

Tetrahedron Vol. 62, No. 41, 2006

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Recent applications of 2,4,6-trichloro-1,3,5-triazine and its derivatives in organic synthesis Grzegorz Blotny

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A new recently published application of 2,4,6-trichloro-1,3,5-triazine (CC) and its derivatives in organic synthesis are reviewed.

ARTICLES

Palladium catalysed bis- and tris-cyclisations furnishing fused cyclopropyl carbo/heterocycles Ronald Grigg,* Uthai Sakee, Visuvanathar Sridharan, Sukanthini Sukirthalingam and Ravishanker Thangavelauthum

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Achieving saturated red photoluminescence and electroluminescence with readily synthesized maleimide-arylamine copolymers

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Tandem versus single C–C bond forming reaction under palladium–copper catalysis: regioselective pp 9554-9570 synthesis of α -pyrones fused with thiophene

Sirisilla Raju, Venkateswara Rao Batchu, Nalivela Kumara Swamy, R. Vasu Dev, Bukkapattanam R. Sreekanth,

J. Moses Babu, K. Vyas, P. Rajender Kumar, K. Mukkanti, Pazhanimuthu Annamalai and Manojit Pal*

$$\begin{array}{c|c} Z & X \\ \hline & Pd/C \\ \hline & Cul \\ & + \\ \hline & CEC-R \\ \hline & X = I, Y = S, Z = CH \\ & X = Br, Y = CH, Z = S \end{array}$$

Direct asymmetric aldol reaction catalyzed by nanocrystalline magnesium oxide

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B. M. Choudary,* Lakkoju Chakrapani, Thekkathu Ramani, K. Vijay Kumar and M. Lakshmi Kantam*

Reactions of 1,4-bis(tetrazole)benzenes: formation of long chain alkyl halides

pp 9577-9581

Andrew D. Bond, Adrienne Fleming, Fintan Kelleher, John McGinley* and Vipa Prajapati

Reactions of 1,4-bis[2-(tributylstannyl)tetrazol-5-yl]benzene with α , ω -dibromoalkanes led to the formation of several alkyl halide derivatives, substituted variously at N1 or N2 on the tetrazole ring. The X-ray crystal structures of a number of derivatives are discussed.

Synthesis of large generation poly(propyl ether imine) (PETIM) dendrimers

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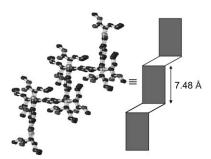
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Sudipta Ray, Raghurama P. Hegde, Apurba Kumar Das, N. Shamala* and Arindam Banerjee*



1,4-Addition of arylboronic acids to β -aryl- α , β -unsaturated ketones and esters catalyzed by a rhodium(I)–chiraphos complex for catalytic and enantioselective synthesis of selective endothelin A receptor antagonists

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Takahiro Itoh,* Toshiaki Mase, Takashi Nishikata, Tetsuji Iyama, Hiroto Tachikawa, Yuri Kobayashi, Yasunori Yamamoto and Norio Miyaura*

$10\text{-}Oxo\text{-}10H\text{-}5\lambda^4, 10\lambda^4\text{-}thian thren-5-ylideneamine as a probe for stereochemistry in the formation and amination of fluoro-}\lambda^6\text{-}sulfane nitriles$

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Synthesis of (S)-gizzerosine, a potent inducer of gizzard erosion in chicks

pp 9628-9634

Yasuharu Shimasaki, Hiromasa Kiyota,* Minoru Sato and Shigefumi Kuwahara

(S)-Gizzerosine, a potent inducer of gizzard erosion in chicks, was synthesized using successive zinc-mediated and palladium-catalyzed coupling reactions as the key steps.

Urea/thiourea-based colorimetric chemosensors for the biologically important ions: efficient and simple sensors

pp 9635-9640

Yeong-Joon Kim,* Han Kwak, Se Jin Lee, Je Sin Lee, Hyun Jung Kwon, Sang Ho Nam, Kyoungrim Lee and Cheal Kim*

Urea 1 and thiourea 2, effectively and selectively, recognized the biologically important F⁻ and carboxylate anions from other anions such as Cl⁻ and Br⁻ in DMSO.

Enantioselective synthesis and absolute configurations of aculeatins A, B, D, and 6-epi-aculeatin D pp 9641–9649 Paula Álvarez-Bercedo, Eva Falomir,* Miguel Carda and J. A. Marco*

A novel method for the reduction of sulfoxides and pyridine *N*-oxides with the system silane/MoO₂Cl₂ pp 9650–9654 Ana C. Fernandes* and Carlos C. Romão

The system silane/ MoO_2Cl_2 (5 mol %) proved to be very efficient for the reduction of aliphatic and aromatic sulfoxides and pyridine N-oxides to the corresponding sulfides and pyridines in good yields.

$$\begin{array}{c} O \\ | \\ | \\ | \\ R_1 \\ \hline \\ S \\ R_2 \\ \hline \\ Silane \ / \ MoO_2Cl_2 \ (5 \ mol\%) \\ \hline \\ R_1 \\ \hline \\ R_2 \\ \hline \\ R_2 \\ \hline \end{array}$$

$$R_1 \\ \hline \\ S \\ R_2$$

$$R_2$$

$$R_1 \\ \hline \\ R_2$$

Aplysiadiol from *Aplysia dactylomela* suggested a key intermediate for a unified biogenesis of regular pp 9655–9660 and irregular marine algal bisabolene-type metabolites

Inmaculada Brito, Teresa Dias, Ana R. Díaz-Marrero, José Darias and Mercedes Cueto*

Two novel blue pigments with ellagitannin moiety, rosacyanins A1 and A2, isolated from the petals of pp 9661–9670 *Rosa hybrida*

Yuko Fukui,* Kyosuke Nomoto,* Takashi Iwashita, Katsuyoshi Masuda, Yoshikazu Tanaka and Takaaki Kusumi

The structure of rosacynanin A1 and A2 consisted of a common chromophore containing cyanidin with a galloyl group link between positions 4 and 5 of the flavylium nucleus and tellimagrandins (1 or 2).



Introduction of the Aib-Pro unit into peptides by means of the 'azirine/oxazolone method' on solid phase

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Simon Stamm and Heinz Heimgartner*

Photo-Linker
$$O$$
 H O CH_2Cl_2 $Photo-Linker O H O R $R = OAllyl$ $R = OH$ $R =$$

Gallic esters of 4,5-dinitrocatechol as potential building blocks for thermotropic liquid crystals

pp 9681-9687

Roxana Judele, Sabine Laschat,* Angelika Baro and Manfred Nimtz

$$O_2N$$
 O_2 O_2N O_2 O_2N O_3 O_4 O_5 O_5 O_5 O_7 O_8 O

Stereoselective synthesis of (E)-4-alkoxy-2-aryl-5-chloro-2-thiazolines

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Antonio Guirado,* Raquel Andreu, Bruno Martiz and Sergio Pérez-Ballester

Synthesis of 7-hydroxy-6H-benzo[c]chromen-6-ones based on a '[3+3] cyclization/domino retro-Michael-aldol-lactonization' strategy

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Ehsan Ullah, Bettina Appel, Christine Fischer and Peter Langer*

Synthesis and inclusion capability of a \(\beta\)-cyclodextrin-tetrathiafulvalene derivative

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Georgiana G. Surpateanu, David Landy, Catalin N. Lungu, Sophie Fourmentin, Gheorghe Surpateanu,* Céline Réthoré and Narcis Avarvari*

On the mechanism of conversion of 4-carboxy-3,4-dihydro-3-phenyl-1(2H)-isoquinolones to indeno[1,2-c]isoquinolines by thionyl chloride

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Xiangshu Xiao, Andrew Morrell, Phillip E. Fanwick and Mark Cushman*



Dibromomethane as one-carbon source in organic synthesis: total synthesis of (\pm) -canadensolide Yung-Son Hon* and Cheng-Han Hsieh

pp 9713-9717

The
$$\beta$$
- and γ -chiral centers are set by stereoselective α -allylation of β -hydroxy ester.

The γ - and δ -chiral centers are set by chelation-controlled aldol reaction.

From terminal alkene by our α -methylenation methodology.

A diastereoselective total synthesis of (\pm) -canadensolide is described. The key step is to introduce the α -methylene group by the ozonolysis of mono-substituted alkenes followed by reaction with a preheated mixture of CH_2Br_2 - Et_2NH .

The synthesis of heterocyclic derivatives from pyran-2-ones and hydrazine hydrate. Ammonium cerium(IV) nitrate as an efficient oxidant in pyridazine chemistry

pp 9718-9725

Franc Požgan, Slovenko Polanc and Marijan Kočevar*

Regioselective dehydrogenation of 3,4-dihydropyrimidin-2(1*H*)-ones mediated by ceric ammonium nitrate

pp 9726-9734

P. Shanmugam and P. T. Perumal*

$$R^{2} \xrightarrow[R^{1}]{O} \xrightarrow[Argon atm, -5 °C]{CAN/aq. acetone} \xrightarrow[Argon atm, -5 °C]{O} \xrightarrow[Ar]{Argon atm, -5 °C} \xrightarrow[R^{1}]{O} \xrightarrow[Ar]{Argon atm, -5 °C} \xrightarrow[Ar]{O} \xrightarrow[Ar]{Argon atm, -5 °C} \xrightarrow[Ar]{O} \xrightarrow$$

Synthesis and complexation studies of intra annularly linked bicyclic cyclophanes

pp 9735-9741

Perumal Rajakumar* and Rajagopal Kanagalatha

Oxidative cleavage of ribofuranose 5-(α -hydroxyphosphonates): a route to erythrofuranose-based nucleoside phosphonic acids

pp 9742-9750

Šárka Králíková, Miloš Buděšínský, Ivana Tomečková and Ivan Rosenberg*

Radical mediated stereoselective synthesis of (4R,8R)-4,8-dimethyldecanal, an aggregation pheromone pp 9751–9757 of *Tribolium* flour beetles

Yoko Kameda and Hajime Nagano*

Synthesis of calix[4]arene(amido)monocrowns and their photoresponsive derivatives

pp 9758-9768

Har Mohindra Chawla,* Suneel Pratap Singh and Shailesh Upreti





Effect of a perfluorocyclopentene core unit on the structures and photoluminescence of fluorene- and pp 9769–9777 anthracene-based compounds

Mijung Han, Sooyong Lee, Jonghwa Jung, Ki-Min Park, Soon-Ki Kwon, Jaejung Ko,* Phil Ho Lee* and Youngjin Kang*

A series of fluorene- and anthracene-based compounds linked by perfluorocyclopentene core unit have been synthesized and characterized, and compounds 1 and 5 have been confirmed by X-ray single-crystal analysis. These compounds show a bright blue emission with high photoluminescence quantum efficiency.



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(1) Supplementary data available via ScienceDirect



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