2Ga[(CH_2)_3NMe_2]$. Molecular Control of the Stoichiometry of Mn–Ga Thin Films Grown by Low-pressure MOCVD



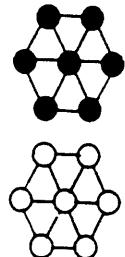
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- 339 Topological Equivalences between Organic and Inorganic Crystal Structures: 1,3,5,7-Tetrahydroxyadamantane and Caesium Chloride



D. Shekhar Reddy, Donald C. Craig, Gautam R. Desiraju

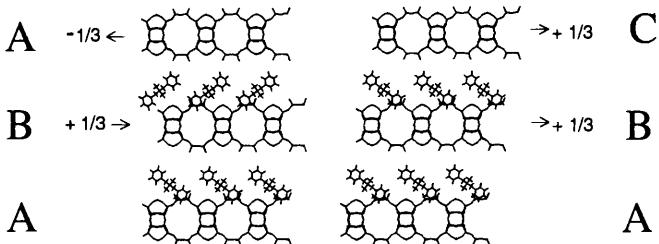
- 341 Hexagonal Supramolecular Networks in the Crystal Structure of the 1:1 Molecular Complex Trimethylisocyanurate–1,3,5-Trinitrobenzene



Trimethylisocyanurate, ● and 1,3,5-Trinitrobenzene, ○ form a 1:1 complex with distinct molecular layers.

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- 343 Postulated Mechanism for Faulting in Zeolite Beta



Adrian P. Stevens, Paul A. Cox

- 347 Interconversion of Chlorofluorocarbons in Plasmas



CFCs interconvert during pyrolysis, so that analysis of product streams from CFC destruction technologies to determine the residual ozone depleting potential is not a trivial exercise.

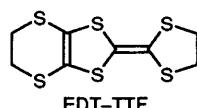
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- 349 Titanium Silicate Molecular Sieve (TS-1)/H₂O₂ induced Triphase Catalysis in the Oxidation of Hydrophobic Organic Compounds with Significant Enhancement of Activity and *Para*-Selectivity

Significantly high conversions and *para* selectivity are achieved in the TS-1/H₂O₂ catalysed hydroxylation/oxidation of water-immiscible organic compounds (toluene, anisole, benzyl alcohol, cyclohexanol etc.) using a triphasic system (solid and two immiscible liquids) *vis-à-vis* commonly employed biphasic systems (solid and immiscible liquids along with a cosolvent, such as acetonitrile).

Asim Bhaumik, Rajiv Kumar

- 351 The New Synthetic Metals of M(dmise)₂: [Me₃HN]-[Ni(dmise)₂]₂ and (EDT-TTF)[Ni(dmise)₂]₂

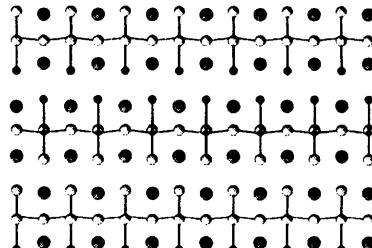


Toshio Naito, Akane Sato, Kouichi Kawano,
Akiko Tateno, Hayao Kobayashi, Akiko
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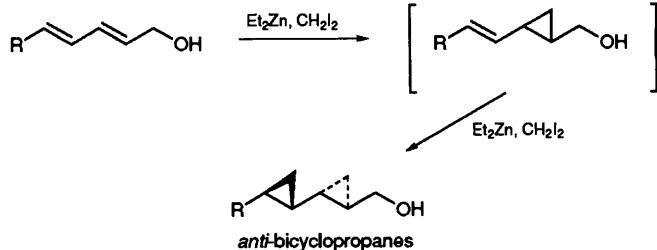
- 353 Synthesis and Structure of Ba₂InO₃F: Oxide/Fluoride Ordering in a New K₂NiF₄ Superstructure

Richard L. Needs, Mark T. Weller



- 355 Studies towards the Synthesis of FR-900848: Stereoselective Preparation of *anti*-Bicyclop propane Derivatives

Anthony G. M. Barrett, Gary J. Tustin



- 357 A Reassessment of the Isoinversion Principle

A maximum in a plot of ln P vs. 1/T can occur without a change in the sign of ΔΔH[‡].

Karl J. Hale, John H. Ridd

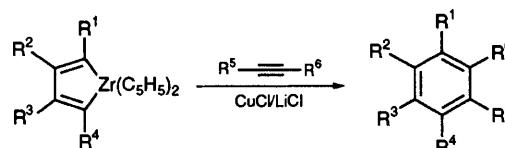
- 359 Synthesis and Catalytic Bifunctional Properties of Tungsten Oxynitrides

S. Sellem, C. Potvin, J. M. Manoli, R. Contant, G. Djéga-Mariadassou

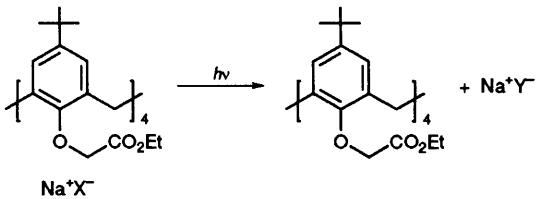
Tungsten oxynitrides WN_xO_y and WN_xO_yP_z were synthesized by temperature-programmed reactions of polyanionic precursors. The characteristics of these materials were investigated by chemical analysis, specific surface area, TEM and XRD. The bifunctional catalytic behaviour of these oxynitrides was evidenced in isomerization and hydrogenolysis/cracking of *n*-heptane in hydrogen at atmospheric pressure. Phosphorus produced a large enhancement of the metallic catalytic properties of the as-synthesized materials.

- 361 Cycloaddition of Zirconacyclopentadienes to Alkynes using Copper Salts: Formation of Benzene Derivatives

Tamotsu Takahashi, Martin Kotora, Zhenfeng Xi

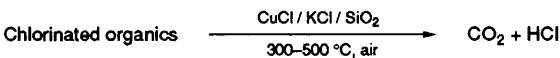


- 363 Anion- and Solvent-dependent Photochemical Decomplexation of Sodium Salt Complexes of a Calix[4]arene Tetraester



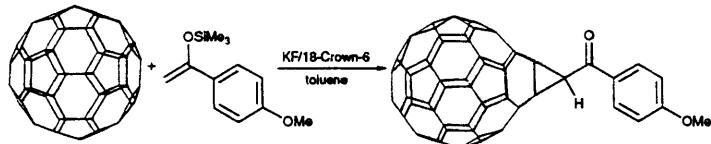
Geraldine Barrett, Denis Corry, Bernadette S. Creaven, Brian Johnston, M. Anthony McKervey, Anthony Rooney

- 365 Total Oxidation of Chlorinated Hydrocarbons by Copper and Chlorine based Catalysts



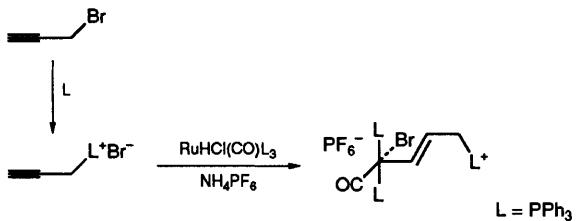
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- 367 Reaction of [60]Fullerene with 1-(4-Methoxyphenyl)-1-(trimethylsilyloxy)ethylene



Lian-He Shu, Guan-Wu Wang, Shi-Hui Wu, Hou-Ming Wu

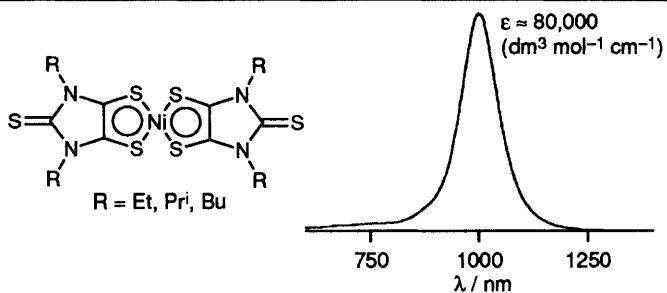
- 369 Hydroruthenation of Prop-2-ynyl-triphenylphosphonium Bromide: Synthesis, Crystal Structure and Reactions of [RuBr-(CH=CHCH₂PPh₃)(CO)(PPh₃)₂]PF₆



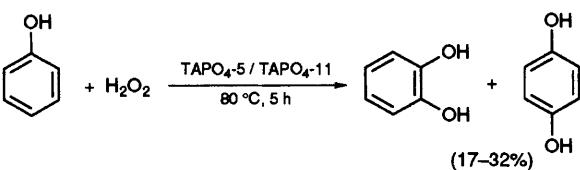
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- 371 New Neutral Nickel Dithiolene Complexes derived from 1,3-Dialkylimidazolidine-2,4,5-trithione, showing Remarkable Near-IR Absorption

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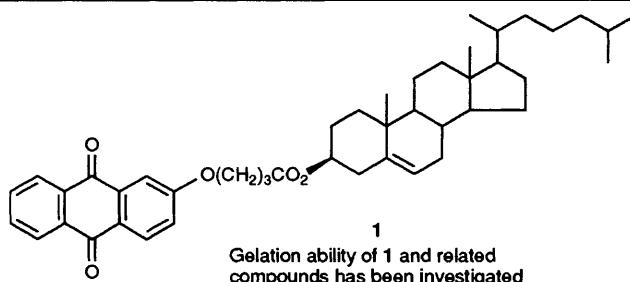


- 373 Titanium Substitution in Silicon-free Molecular Sieves: Anatase-free TAPO₄-5 and TAPO₄-11 Synthesis and Characterisation for Hydroxylation of Phenol



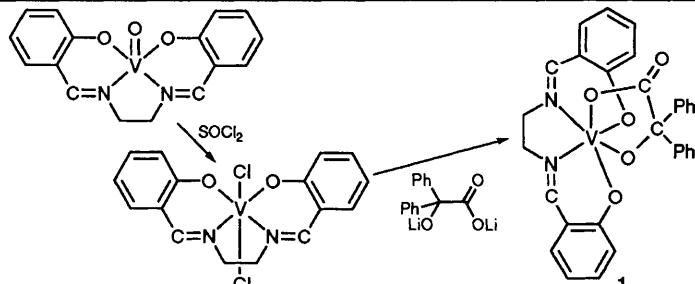
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375 Anthraquinone–Steroid based Gelators of Alcohols and Alkanes



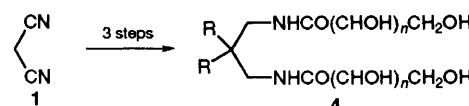
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377 [Vanadium(salen)benzilate]—A Novel Non-oxo Vanadium(IV) Complex



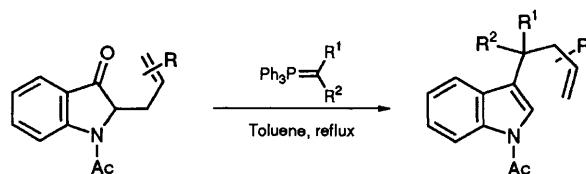
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379 Synthesis and Properties of Some Novel Nonionic Polyol Surfactants



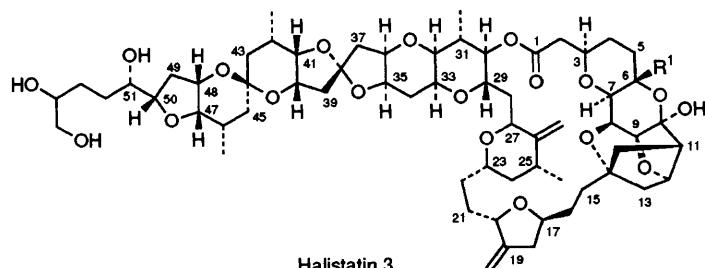
Catherine B. A. Briggs, Ian M. Newington, Alan R. Pitt

381 Tandem Wittig Reaction and Cope Rearrangement of 2-Allyl-1,2-dihydroindol-3-ones to 3-Indole Acetates



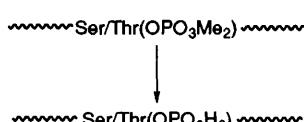
Tomomi Kawasaki, Kazuaki Watanabe, Kouhei Masuda, Masanori Sakamoto

383 Isolation and Structure of Halistatin 3 from the Western Pacific (Chuuk) Marine Sponge *Phakellia sp*



George R. Pettit, Yoshitatsu Ichihara, Gerald Wurzel, Michael D. Williams, Jean M. Schmidt, Jean-Charles Chapulis

387 Practical Synthesis of Phosphopeptides using Dimethyl-protected Phosphoamino Acid Derivatives

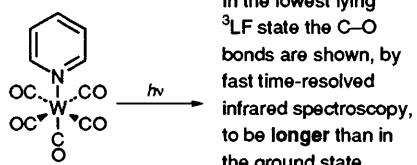


Akira Otaka, Kengo Miyoshi, Peter P. Roller, Terrence R. Burke Jr., Hirokazu Tamamura, Nobutaka Fujii

Practical synthesis of phosphopeptides was achieved using a combination of dimethyl-protected phosphoamino acids and two-step deprotection protocols consisting of high acidic and low acidic reagent systems.

- 391 The Structure of $W(CO)_5L$ (L = pyridine, piperidine) in the Lowest Ligand Field Excited State determined by Fast Time-resolved IR Spectroscopy; Unexpected C–O Bond Length Changes

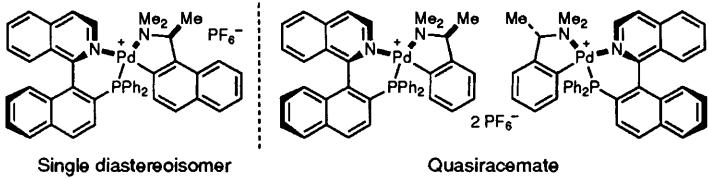
Frank P. A. Johnson, Michael W. George, Sara L. Morrison, James J. Turner



In the lowest lying 3LF state the C–O bonds are shown, by fast time-resolved infrared spectroscopy, to be longer than in the ground state.

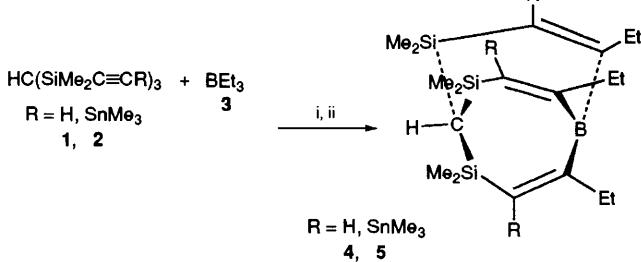
- 395 Contrasting Behaviour of Related Palladium Complex-derived Resolving Agents. 8-H Conformational Locking of the 1-Naphthyl Side-Chain

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