

Tetrahedron Letters Vol. 48, No. 9, 2007

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The reaction of (*N*-isocyanimino)triphenylphosphorane with benzoic acid derivatives: a novel synthesis of pp 1549–1551 2-aryl-1,3,4-oxadiazole derivatives

Ali Souldozi and Ali Ramazani*

$$X$$
OH
 $+$
 $C = N$
 $N = PPh_3$
 CH_2CI_2
 $r. t.$
 $N = N$
 N

The reactions of benzoic acid derivatives with (*N*-isocyanimino)triphenylphosphorane proceed smoothly at room temperature to afford 2-aryl-1,3,4-oxadiazoles in high yields.

Improved solubilization of pyromellitic dianhydride and 4,4'-oxydianiline in ionic liquid by the addition of zwitterion and their polycondensation

pp 1553-1557

Masahiro Tamada, Takahiro Hayashi and Hiroyuki Ohno*

Solubility of 4,4'-oxydianiline and pyromellitic dianhydride as starting materials H₂N of polyimide in 1-benzyl-3-methylimidazolium bis(trifluoromethane sulfonyl)imide was significantly improved by the addition of imidazolium type zwitterion to afford high molecular weight polyimide.

Cochinchistemonine, a novel skeleton alkaloid from Stemona cochinchinensis

pp 1559-1561

Li-Gen Lin, Chun-Ping Tang, Pham-Huu Dien, Ren-Sheng Xu and Yang Ye*

Cochinchistemonine, an alkaloid with a novel skeleton, was isolated from the roots of *Stemona cochinchinensis*. The structure was established on the basis of extensive spectral studies. The stereochemistry was confirmed by X-ray diffraction.

A short and efficient synthesis of 5-hydroxymethylcyclopent-2-enol from p-glucose and its elaboration to pp 1563–1566 the carbanucleoside (–)-carbovir

Biswajit G. Roy, Prithwish K. Jana, Basudeb Achari and Sukhendu B. Mandal*

Cytotoxic and novel skeleton compounds from the heartwood of *Chamaecyparis obtusa* var. *formosana* pp 1567–1569 Shih-Chang Chien, Jang-Yang Chang, Ching-Chuan Kuo, Cheng-Chih Hsieh, Ning-Sun Yang and Yueh-Hsiung Kuo*

The novel skeleton compounds, chamaecypanone C (3) and obtunorlignan A (4) were isolated from the heartwood of *Chamaecyparis obtusa* var. *formosana*.

A practical method for the synthesis of pyrrolizidine, indolizidine and pyrroloazepinolizidine nucleus

pp 1571-1575

Tomás Quiroz, David Corona, Adrián Covarruvias, José Gustavo Avila-Zárraga and Moisés Romero-Ortega*

ON OH OH COOET

$$n = 1, 2, 3$$

Montmorillonite clay-catalyzed hetero-Diels-Alder reaction of 2,3-dimethyl-1,3-butadiene with benzaldehydes

pp 1577-1579

Matthew R. Dintzner,* Andrew J. Little, Massimo Pacilli, Dominic J. Pileggi, Zachary R. Osner and Thomas W. Lyons

Synthesis and binding studies of novel thiacalixpodands and bisthiacalixarenes having O,O"-dialkylated thiacalix[4]arene unit(s) of 1,3-alternate conformation

pp 1581-1585

Vandana Bhalla, J. Nagendra Babu, Manoj Kumar,* Tetsutaro Hattori* and Sotaro Miyano

Thiacalixpodand **7a**, as well as a bisthiacalixarene of the related structure, quantitatively and selectively extracts silver ion from aqueous into organic phase under neutral conditions. Compound **7a** forms a 1:2 (L:M) complex with silver ion as proved by NMR spectroscopy, Job's plot and X-ray crystallography.

Calyciphylline C, a novel Daphniphyllum alkaloid from Daphniphyllum calycinum

pp 1587–1589

Shizuka Saito, Takaaki Kubota, Eri Fukushi, Jun Kawabata, Huiping Zhang and Jun'ichi Kobayashi*

Synthesis, structural characterization, and fluorescent chemosensory properties of novel molecular clips pp 1591–1594 based on diethoxycarbonyl glycoluril

Sheng-Li Hu, Neng-Fang She, Guo-Dong Yin, Hui-Zhen Guo, An-Xin Wu* and Chu-Luo Yang*

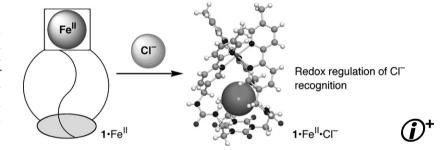
Isomer 1a and 1b, for selective recognition of Fe³⁺ with different association constant.

Multi-step regulation of anion recognition by redox-active pseudocryptand

pp 1595-1598

Tatsuya Nabeshima,* Sayuri Masubuchi, Norie Taguchi, Shigehisa Akine, Toshiyuki Saiki and Soichi Sato

We synthesized an artificial redox-active and Cl⁻-selective Fe-pseudocryptand as an anion receptor to respond to electrochemical oxidation and reduction. As the positive charge of the Fe center increases, the anion affinity effectively increased due to an enhanced electrostatic interaction between the Fe atom and the anionic guest.



Efficient catalytic aza-Michael additions of carbamates to enones: revisited dual activation of hard nucleophiles and soft electrophiles by InCl₃/TMSCl catalyst system

pp 1599-1603

Lei Yang, Li-Wen Xu* and Chun-Gu Xia*

$$R^{2} \stackrel{\text{O}}{\stackrel{\text{I}}{\text{II}}} \qquad R^{1} \qquad \frac{\text{carbamate}}{\text{InCl}_{3}/\text{TMSCl, rt.}} \qquad R^{2} \stackrel{\text{I}}{\stackrel{\text{I}}{\text{II}}} \qquad R^{1}$$



Enantioselective organocatalytic aryloxylation of aldehydes with o-quinones

Felix A. Hernandez-Juan, Dane M. Cockfield and Darren J. Dixon*

pp 1605-1608

An enantioselective organocatalytic inverse electron demand hetero Diels-Alder reaction of in situ generated enamines of aldehydes with *ortho*-quinone reagents is reported.



Diastereoselective synthesis of polyfunctionalized piperidines as precursors of dopamine transporter imaging agents

pp 1609-1612

Françoise Riché,* Fadi Masri and Monique Lopez

(i)+

$Immobilization\ of\ ruthenium (II)\ salen\ complexes\ on\ poly (4-vinylpyridine)\ and\ their\ application\ in\ catalytic\ aldehyde\ olefination$

pp 1613-1617

Syukri Syukri, Wei Sun and Fritz E. Kühn*

Ruthenium(II) salen complexes have been heterogenized on a polymeric carrier material. They can be utilized as active catalysts in the olefination of aldehydes.

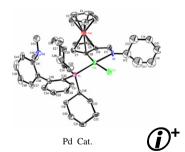
Amination of aryl chlorides in water catalyzed by cyclopalladated ferrocenylimine complexes with commercially available monophosphinobiaryl ligands

pp 1619-1623

Chen Xu, Jun-Fang Gong* and Yang-Jie Wu*

The easily accessible, air- and moisture-stable cyclopalladated ferrocenylimine complex **3** was found to be a highly active one-component precatalyst for the amination of aryl chlorides in water in the presence of inexpensive KOH and *t*-BuOH as a base and an additive, respectively.

ArCl +
$$H_2N-R$$
 $\xrightarrow{Pd Cat., Water}$ $Ar-HN-R$



gem-Difluoropropargylation of aldehydes using cat. In/Zn in aqueous media

pp 1625-1627

Satoru Arimitsu, Jesse M. Jacobsen and Gerald B. Hammond*

Reaction of 1 and 2 in the presence of Zn and catalytic amounts of In and I_2 produced gem-difluorohomopropargyl alcohol 3; these conditions are suitable for large scale applications.

A new fluorescent chemosensor for copper(II) and molecular switch controlled by light Zhi Liang, Zhilian Liu, Lin Jiang and Yunhua Gao*

Enol-forms

pp 1629-1632

 O_2N O_2N

Synthesis of poly-substituted nitrobenzene derivatives from Baylis-Hillman adducts via [3+3] annulation pp 1633-1636

Keto-forms

Da Yeon Park, Ka Young Lee and Jae Nyoung Kim*

protocol

Visible light

A new palladium-mediated approach to 4-N-arylamino-1-butanols from peroxidic tetrahydrofuran and pp 1637–1639 primary aromatic amines

Henry F. Russell,* John B. Bremner, Jennifer Bushelle-Edghill, Melissa R. Lewis, Stacey R. Thomas and Floyd Bates, II

Highly selective zeolite-catalysed mono-N-alkylation of arylenediamines by dialkyl carbonates Warren J. Ebenezer, Michael G. Hutchings,* Ken Jones, David A. Lambert and Ian Watt

pp 1641-1643

6-endo Versus 5-exo radical cyclization: streamlined syntheses of carbahexopyranoses and derivatives by pp 1645–1649 6-endo-trig radical cyclization

Ana M. Gómez,* Maria D. Company, Clara Uriel, Serafín Valverde and J. Cristóbal López*

Synthesis of the Janus integer pheromone (4R,9Z)-9-octadecen-4-olide

Gowravaram Sabitha,* K. Yadagiri and J. S. Yadav

pp 1651-1652

$${\rm O}_{\text{\tiny C_8H}_{17}}$$

Highly stereoselective syn-ring opening of enantiopure epoxides with nitric oxide

pp 1653-1656

Wentao Wu, Qiang Liu, Yinglin Shen, Rui Li and Longmin Wu*

$$\begin{array}{c} R^{1} \underset{(R)}{\overset{\wedge}{\nearrow}} \underset{\alpha}{\overset{\wedge}{\nearrow}} R^{2} \\ Ph \\ \textbf{1} \end{array} \xrightarrow{\begin{array}{c} NO \text{ (trace } O_{2}) \\ CH_{2}Cl_{2}, \text{ r.t.} \\ \end{array}} \begin{array}{c} O_{2}NO \\ R^{1}_{1} \underset{(R)}{\overset{\wedge}{\nearrow}} (R) \\ Ph \\ \textbf{2} \end{array} \xrightarrow{\begin{array}{c} O_{2}NO \\ Ph \\ OH \\ \end{array}} \begin{array}{c} R^{2} \\ R^{1}_{1} \underset{(R)}{\overset{\wedge}{\nearrow}} (R) \\ Ph \\ \textbf{3} \end{array}$$

Reaction of enantiopure epoxides (1) with NO afforded *syn*-ring opened products, nitrates (2). Their configurations were confirmed to be retained by determining the configuration of reduced products 1,2-glycols from 2.

Catalytic, asymmetric synthesis of α-phenoxy-β-aryl-β-lactams

pp 1657-1659

Yazhong Huang and Michael A. Calter*



Functionalized azobenzenes through cross-coupling with organotrifluoroborates

pp 1661-1664

Jessica H. Harvey, Brandon K. Butler and Dirk Trauner*

$$N = N$$

$$N =$$

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Corrigendum p 1665

*Corresponding author

** Supplementary data available via ScienceDirect

COVER

The enantioselective total synthesis of (+)-digitoxigenin was achieved in a convergent manner by effectively utilizing chiral building blocks prepared via the catalytic asymmetric intramolecular cyclopropanation developed by us as well as via the baker's yeast reduction. This new synthetic approach to (+)-digitoxigenin would be useful for preparing some new derivatives of (+)-digitoxigenin for SAR studies and could be applied for the enantioselective total synthesis of other cardenolides left unprepared. *Tetrahedron Letters* **2007**, *48*, 1541–1544.

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