

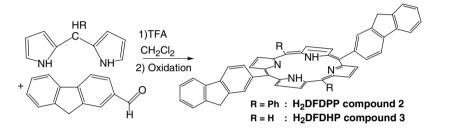
Tetrahedron Letters Vol. 48, No. 25, 2007

Contents

COMMUNICATIONS

New tetra-aryl and bi-aryl porphyrins bearing 5,15-related fluorenyl pendants: the influence of arylation pp 4317–4322 on fluorescence

Christine O. Paul-Roth,* J. A. Gareth Williams,* Julien Letessier and G. Simonneaux



Takai-Utimoto reactions of oxoalkylhalides catalytic in chromium and cobalt

Ludger A. Wessjohann* and Henri S. Schrekker*

pp 4323–4325

$$R^{1}$$
-Br + R^{2} H $\underbrace{ \begin{bmatrix} CrCl_{2}\text{-catalyst} \end{bmatrix}}_{ \begin{bmatrix} Cobalt\text{-catalyst} \end{bmatrix}}$ R^{1} R^{2}

R¹ = Arylalkyl, Hydroxyalkyl, Carboxyethylalkyl R² = Ethyl, Phenyl

Alkylchromium reactions: The reaction of functionalized alkylhalides under mild cobalt and chromium catalysis opens new perspectives for highly chemoselective C–C-couplings with complex substrates, for example, in total synthesis.



Towards a biomimetic synthesis of barrenazine A

Frédéric Buron, Alain Turck, Nelly Plé, Laurent Bischoff* and Francis Marsais

pp 4327-4330

An analogue of barrenazine A was prepared in eight steps with a 29% overall yield, from protected aspartic acid.

An enyne metathesis/Diels-Alder reaction sequence towards the synthesis of cup-shaped 5/5/6-tricyclic pp 4331-4333 architectures

Laurent Evanno, Alexandre Deville, Bernard Bodo and Bastien Nay*

Water-soluble chiral monosulfonamide-cyclohexane-1,2-diamine-RhCp* complex and its application in pp 4335-4338 the asymmetric transfer hydrogenation (ATH) of ketones

Norma A. Cortez, Gerardo Aguirre, Miguel Parra-Hake and Ratnasamy Somanathan*

Monosulfonamide ligands with heteroatom/heterocyclic systems were derived from (1R,2R)-cyclohexane-1,2-diamine and used in the ATH of acetophenone.

$$\begin{array}{c} R \\ R_1 \end{array} \hspace{0.5cm} \begin{array}{c} [Cp^*RhCl_2]_2, [(benzene)RuCl_2]_2, L^* \\ \hline \\ water/sodium formate, \\ or isopropanol/KOH \end{array} \hspace{0.5cm} \begin{array}{c} R \\ R_1 \end{array} \hspace{0.5cm} \begin{array}{c} OH \\ R_1 \end{array}$$

Enantioselective synthesis of α -aminopropargylphosphonates

Rajasekhar Dodda and Cong-Gui Zhao*

Enantioenriched α -aminopropargylphosphonates have been synthesized for the first time by using a Cu(I)–pybox complex.



pp 4343-4345

pp 4339-4342

A simple synthesis of (R)-3-aminooctanoic acid (D-BAOA) from (S)-1-octyn-3-ol

Marcello Tiecco,* Lorenzo Testaferri, Andrea Temperini,* Raffaella Terlizzi, Luana Bagnoli, Francesca Marini and Claudio Santi



Original one-pot microwave-promoted Hunsdiecker–Suzuki strategy: straightforward access to *trans*-1,2-diarylethenes from cinnamic acids

pp 4347-4351

Marc-Antoine Bazin, Laïla El Kihel, Jean-Charles Lancelot and Sylvain Rault*

This Letter describes an efficient one-pot synthesis of trans-1,2-diarylethenes from cinnamic acids using microwave irradiation.

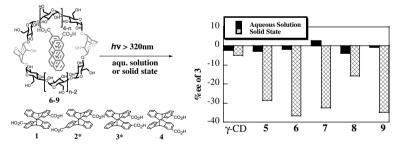
Synthesis of acyclic galactitol- and lyxitol-aminophosphonates as inhibitors of UDP-galactopyranose pp 4353-4356 mutase

Weidong Pan, Christophe Ansiaux and Stéphane P. Vincent*

Acyclic alditol-aminophosphonates 1 and 2 were designed as mimics of high energy intermediates of the UGM catalyzed isomerization. Interestingly, the p-lyxitol-aminophosphonate 2 displayed better inhibition properties than 1.

A remarkable stereoselectivity switching upon solid-state versus solution-phase enantiodifferentiating photocyclodimerization of 2-anthracenecarboxylic acid mediated by native and 3,6-anhydro- γ -cyclodextrins

Cheng Yang, Masaki Nishijima, Asao Nakamura, Tadashi Mori, Takehiko Wada and Yoshihisa Inoue*



Nucleophilic β -amination of pyridine nuclei

pp 4361-4363

Nagatoshi Nishiwaki,* Yutaka Nishida, Eiko Tominaga and Masahiro Ariga*

$$NO_2$$
 $+$
 $+$
 R^1R^2NH
 O
 O
 NO_2
 NR^1R^2



Highly luminescent glycocluster: silole-core carbosilane dendrimer having peripheral globotriaose pp 4365–4368 Ken Hatano,* Hiroaki Aizawa, Hiroo Yokota, Akihiro Yamada, Yasuaki Esumi, Hiroyuki Koshino, Tetsuo Koyama, Koji Matsuoka and Daiyo Terunuma

Triple helical structure constructed by covalent bondings: effective synthesis by a pre-organized partial pp 4369–4372 structure and helicity induced by aromatic–aromatic interactions

Masahide Tominaga, Hyuma Masu, Kosuke Katagiri and Isao Azumaya*





Lewis acid mediated S_N 2-type nucleophilic ring opening followed by [4+2] cycloaddition of N-tosylazetidines with aldehydes and ketones: synthesis of chiral 1,3-oxazinanes and 1,3-amino alcohols

pp 4373-4377

Manas K. Ghorai,* Kalpataru Das and Amit Kumar

Ph Ts O LA*, Solvent rt, 85-93%
$$R^{1}$$
 R^{2} R^{2} R^{2} R^{3} R^{4} R^{2} R^{2} R^{4} R^{2} R^{2} R^{2} R^{3} R^{4} R^{5} R^{5

2-Oxobenzo[h]chromene: a novel entry for the concise and efficient synthesis of indeno[1,2-c]-phenanthrenes

pp 4379–4382

Ramendra Pratap and Vishnu Ji Ram*

One-pot synthesis of new symmetric and asymmetric xanthene dyes

Scott A. Hilderbrand* and Ralph Weissleder

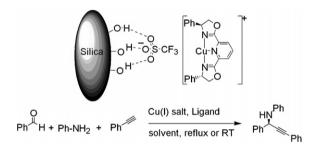
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Electrostatic immobilisation of copper(I) and copper(II) bis(oxazolinyl)pyridine catalysts on silica: application to the synthesis of propargylamines via direct addition of terminal alkynes to imines

pp 4387-4390

Chiara McDonagh, Peter O'Conghaile, Robertus J. M. Klein Gebbink and Patrick O'Leary*



An efficient multicomponent protocol for the stereoselective synthesis of oxazinobenzothiazole derivatives pp 4391–4393 Abhilash N. Pillai, B. Rema Devi, Eringathodi Suresh and Vijay Nair*

SiCl₄–Zn induced reductive coupling of carbonyl compounds: novel and efficient routes for one-pot syntheses of 1,2,3-triaryl-2-propen-1-ones and pinacolones at room temperature

pp 4395-4398

Tarek A. Salama,* Saad S. Elmorsy and Abdel-Galel M. Khalil

Reductive trimerization of aromatic aldehydes to 1,2,3-triaryl-2-propen-1-ones as well as tandem reductive coupling-rearrangements of aryl ketones to pinacolone analogues were efficiently achieved using SiCl₄–Zn (TCS/Zn) at room temperature.

Microwave-assisted synthesis of rufigallol and its novel room-temperature liquid crystalline derivatives pp 4399–4402 Hari Krishna Bisoyi and Sandeep Kumar*

Rufigallol and its novel room-temperature discotic liquid crystalline derivatives have been prepared in high yield using microwave heating.

An improved total synthesis of UDP-N-acetyl-muramic acid

Andrej Babič* and Slavko Pečar

pp 4403-4405

Reduction of propargylic sulfones to (Z)-allylic sulfones using zinc and ammonium chloride Helen M. Sheldrake and Timothy W. Wallace*

pp 4407-4411

HO
$$=$$
 SO_2Ph Zn, NH_4Cl H_2O, THF SO_2Ph SO_2P



Microwave-enhanced rhodium-catalyzed conjugate-addition of aryl boronic acids to unprotected maleimides

pp 4413-4418

Pravin S. Iyer,* Meaghan M. O'Malley and Matthew C. Lucas

Various boronic acids were treated with a rhodium(I) catalyst enabling their 1,4-conjugate addition to unprotected maleimide. The scope of the reaction was explored to include both electronrich and electron poor boronic acids. These reactions were also performed in the microwave resulting in reduced reaction times and improved efficiencies. Additionally, substrates that were recalcitrant under conventional conditions were successfully reacted under microwave conditions. The reaction worked satisfactorily with boronic acids having a free OH or NH group.

Unusual synthesis of dihydropyrido[2,1-a]isoindolone derivatives by radical cyclization of enamides of pp 4419–4422 Baylis–Hillman adducts

Saravanan Gowrisankar, Seong Jin Kim, Ji-Eun Lee and Jae Nyoung Kim*

The use of 2-O-propagyloxycarbonyl protecting group in the selective formation of 1,2-trans-glycosidic pp 4423-4425 linkage

Ken-ichi Sato,* Koudai Sakai, Masaru Kojima and Shoji Akai

1,3,5-Tris(2-butyrylaminophenyl)benzene: a simple, acyclic chloride anion receptor Piotr Piatek

pp 4427-4430

A practical fluorous benzylidene acetal protecting group for a quick synthesis of disaccharides

pp 4431-4436

Masaru Kojima, Yutaka Nakamura and Seiji Takeuchi*

Design, synthesis and utilization of a novel coupling reagent for the preparation of O-alkyl hydroxamic pp 4437–4440 acids

Nagnnath D. Kokare, Rahul R. Nagawade, Vipul P. Rane and Devanand B. Shinde*

Anomeric stereospecific synthesis of 2'-C-methyl β -nucleosides; the Holy reaction of cyanamide with 2-C-methyl-D-arabinose

pp 4441-4444

Sarah F. Jenkinson, Nigel A. Jones, Adel Moussa, Alistair J. Stewart, Thomas Heinz and George W. J. Fleet*

$$\begin{array}{c} \text{CHO} \\ \text{HO} \\ \text{HO} \\ \text{HO} \\ \text{HO} \\ \text{OH} \\ \text{CH}_2\text{OH} \\ \end{array} \\ \begin{array}{c} \text{HOH}_2\text{C} \\ \text{NH}_2 \\ \text{HO} \\ \text{Me} \\ \end{array} \\ \begin{array}{c} \text{HOH}_2\text{C} \\ \text{NH}_2 \\ \text{HO} \\ \text{NH}_2 \\ \text{HO} \\ \text{NH}_2 \\ \text{HO} \\ \text{NH}_2 \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{HOH}_2\text{C} \\ \text{NH}_2 \\ \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\$$

Ophiuroidine, the first indolo[2,1-b]quinazoline alkaloid from the Caribbean brittle star *Ophiocoma riisei* pp 4445–4447 Natalia K. Utkina* and Vladimir A. Denisenko

A new indoloquinazoline alkaloid, ophiuroidine, was isolated from the Caribbean ophiuroid *Ophiocoma riisei*. Its structure was determined as 4,8,9-trihydroxyindolo[2,1-*b*]quinazoline-6,12-dione from spectroscopic data. Ophiuroidine is the first example of an indoloquinazoline alkaloid found in a marine invertebrate.

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** Supplementary data available via ScienceDirect

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