

Tetrahedron Letters Vol. 49, No. 13, 2008

Contents

COMMUNICATIONS

The dimer of phenylpropiolyl chloride

pp 2049-2051

Harry H. Wasserman *, Elga R. Wasserman, Steven J. Coats, Raymond E. Davis, Vincent M. Lynch, Kenneth B. Wiberg



Facile rearrangement of N^4 -(α -aminoacyl)cytidines to N-(4-cytidinyl)amino acid amides

pp 2052-2055

Deyi Zhang *, David M. Bender, Frantz Victor, Jeffrey A. Peterson, Robert D. Boyer, Gregory A. Stephenson, Adam Azman, James R. McCarthy *

Functionalized 3,4-ethylenedithiathiophenes (EDTTs) as building blocks for poly (3,4-ethylenedithiathiophene) (PEDTT) derivatives

pp 2056-2059

Raúl Blanco, Carlos Seoane, José L. Segura *

The relative stability of pyridinium and 1,7-diaza[12]annulenium quaternary salts Ibon Alkorta *, José Elguero

pp 2060-2062





pp 2063-2065

Synthesis of 4,6-dimethyl-tetrahydro- and hexahydro-dibenzothiophene

Yinyong Sun, Huamin Wang, Roel Prins

2-Bromo-3-methylcyclohexanone was synthesized by conjugate addition of trimethylaluminum to 2-bromo-2-cyclohexen-1-one with copper bromide as catalyst, coupled with 2-methylthiophenol and annulated with the aid of polyphosphoric acid to 4,6-dimethyl-tetrahydrodibenzothiophene. The latter was hydrogenated to 4,6-dimethyl-hexahydrodibenzothiophene.

Sorgomol, germination stimulant for root parasitic plants, produced by Sorghum bicolor

pp 2066-2068

Xiaonan Xie, Kaori Yoneyama, Dai Kusumoto, Yoichi Yamada, Yasutomo Takeuchi, Yukihiro Sugimoto, Koichi Yoneyama *



Synthesis of novel isoxazole-linked steroidal glycoconjugates—an application of a novel steroidal nitrile oxide pp 2069–2073 Karuna S. Wankhede, Vipraja V. Vaidya, Prajakta S. Sarang, Manikrao M. Salunkhe *, Girish K. Trivedi *

Isoxazole-linked steroidal glycoconjugates are prepared by 1,3-dipolar cycloaddition reactions of an in situ generated and hitherto unknown steroidal nitrile oxide with appropriate propargyl ethers of sugars. The methodology provides a novel vector in the form of an easily accessible nitrile oxide having the ability to couple with a host of biomolecules, thus offering a new pathway to construct biologically significant steroidal conjugates.

Microwave-assisted synthesis of 4-quinolylhydrazines followed by nickel boride reduction: a convenient approach to 4-aminoquinolines and derivatives

pp 2074-2077

Sandra Gemma, Gagan Kukreja, Pierangela Tripaldi, Maria Altarelli, Matteo Bernetti, Silvia Franceschini, Luisa Savini, Giuseppe Campiani *, Caterina Fattorusso, Stefania Butini

$$R^{1} \stackrel{\text{CI}}{ \sqcup} R^{2} \xrightarrow{\text{NH}} R^{2} \xrightarrow{\text{NH}} R^{1} \stackrel{\text{II}}{ \sqcup} R^{2} \xrightarrow{\text{NiCl}_{2}} R^{1} \stackrel{\text{II}}{ \sqcup} R^{2}$$

Synthesis and optical behaviour of monodispersed oligo(fluorenylidene)s

pp 2078-2082

Roberto Grisorio, Piero Mastrorilli, Giuseppe Ciccarella, Gian Paolo Suranna*, Cosimo Francesco Nobile

$$C_{10}H_{21}$$
 $C_{10}H_{21}$ $C_{10}H_{21}$

The article describes the convergent synthesis and optical characterization of novel monodispersed fluorenylidene-based molecular materials.



A facile synthesis of aminomethylene bisphosphonates through rhodium carbenoid mediated N-H insertion reaction. Application to the preparation of powerful uranyl ligands

pp 2083–2087

Delphine Lecerclé, Sandra Gabillet, Jean-Marie Gomis, Frédéric Taran *

A straightforward procedure ensuring the anchoring of bisphosphonate moiety onto aromatic amines is described.

Preparation of silyl enol ethers from acyloin derivatives using silyllithium reagents

pp 2088-2090

Bradley D. Robertson, Aaron M. Hartel *

Dimethylphenyl- and methyldiphenylsilyl enol ethers are prepared from the reaction of acyloin derivatives with silyllithium reagents. The reaction proceeds via Brook rearrangement driven by expulsion of the adjacent leaving group.



Synthesis of a pH-independent bifurcated amphiphile

Kaitlin A. Willham, Boyd A. Laurent, Scott M. Grayson *

pp 2091-2094

An efficient synthetic method for preparing bifurcated amphiphiles has been developed such that the functionality for attachment is located at the interface between the lipophilic and hydrophilic side chains.



A general description of phosphorus containing functional groups

Tom Leyssens *, Daniel Peeters

pp 2095–2098

Computational study on the interaction of phosphorus containing functional groups with anionic and neutral carbon backbones. This leads to a general description of these functional groups, showing them to be highly ionic groups having a σ donor/ π acceptor character.

Ugi four-component condensation with two cleavable components: the easiest synthesis of 2,N-diarylglycines pp 2099–2102 Cristina Faggi, Ana G. Neo, Stefano Marcaccini *, Gloria Menchi, Julia Revuelta



Total synthesis of ovalifoliolatin B, acerogenins A and C

G. D. Kishore Kumar, Amarnath Natarajan *

pp 2103-2105



A first high enantiocontrol of an asymmetric tertiary carbon center attached with a fluoroalkyl group via Rh(I)-catalyzed conjugate addition reaction

pp 2106-2110

Tsutomu Konno *, Tomoo Tanaka, Tomotsugu Miyabe, Atsunori Morigaki, Takashi Ishihara

Intermolecular asymmetric cyclopropanation with diazoketones catalyzed by chiral ruthenium porphyrins
Irène Nicolas, Paul Le Maux, Gérard Simonneaux *

pp 2111-2113

An ultrasonic wave-assisted synthesis of meso-amidinophenyl substituted porphyrins

pp 2114-2118

Xun-Jin Zhu, Wai-Kwok Wong *, Feng-Lei Jiang, Chun-Ting Poon, Wai-Yeung Wong *

Using an ultrasonic irradiation, *meso*-amidinophenyl-substituted porphyrins were prepared by reacting lithium amide with *meso*-cyanophenyl porphyrins in very high yields and short reaction times relative to the conventional thermal method.

A mild and efficient CAN mediated oxidation of Morita-Baylis-Hillman adducts of 5-methyl-N-alkylisatin pp 2119–2123 to 5-formyl-N-alkylisatin

Ponnusamy Shanmugam *, Vadivel Vaithiyanathan, Kodirajan Selvakumar

 $Z = CO_2Me$, CO_2Et , COMe, CO_2^nBu , CN, SO_2Ph R = H, CH_3 , C_2H_5 , benzyl, propargyl, isopropyl, CO_2Me

Binary 1,4-asymmetric induction from a single allyltin reagent with a chiral nitrogen functional group toward pp 2124–2127 aldehydes

Yutaka Nishigaichi *, Ken-ichi Tamura, Narifumi Ueda, Hidetoshi Iwamoto, Akio Takuwa

Utilizing the high dielectric constant of water: efficient synthesis of amino acid-derivatized cyclobutenones

pp 2128–2131

Jun Li, Yongbin Han, Teresa B. Freedman, Shifa Zhu, Deborah J. Kerwood, Yan-Yeung Luk *

This work reports the use of water as a solvent to facilitate an efficient syntheses of amino acid-derivatized cyclobutenone. Kinetics studies in different solvents reveals that high dielectric constants of the solvents are the primary attribute for the high yielding and fast rate for this class of reactions. This class of substitution reactions in water also proceeds efficiently with a wide range of amino acids.



An unusual contra-Michael addition of $NaNO_2$ -ceric ammonium nitrate to acrylic esters

pp 2132-2135

Alexei V. Buevich *, Yusheng Wu *, Tze-Ming Chan, Andrew Stamford

Synthesis of the pentacyclic core of lihouidine

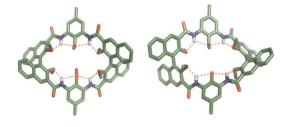
Ken S. Feldman *, Adiel Coca

Pre-organization-mediated macrocylization: efficient synthesis and structural investigations of BINOL-m-phenylenediamine-derived macrocycles

pp 2139-2142

Deekonda Srinivas, Rajesh Gonnade, P. R. Rajamohanan, Gangadhar J. Sanjayan *

This Letter describes a serendipitous discovery of an efficient synthetic route to BINOL-m-phenylenediamine-derived macrocycles. These macrocycles are quickly accessible in a one-pot procedure by the direct condensation of (R) and (S) BINOL bis-acids with suitably substituted m-phenylenediamine analogs. Structural investigations by single crystal X-ray crystallography and solution-state NMR studies provided convincing evidence of their intramolecular hydrogen bonding arrangement and rigid structural architecture. The striking feature of these macrocycles is their ready accessibility in optically pure form coupled with their ease of synthesis.



An unexpected cyclization discovered during the synthesis of 8-substituted purines from a 4,5-diaminopyrimidine

pp 2143-2145

Qun Dang *, Robert M. Rydzewski, Daniel K. Cashion, Mark D. Erion

'Cloverleaf' crown ether resorcin[4] arenes

pp 2146-2149

Yanwei Cai, Peter P. Castro, Linda M. Gutierrez-Tunstad *

(i)+

Debenzylation using catalytic hydrogenolysis in trifluoroethanol, and the total synthesis of (–)-raumacline Patrick D. Bailey *, Mark A. Beard, Hoa P. T. Dang, Theresa R. Phillips, Richard A. Price, James H. Whittaker

pp 2150-2153

Debenzylation using catalytic hydrogenolysis proceeds cleanly in trifluoroethanol as solvent, whereas other alcohols lead to alkylation as a side reaction.

An NMR study of sequential intermediates and collateral products in the conversion of 1,3,6,8-tetraazatricyclo[4.4.1.1^{3,8}]dodecane (TATD) to 1,3,6,8-tetraazatricyclo[4.3.1.1^{3,8}]undecane (TATU)

pp 2154-2158

Augusto Rivera *, Martín E. Núñez, Eliseo Avella, Jaime Ríos-Motta

$$+ NH_4F \xrightarrow{D_2O} N$$



pp 2159-2162

Macrocyclic sulfamides: synthesis, hybridization, and metal binding properties

Patrick D. Bailey *, Anuparma Sethi, Robin G. Pritchard

Using 1 as a 6-membered building block, four macrocyclic sulfamides were prepared; X-ray crystal structures revealed interesting features of hybridization, and metal binding studies showed selectivity for Ba²⁺, Ag⁺ and Rb⁺.

Regioselective green anomeric deacetylation catalyzed by lanthanide triflates

pp 2163-2165

Anh Tuan Tran, Sophie Deydier, David Bonnaffé, Christine Le Narvor *

 $\rm R_1=H,\,OAc;\,R_2=H,\,OAc;\,R_3=Ac,\,Bn,\,R_4=H,\,OAc;\,R_5=H,\,OAc\,R_6=H,\,COOMe,\,CH_2OAc;\,R_7=H,\,COOMe$

Synthesis of novel multidentate carbohydrate-triazole ligands

pp 2166-2169

Thomas Ziegler *, Catrin Hermann

A series of multidentate complex ligands were prepared by Cu(I)-catalyzed 1,3-dipolar cycloaddition (click reaction) of glycosyl azides and azidoethyl glycosides with bis-2-propynyl amides of phthalic, isophthalic, and 2,6-pyridine dicarboxylic acid.

Highly selective Ir-catalyzed direct sixfold borylation of peripheral aromatic substituents on hexakisaryl-substituted [28]hexaphyrin(1.1.1.1.1.1)

pp 2170-2172

Goro Mori, Hiroshi Shinokubo *, Atsuhiro Osuka *

$$Ar = NH$$

$$Ar =$$

Polystyrene-immobilized pyrrolidine as a highly stereoselective and recyclable organocatalyst for asymmetric pp 2173–2176 Michael addition of cyclohexanone to nitroolefins

Tao Miao, Lei Wang *

OTHER CONTENT

Corrigendum p 2177

*Corresponding author

** Supplementary data available via ScienceDirect

COVER

The cover image illustrates the unique conversion of phenylpropiolic acid to a 1,3-cyclobutanedione derivative, which involves the isomerization of its acid chloride to a ketene derivative that subsequently undergoes dimerization to the products. *Tetrahedron Letters* **2008**, *49*, 2049–2051.

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