

Contents

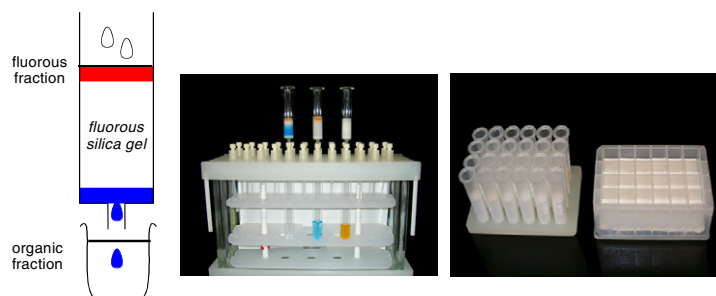
REPORT

Synthetic applications of fluoros solid-phase extraction (F-SPE)

Wei Zhang\* and Dennis P. Curran\*

pp 11837–11865

The concept, protocols, instruments of fluoros solid-phase extraction techniques, and their applications for solution-phase parallel and high-throughput synthesis of small molecules and biomolecules are reviewed in this article.

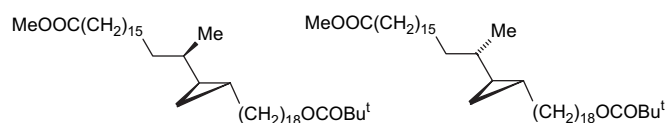


ARTICLES

The synthesis of single enantiomers of meromycolic acids from mycobacterial wax esters

Juma'a R. Al Dulayymi, Mark S. Baird,\* Evan Roberts and David E. Minnikin

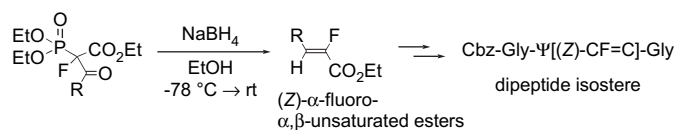
pp 11867–11880



Tandem reduction–olefination of triethyl 2-acyl-2-fluoro-2-phosphonoacetates and a synthetic approach to Cbz-Gly-Ψ[(Z)-CF=C]-Gly dipeptide isostere

Shigeki Sano,\* Yoko Kuroda, Katsuyuki Saito, Yukiko Ose and Yoshimitsu Nagao

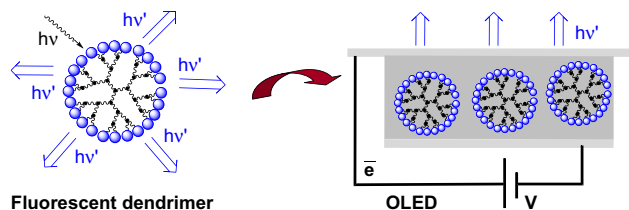
pp 11881–11890



**Synthesis of phosphorus dendrimers bearing chromophoric end groups: toward organic blue light-emitting diodes**

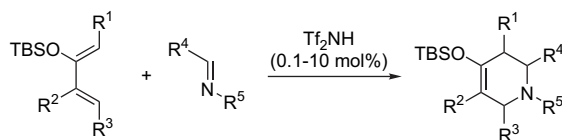
pp 11891–11899

Laurent Brauge, Gilles Vériot, Grégory Franc, Rodolphe Deloncle, Anne-Marie Caminade\* and Jean-Pierre Majoral\*


**Catalytic imino Diels–Alder reaction by triflic imide and its application to one-pot synthesis from three components**

pp 11900–11907

Kiyosei Takasu,\* Naoya Shindoh, Hidetoshi Tokuyama and Masataka Ihara


**A convenient preparation of thioether functionalized porphyrins**

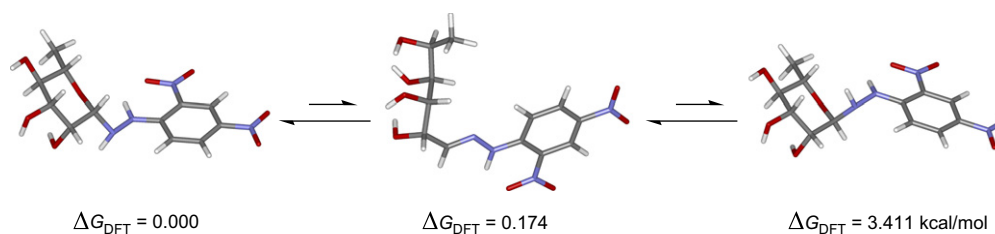
pp 11908–11915

Michael M. Pollard and John C. Vederas\*


**Density functional theory calculations and experimental parameters for mutarotation of 6-deoxy-L-mannopyranosyl hydrazine**

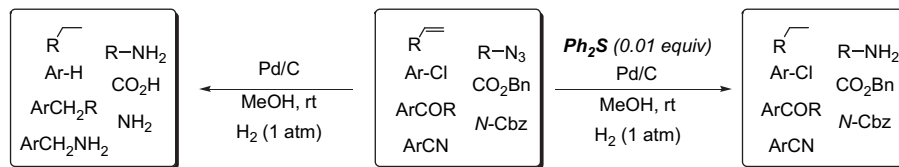
pp 11916–11924

Mabel Fragoso-Serrano, Rogelio Pereda-Miranda and Carlos M. Cerda-García-Rojas\*



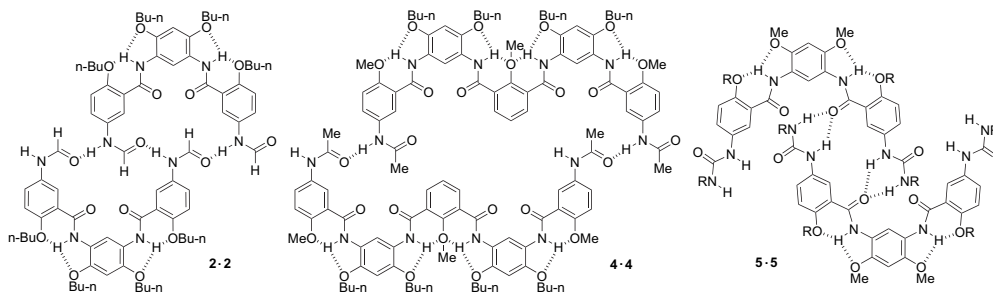
**Chemoselective hydrogenation method catalyzed by Pd/C using diphenylsulfide as a reasonable catalyst poison** pp 11925–11932

Akinori Mori, Tomoteru Mizusaki, Yumi Miyakawa, Eri Ohashi, Tomoko Haga, Tomohiro Maegawa, Yasunari Monguchi and Hironao Sajiki\*



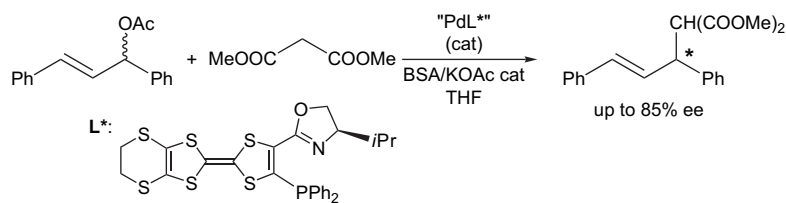
**Hydrogen bonding-mediated self-assembly of anthranilamide-based homodimers through preorganization of the amido and ureido binding sites** pp 11933–11941

Jiang Zhu, Jian-Bin Lin, Yun-Xiang Xu, Xi-Kui Jiang and Zhan-Ting Li\*



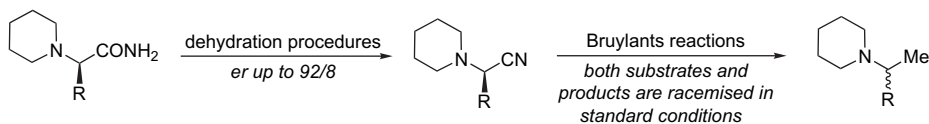
**Chiral tetrathiafulvalene based phosphine- and thiomethyl-oxazoline ligands. Evaluation in palladium catalysed asymmetric allylic alkylation** pp 11942–11947

Céline Réthoré, Isabelle Suisse, Francine Agbossou-Niedercorn,\* Eva Guillamón, Rosa Llusar, Marc Fourmigué and Narcis Avarvari\*



**Preparation of non-racemic single-stereocentre  $\alpha$ -aminonitriles and a study of their fate in Bruylants reactions** pp 11948–11954

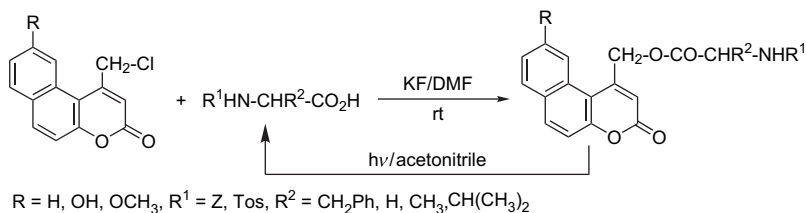
Virginie Beaufort-Droal, Elisabeth Pereira, Vincent Théry and David J. Aitken\*



**Oxobenzof]benzopyrans as new fluorescent photolabile protecting groups for the carboxylic function**

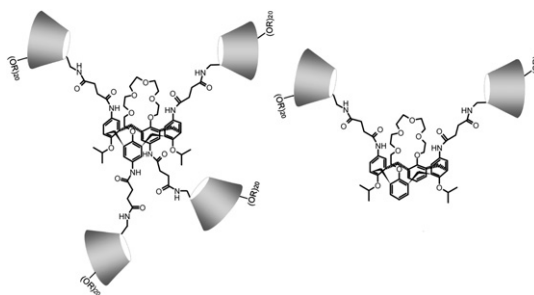
pp 11955–11962

Ana M. Piloto, Daniel Rovira, Susana P. G. Costa and M. Sameiro T. Gonçalves\*

**Synthesis of calixarene–cyclodextrin coupling products**

pp 11963–11971

C. Hocquelet, J. Blu, C. K. Jankowski,\* S. Arseneau, D. Buisson and L. Mauclair

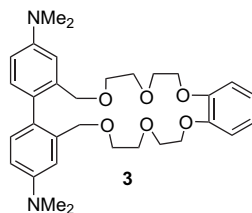


Structures of two main bis- and tetrasubstituted cyclodextrin–calixarene coupling products (R=methyl or H).

**4,4'-Substituted biphenyl coronands. Preparation of a new selective fluorescent sensor for mercury salts**

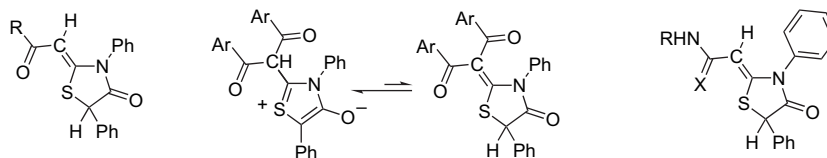
pp 11972–11978

Ana M. Costero,\* M. José Bañuls, M. José Aurell and Antonio Doménech

Six new 4,4'-substituted biphenyl coronands have been prepared. The ligands containing dimethylamino groups in the biphenyl moiety have been used in transition metal cations' complexation and one of them (**3**) has demonstrated to be a selective fluorescent sensor for mercury.**On the reactivity of 2-alkyl-1,3-thiazolium-4-olates toward electrophiles**

pp 11979–11986

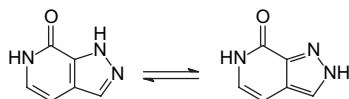
Martín Ávalos, Reyes Babiano,\* Pedro Cintas, Jesús Díaz, José L. Jiménez, I. López and Juan C. Palacios



**Synthesis and tautomerism study of 7-substituted pyrazolo[3,4-*c*]pyridines**

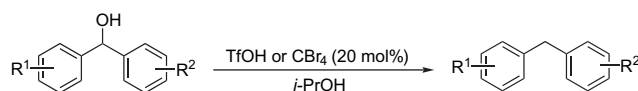
pp 11987–11993

Vassilios N. Kourafalos, Panagiotis Marakos, Emmanuel Mikros,\* Nicole Pouli,\* Jaromír Marek and Radek Marek

**Disproportionation reaction of diarylmethylisopropyl ethers: a versatile access to diarylmethanes from diarylcarbinols speeded up by the use of microwave irradiation**

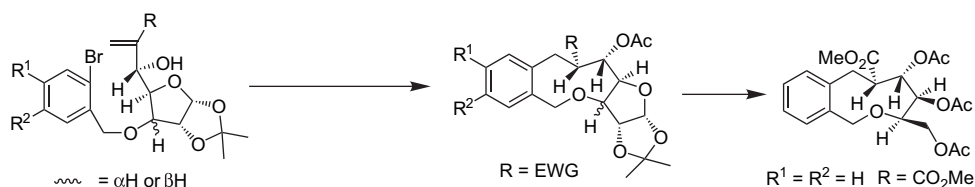
pp 11994–12002

Nathalie L'Hermite, Anne Giraud, Olivier Provot,\* Jean-François Peyrat, Mouâd Alami\* and Jean-Daniel Brion

**Sequential Baylis–Hillman reaction and radical cyclization of furanose derivatives: expeditious approach to enantiopure benzo-fused nine-membered oxacycles**

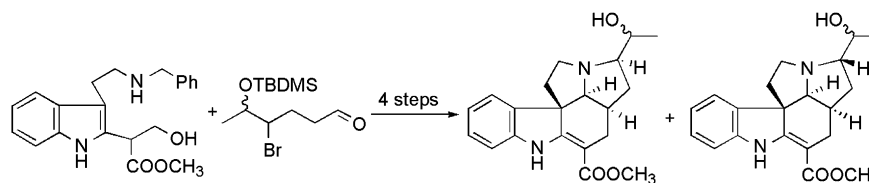
pp 12003–12010

Tirtha Pada Majhi, Arpita Neogi, Soumen Ghosh, Alok Kumar Mukherjee and Partha Chattopadhyay\*

**Synthesis of vinca alkaloids and related compounds. Part 105: Efficient convergent synthetic pathway to the ibophyllidine skeleton and synthesis of (±)-19-hydroxy-ibophyllidine and (±)-19-hydroxy-20-epiibophyllidine**

pp 12011–12016

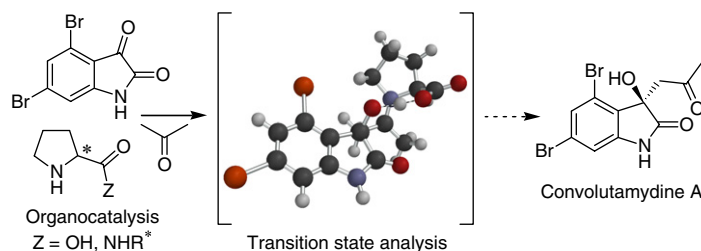
Flórián Tóth, György Kalas,\* István Greiner, Mária Kajtár-Peredy, Ágnes Gömöry, László Hazai and Csaba Szántay\*



**The first total synthesis of (*R*)-convolutamydine A**

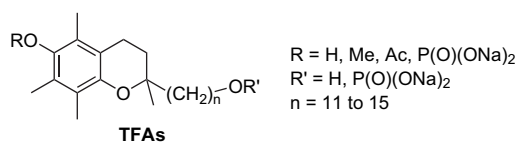
pp 12017–12024

Gianluigi Luppi, Magda Monari, Rodrigo J. Corrêa, Flavio de A. Violante, Angelo C. Pinto, Bernard Kaptein, Quirinus B. Broxterman, Simon J. Garden\* and Claudia Tomasini\*

**Improved synthesis of tocopherol fatty alcohols and analogs: microglial activation modulators**

pp 12025–12040

Thierry Muller, Djalil Coowar, Mazen Hanbali, Paul Heuschling and Bang Luu\*

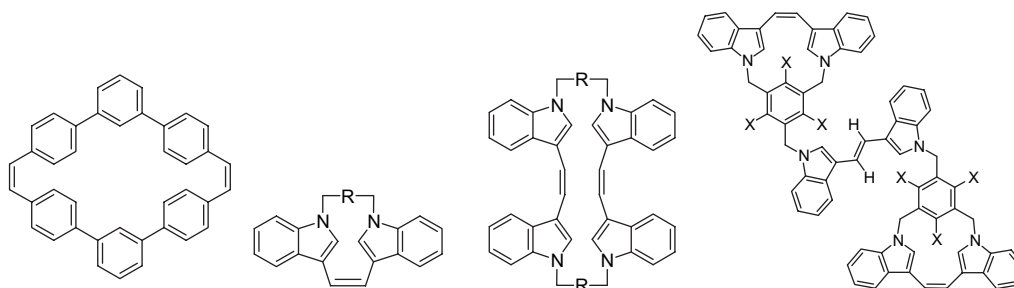


Improved syntheses of several series of tocopherol fatty alcohols (TFAs), modulators of microglial activation as well as their water-soluble prodrug forms are described.

**Synthesis, complexation studies and biological applications of some novel stilbenophanes, indolophanes and bisindolostilbenophanes via McMurry coupling**

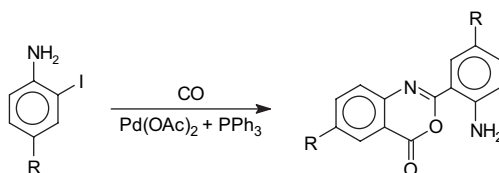
pp 12041–12050

Perumal Rajakumar,\* Merikapudi Gayatri Swaroop, S. Jayavelu and K. Murugesan

**Palladium-catalysed carbonylation of 4-substituted 2-iodoaniline derivatives: carbonylative cyclisation and aminocarbonylation**

pp 12051–12056

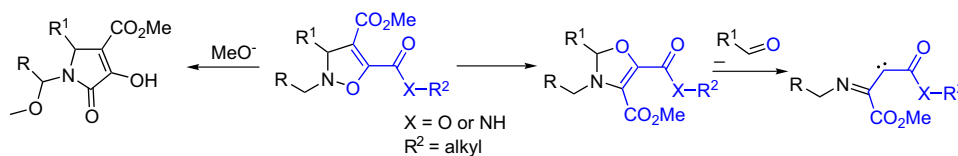
Péter Ács, Ernő Müller, Gábor Rangits, Tamás Lóránd and László Kollár\*



**Synthesis and new rearrangements of 4-isoxazolin-4,5-dicarboxylic acid derivatives**

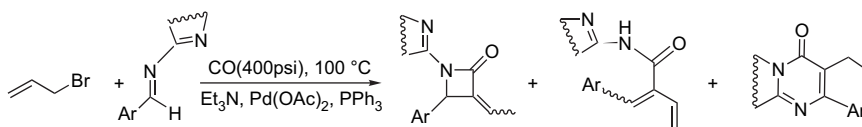
pp 12057–12063

Necdet Coşkun\* and Aylin Öztürk

**Synthesis and isomerization of *N*- $\alpha$ -aza-heteroaryl- $\beta$ -lactams**

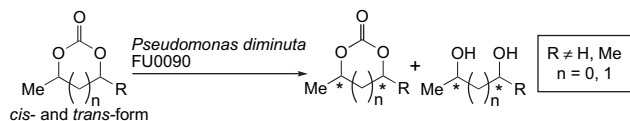
pp 12064–12070

Luigino Troisi,\* Ludovico Ronzini, Catia Granito, Emanuela Pindinelli, Alessandro Troisi and Tullio Pilati

**Enantioselective microbial hydrolysis of dissymmetrical cyclic carbonates with disubstitution**

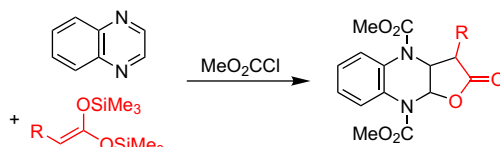
pp 12071–12083

Masaki Nogawa, Satomi Sugawara, Rie Iizuka, Megumi Shimojo, Hiromichi Ohta, Minoru Hatanaka and Kazutsugu Matsumoto\*

**Synthesis of 1,4-diaza-7-oxabicyclo[4.3.0]non-2-en-6-ones by cyclization of 1,1-bis(trimethylsiloxy)ketene acetals with pyrazine and quinoxaline**

pp 12084–12091

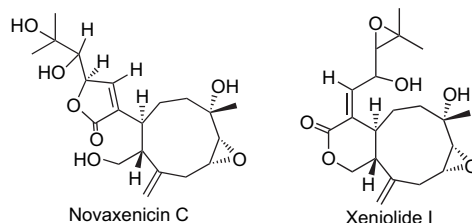
Sven Rotzoll, Ehsan Ullah, Christine Fischer, Dirk Michalik, Anke Spannenberg and Peter Langer\*



**Novaxenicins A–D and xeniolides I–K, seven new diterpenes from the soft coral *Xenia novaebritanniae***

pp 12092–12097

Ashgan Bishara, Amira Rudi, Israel Goldberg, Yehuda Benayahu and Yoel Kashman\*

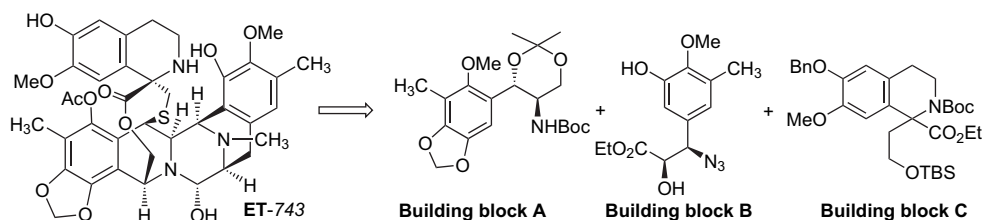


The structure of seven new compounds and their relative stereochemistry were elucidated by NMR and mass spectroscopy data.

**Synthetic studies on Ecteinascidin-743: synthesis of building blocks through Sharpless asymmetric dihydroxylation and aza-Michael reactions**

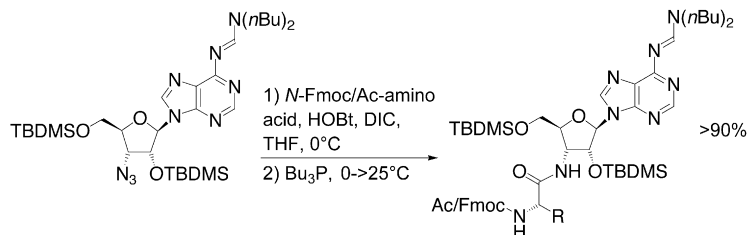
pp 12098–12107

S. Chandrasekhar,\* N. Ramakrishna Reddy and Y. Srinivasa Rao


**Shorter puromycin analog synthesis by means of an efficient Staudinger–Vilarrasa coupling**

pp 12108–12115

Hubert Chapuis and Peter Strazewski\*



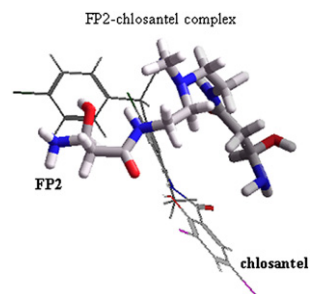
An efficient Staudinger–Vilarrasa coupling generates amides from azides in very high isolated yields and purity. New puromycin analogs, mostly putative biosynthetic intermediates, were synthesized in nine steps from adenosine.

**Theoretical design of dendrimeric fractal patterns for the encapsulation of a family of drugs: salicylanilides**

pp 12116–12125


Delia Soto-Castro, Aurelio Evangelista-Lara and Patricia Guadarrama\*

Four dendrimeric fragments (FPs) were designed to encapsulate, mainly by H-bonding, a family of drugs known as salicylanilides (acaricides). All geometries were optimized at DFT/LAV3P\* level of theory. Amide and alcohol groups were the most efficient to interact with salicylanilides (e.g., FP2–chlosantel complex).





\*Corresponding author

 Supplementary data available via ScienceDirect

## COVER

Several series of phosphorus dendrimers decorated by fluorescent terminal groups are synthesized. A dramatic dependence of the fluorescence properties with the nature of the linkage between the dendrimer and the fluorescent entities is observed. Some of these dendrimers possess electroluminescent properties and were used for the elaboration of Organic Light Emitting Diodes (OLEDs). *Tetrahedron* **2006**, *62*, 11891–11899.

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