Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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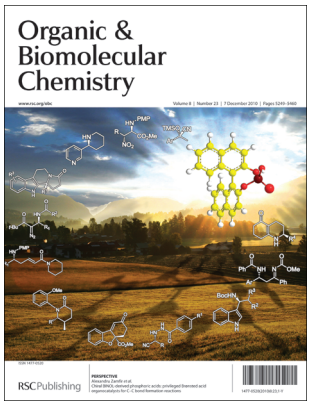
ISSN 1477-0520 CODEN OBCRAK 8(23) 5249–5460 (2010)



Cover

See Alexandru Zamfir *et al.*, pp. 5262–5276.

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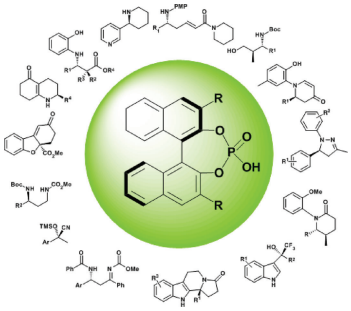
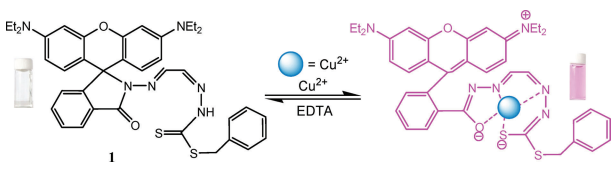
PERSPECTIVE



COMMUNICATIONS



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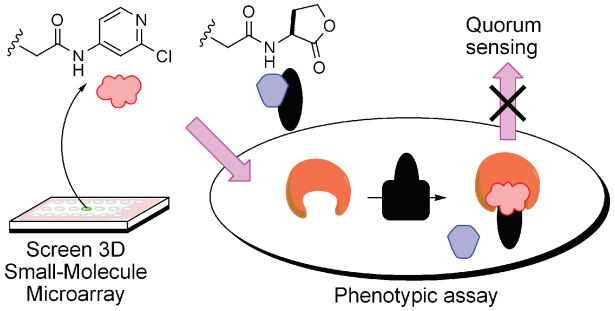
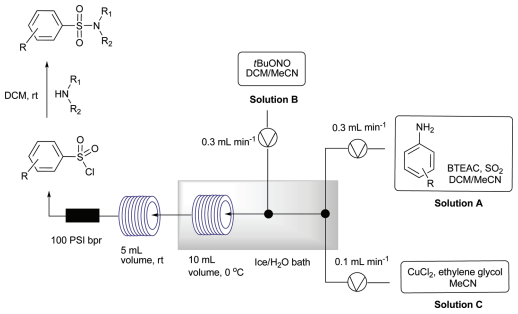
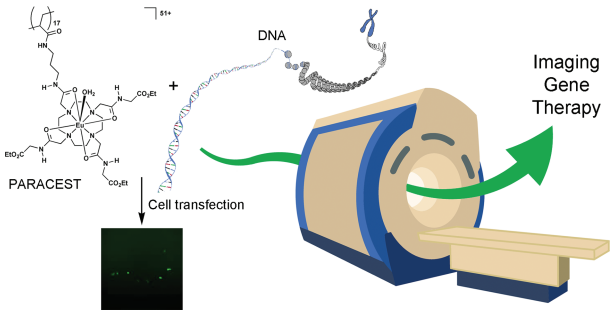
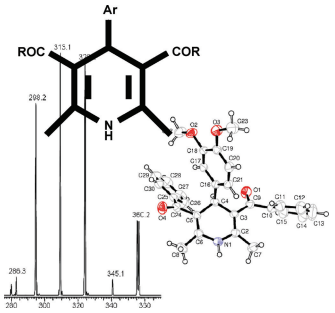
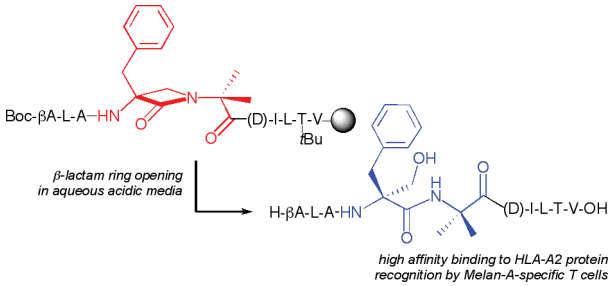






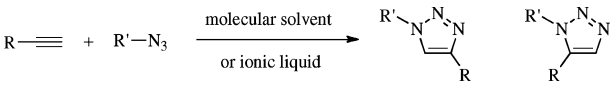




Design, synthesis and evaluation of β-lactam antigenic peptide hybrids; unusual opening of the β-lactam ring in acidic media

M. Tarbe, I. Azcune, E. Balentová, J. J. Miles, E. E. Edwards, K. M. Miles, P. Do, B. M. Baker, A. K. Sewell, J. M. Aizpurua, C. Douat-Casassus* and S. Quideau*

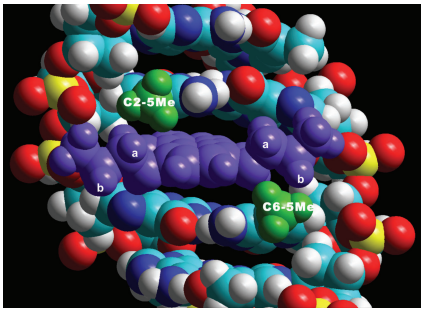
An unusual β-lactam ring opening occurred during aqueous TFA-mediated release of β-lactam–peptide hybrids from solid support, leading to the formation of a pseudopeptide that expresses a high HLA-A2 binding affinity and stimulates Melan-A-specific T cells.



The effects of ionic liquids on azide-alkyne cycloaddition reactions

Stephen R. D. George, Gavin L. Edwards and Jason B. Harper*

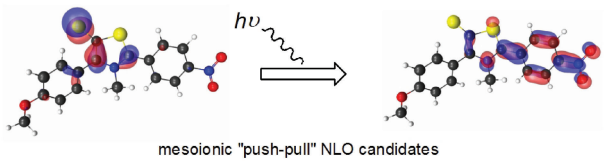
Ionic liquids increase the regioselectivity whilst effects on activation parameters are intermediate between coordinating and non-coordinating salts. The presence of small amounts of water grossly affects activation parameters.



DNA binding by pixantrone

Najia Adnan, Damian P. Buck, Benny J. Evison, Suzanne M. Cutts,* Don R. Phillips and J. Grant Collins*

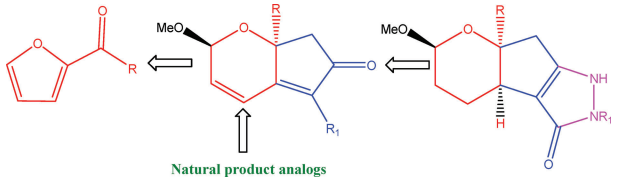
The anticancer drug pixantrone intercalates at the 5′-^{5Me}CpG sites of the octanucleotide d(A^{5Me}CGAT^{5Me}CGT)$_2$ from the major groove, with the methyl groups not presenting a steric barrier to intercalation.

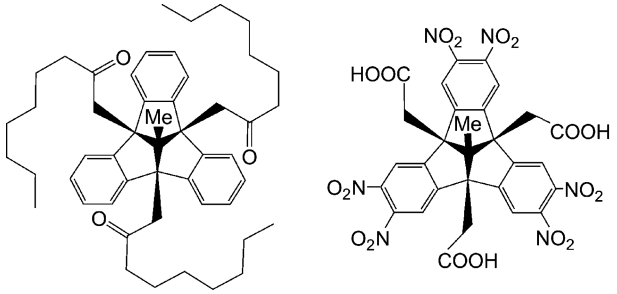


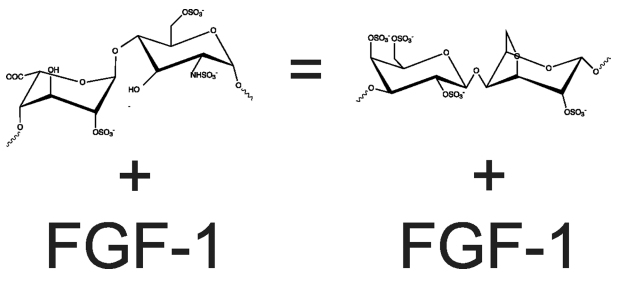
Push-pull 1,3-thiazolium-5-thiolates. Formation *via* concerted and stepwise pathways, and theoretical evaluation of NLO properties

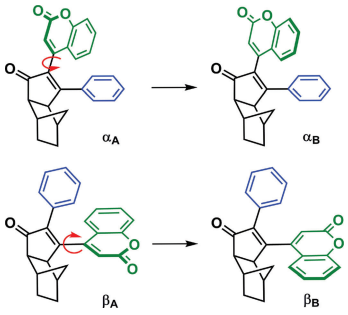
David Cantillo,* Martín Ávalos, Reyes Babiano, Pedro Cintas, José L. Jiménez, Mark E. Light, Juan C. Palacios and Valentín Rodríguez

Mesoionic rings possessing a 1,3-thiazolium-5-thiolate unit show promising perspectives in non-linear optics. Full synthetic studies combined with DFT calculations also provide a plausible mechanistic picture.









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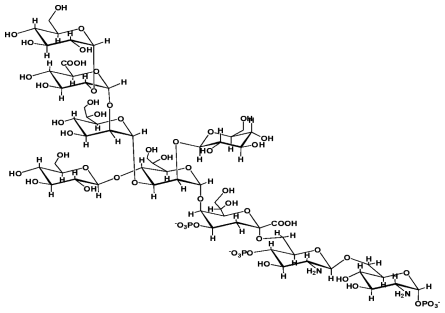
5404

Structural characterization of the core region from the lipopolysaccharide of the haloalkaliphilic bacterium *Halomonas alkaliantarctica* strain CRSS

Giuseppina Pieretti, Sara Carillo, Barbara Nicolaus, Annarita Poli, Rosa Lanzetta, Michelangelo Parrilli and Maria Michela Corsaro*

We described the core oligosaccharide structure from the LPS of the haloalkaliphile *Halomonas alkaliantarctica*, obtained after alkaline hydrolysis of the LPS, HPAEC purification, NMR spectroscopy and mass spectrometry analysis.

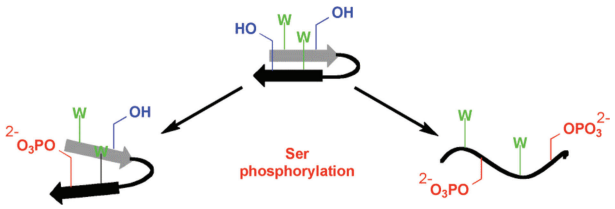


5411

Positional effects of phosphoserine on β-hairpin stability

Alexander J. Riemen and Marcey L. Waters*

Phosphorylation of a β-hairpin demonstrates the ability of this covalent modification to alter structure in a position-dependent manner, providing insight potential mechanisms by which protein phosphorylation influences structure and function.

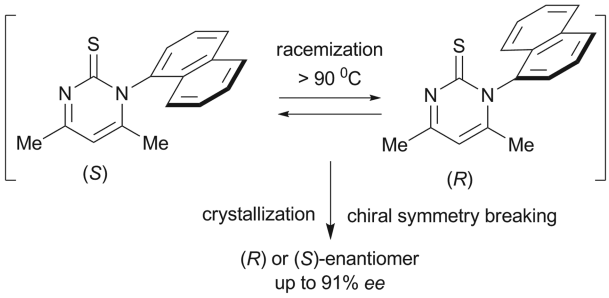


5418

Generation and amplification of optical activity of axially chiral *N*-(1-naphthyl)-2(*1H*)-pyrimidinethione by crystallization

Masami Sakamoto,* Fumitoshi Yagishita, Masaru Ando, Yuich Sasahara, Norifumi Kamataki, Mai Ohta, Takashi Mino, Yoshio Kasashima and Tsutomu Fujita

The crystallization of racemic axially chiral pyrimidinethione at high temperature led to the chiral breaking of symmetry up to 91% ee.

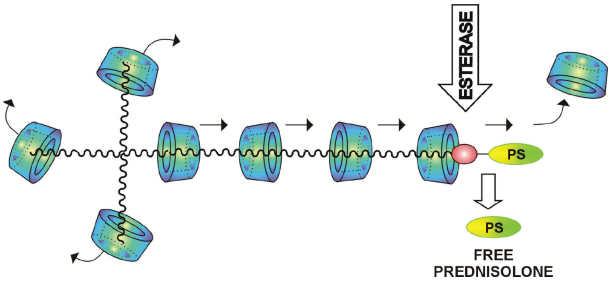


5423

Prednisolone-α-cyclodextrin-star PEG polypseudorotaxanes with controlled drug delivery properties

Eliška Bílková, Miloš Sedlák,* Bohuslav Dvořák, Karel Ventura, Petr Knotek and Ludvík Beneš

The synthesized polypseudorotaxanes were characterized by 2D NOESY NMR spectra, powder X-ray diffraction patterns, and STM. The rate of release of prednisolone from the carrier can be controlled by: character of the linker between polymeric carrier and prednisolone, molecular mass of PEG, and the kinetics of the dethreading of α-CD units.



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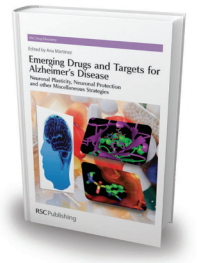

Emerging Drugs and Targets for Alzheimer's Disease

Edited by Ana Martinez | Medicinal Chemistry Institute–CSIC, Spain
ISBN: 9781849730457
Price: £220.00 Publication: May 2010

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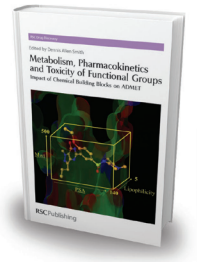
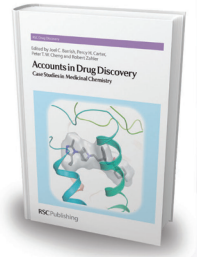


Metabolism, Pharmacokinetics and Toxicity of Functional Groups: Impact of Chemical Building Blocks on ADMET

Edited by Dennis A Smith | Pfizer Global R & D, UK
ISBN: 9781849730167
Price: £144.99 Publication: April 2010

Written by medicinal chemists and ADMET scientists with a combined experience of 300 years this aid to discovering drugs provides detailed coverage on absorption, distribution, metabolism, excretion and toxicity issues associated with drugs.



Accounts in Drug Discovery Case Studies in Medicinal Chemistry

Edited by Joel Barrish, Percy Carter, Robert Zahler, Peter Cheng
Bristol-Myers-Squibb, USA
ISBN: 9781849731263
Price: £132.99
Publication: October 2010

Accounts in Drug Discovery describes recent case studies in medicinal chemistry with a particular emphasis on how problems can be overcome.

New Frontiers in Chemical Biology Enabling Drug Discovery

Edited by Mark Bunnage
Pfizer Global R & D, UK
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Publication: December 2010

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