

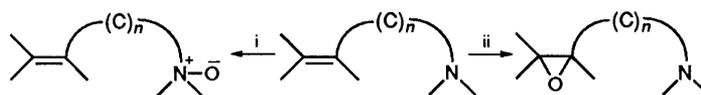
JOURNAL OF THE CHEMICAL SOCIETY

## Chemical Communications

Number 3  
1995

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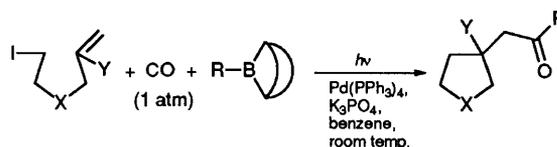
- 293 Use of Dioxiranes for the Chemoselective Oxidation of Tertiary Amines bearing Alkene Moieties



i, DMD-acetone, 0 °C;  
ii,  $\text{BF}_3 \cdot \text{Et}_2\text{O}$ , -70 °C then DMD or TFMD,  $\text{CH}_2\text{Cl}_2$ -acetone, 0 °C; then  $\text{KHCO}_3$

Marta Ferrer, Francisco Sánchez-Baeza, Angel Messegue, 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

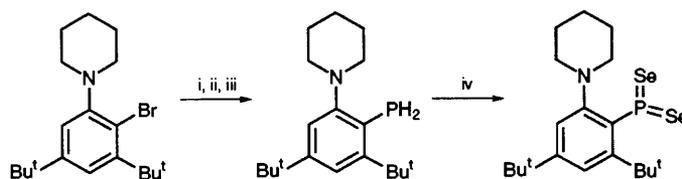


X =  $\text{CH}_2$ ; Y = H, X = O; Y = H, X = NTs; Y = Me

Oxidative addition through a radical process provides cyclized ketones.

Tatsuo Ishiyama, Miki Murata, Akira Suzuki, Norio Miyaura

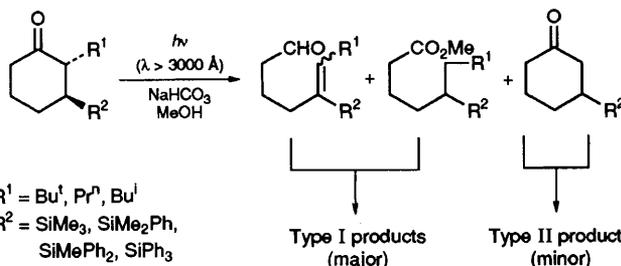
- 297 2,4-Di-
- tert*
- butyl-6-piperidinophenyl as a Sterically and Electronically Stabilizing Group and X-Ray Analysis of the Corresponding Diselenoxophosphorane



i,  $\text{Bu}^n\text{Li}$ ; ii,  $\text{PCl}_3$ ; iii,  $\text{LiAlH}_4$ ; iv, Se

Masaaki Yoshifuji, Shinya Sangu, Kazunori Kamijo, Kozo Toyota

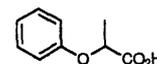
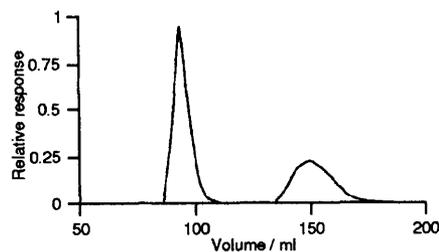
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- $\beta$
- Silyl Groups in Cycloalkanones on the Norrish Type I and Type II Cleavages



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

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Stephen A. Matlin, Sally J. Grieb, Ana M. Belenguer



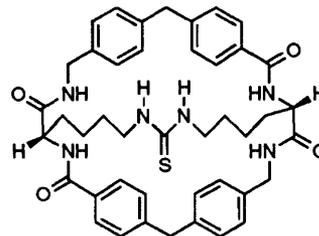
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V. J. P. Srivatsavoy, M. Eschle, J.-E. Moser, M. Grätzel



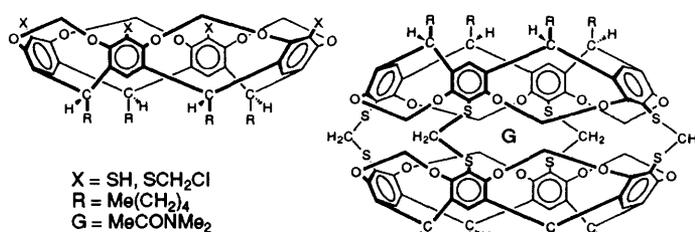
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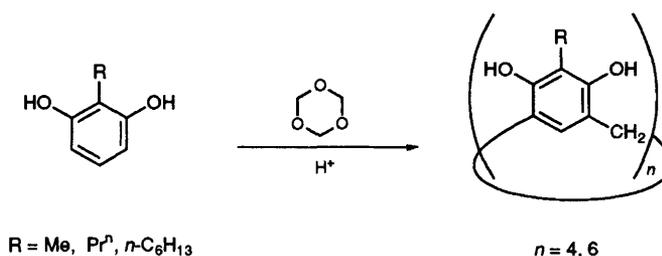


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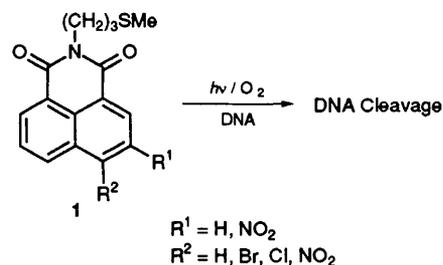
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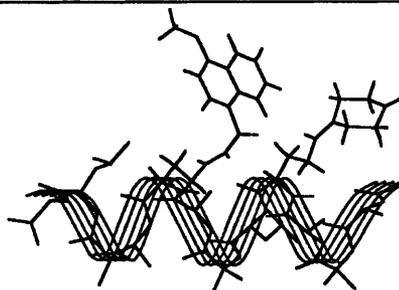
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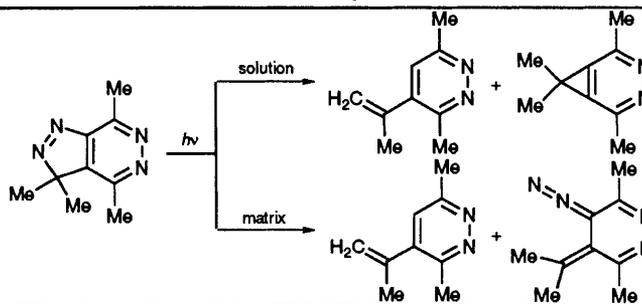
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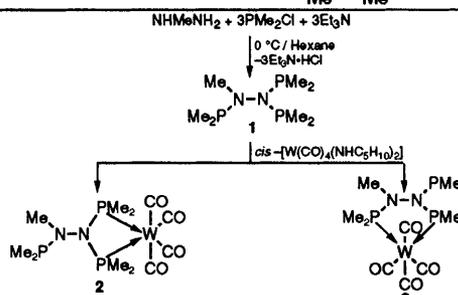
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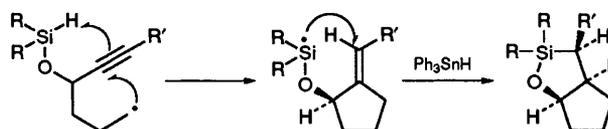
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V. Sreenivasa Reddy, Kattesh V. Katti, Charles L. Barnes



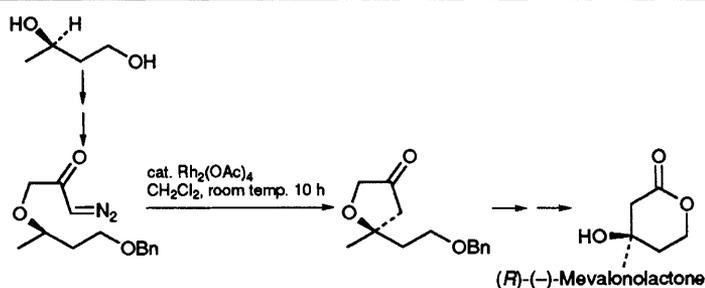
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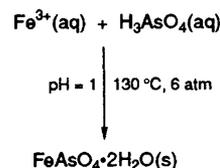
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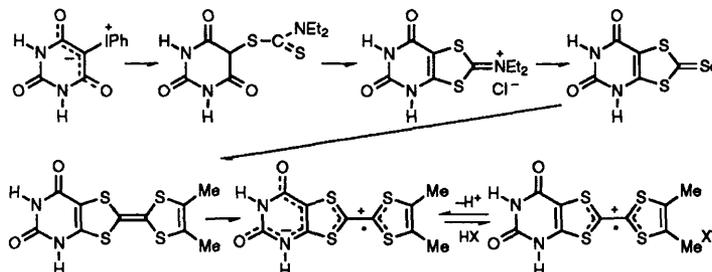


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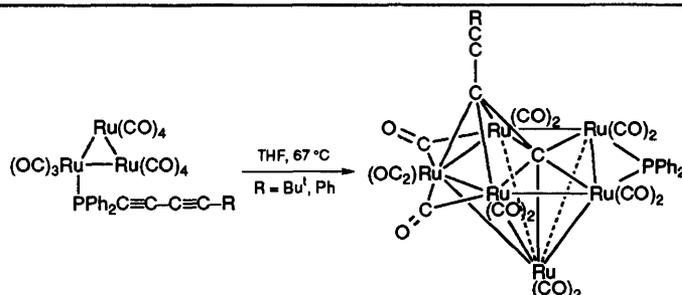


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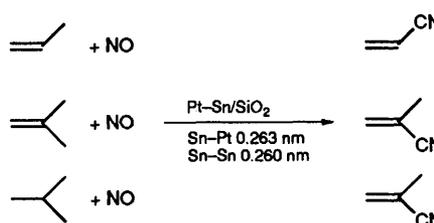
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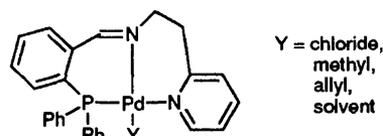
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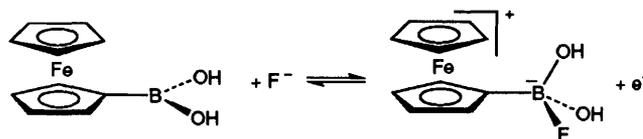
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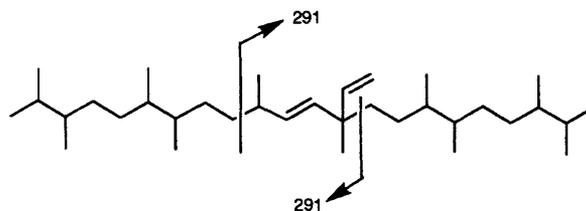
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Claus Dusemund, K. R. A. Samankumara Sandanayake, Seiji Shinkai

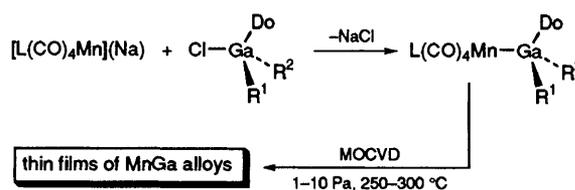
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Yongsong Huang, Martin Murray

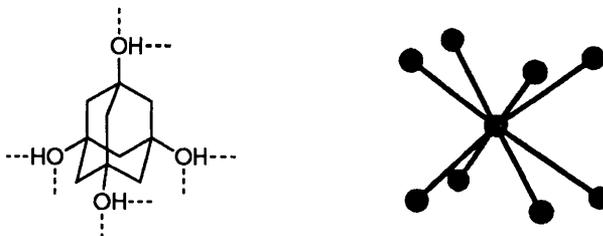
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Roland A. Fischer, Alexander Miehr, Markus M. Schulte, Eberhardt Herdtweck



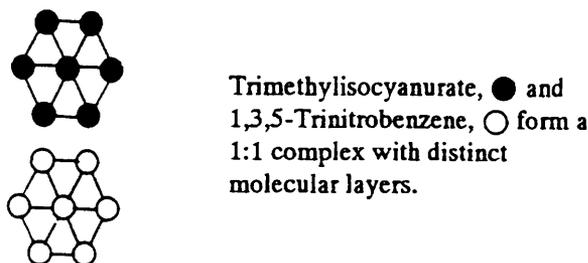
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D. Shekhar Reddy, Donald C. Craig, Gautam R. Desiraju



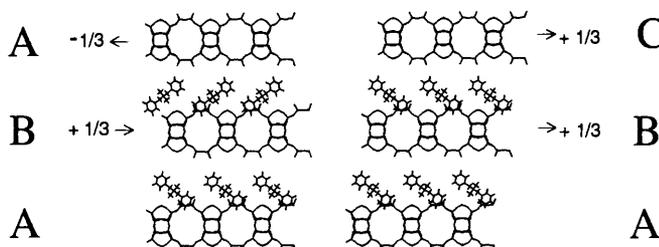
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Venkat R. Thalladi, Kaliyamoorthy Panneerselvam, C. J. Carrell, H. L. Carrell, Gautam R. Desiraju



- 343 **Postulated Mechanism for Faulting in Zeolite Beta**

Adrian P. Stevens, Paul A. Cox



- 347 **Interconversion of Chlorofluorocarbons in Plasmas**

Rowan T. Deam, Austin R. Dayal, Trevor McAllister, Alan E. Mundy, Robert J. Western, Laurence M. Besley, Anthony J. D. Farmer, E. Corinna Horrigan, Anthony B. Murphy



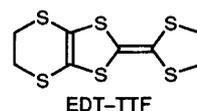
CFCs interconvert during pyrolysis, so that analysis of product streams from CFC destruction technologies to determine the residual ozone depleting potential is not a trivial exercise.

- 349 **Titanium Silicate Molecular Sieve (TS-1)/ $H_2O_2$  induced Triphase Catalysis in the Oxidation of Hydrophobic Organic Compounds with Significant Enhancement of Activity and *Para*-Selectivity**

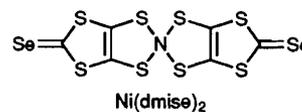
Asim Bhaumik, Rajiv Kumar

Significantly high conversions and *para* selectivity are achieved in the TS-1/ $H_2O_2$  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).

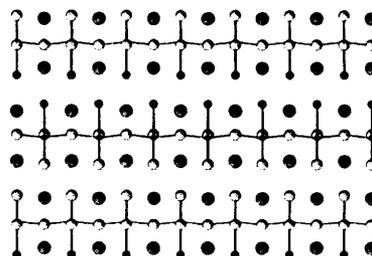
- 351 The New Synthetic Metals of  $M(\text{dmise})_2$ :  $[\text{Me}_3\text{HN}]\text{-}[\text{Ni}(\text{dmise})_2]_2$  and  $(\text{EDT-TTF})[\text{Ni}(\text{dmise})_2]$



Toshio Naito, Akane Sato, Kouichi Kawano,  
Akiko Tateno, Hayao Kobayashi, Akiko  
Kobayashi

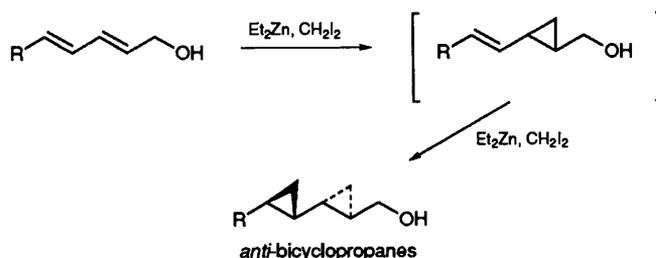


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Richard L. Needs, Mark T. Weller

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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  $\Delta\Delta H^\ddagger$ .

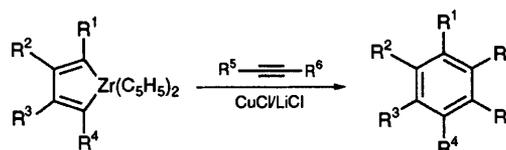
Karl J. Hale, John H. Ridd

- 359 Synthesis and Catalytic Bifunctional Properties of  
Tungsten Oxynitrides

Tungsten oxynitrides  $\text{WN}_x\text{O}_y$  and  $\text{WN}_x\text{O}_y\text{P}_z$  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.

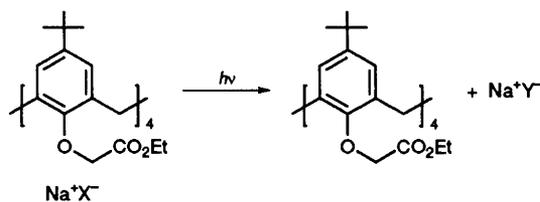
S. Sellem, C. Potvin, J. M. Manoli, R. Contant, G.  
Djéga-Mariadassou

- 361 Cycloaddition of Zirconacyclopentadienes to  
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Derivatives



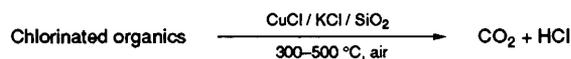
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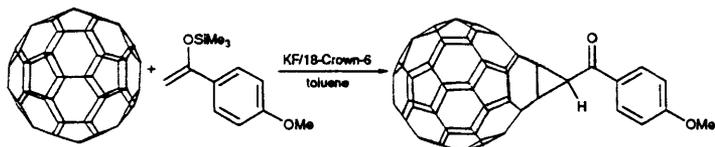
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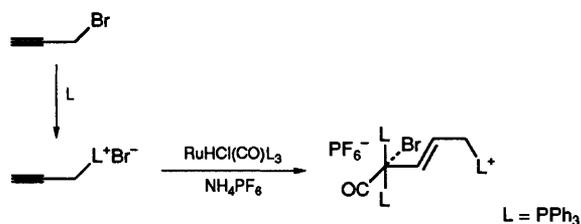
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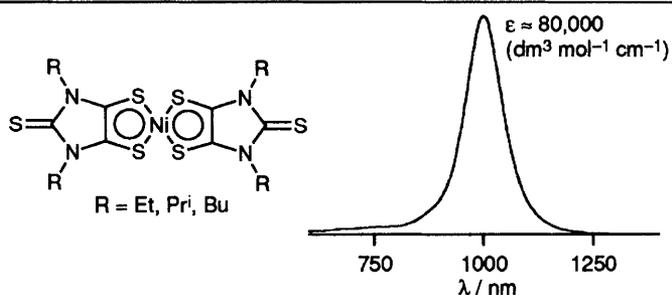
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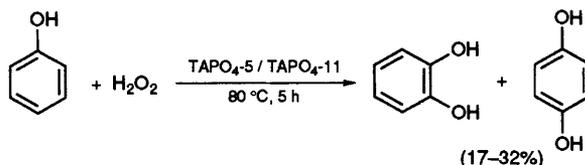
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Francesco Bigoli, Paola Deplano, Francesco A. Devillanova, Vito Lippolis, Peter J. Lukes, Maria Laura Mercuri, Maria Angela Pellinghelli, Emanuele F. Trogu

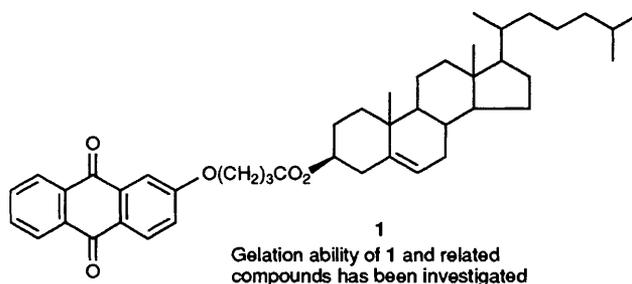
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N. Ulagappan, V. Krishnasamy

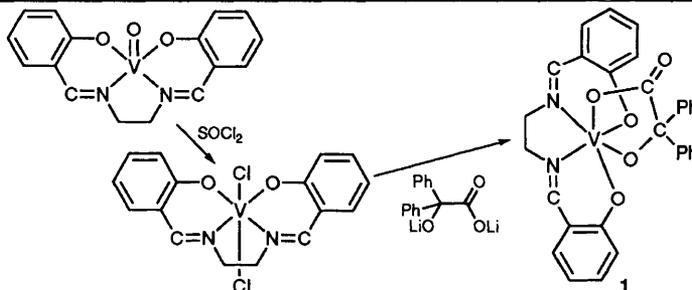
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Ravindranath Mukkamala, Richard G. Weiss



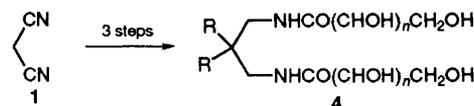
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Vassilios Vergopoulos, Sven Jentzen, Dieter Rodewald, Dieter Rehder



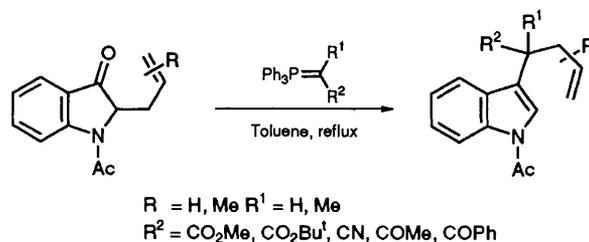
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Catherine B. A. Briggs, Ian M. Newington, Alan R. Pitt



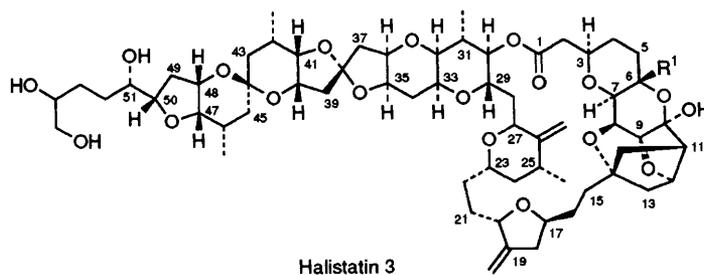
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Tomomi Kawasaki, Kazuaki Watanabe, Kouhei Masuda, Masanori Sakamoto



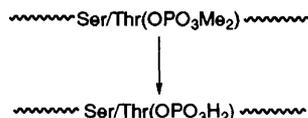
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George R. Pettit, Yoshitatsu Ichihara, Gerald Wurzel, Michael D. Williams, Jean M. Schmidt, Jean-Charles Chapuls

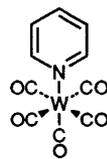


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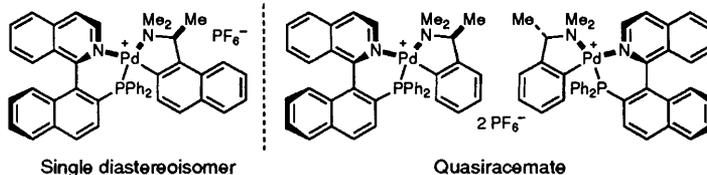
- 391 **The Structure of  $W(CO)_5L$  ( $L =$  pyridine, piperidine) in the Lowest Ligand Field Excited State determined by Fast Time-resolved IR Spectroscopy; Unexpected C–O Bond Length Changes**



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.

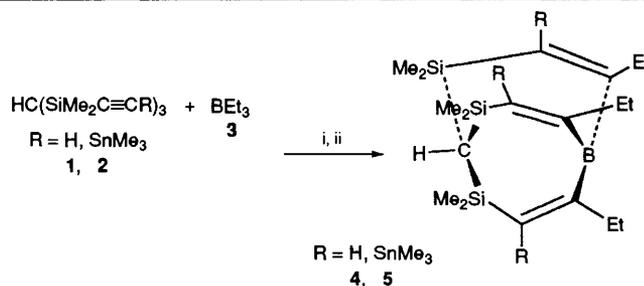
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Nathaniel W. Alcock, David I. Hulmes, John M. Brown

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Bernd Wrackmeyer, Dagmar Wettinger, Wolfgang Milius

