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Cover
See Leung Sheh *et al.*, pp. 48–61.

Energetic basis for molecular recognition of peptides to DNA enlightens the universal EEC paradox.

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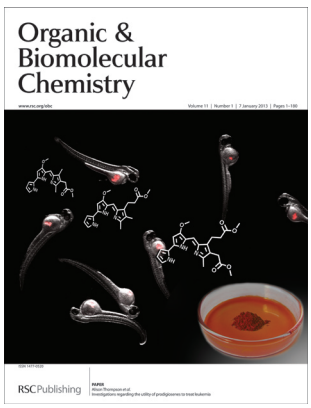

Inside cover
See Alison Thompson *et al.*, pp. 62–68.

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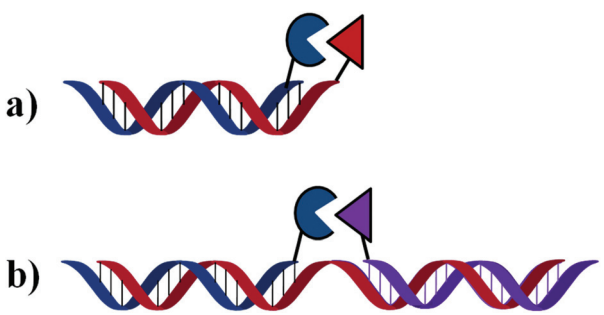
EDITORIAL

EMERGING AREA



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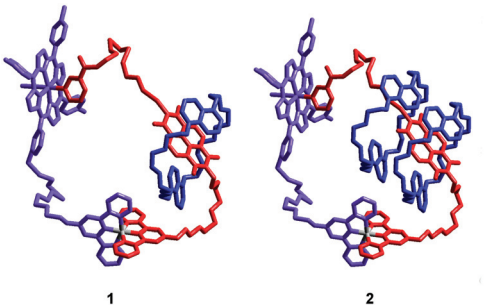

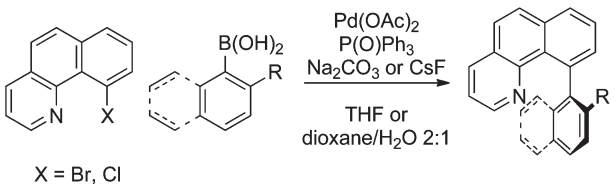

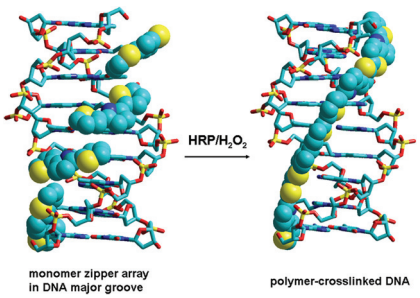

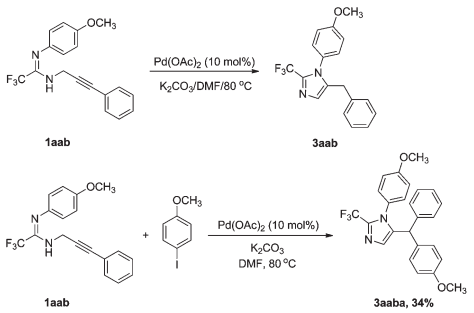

COMMUNICATIONS

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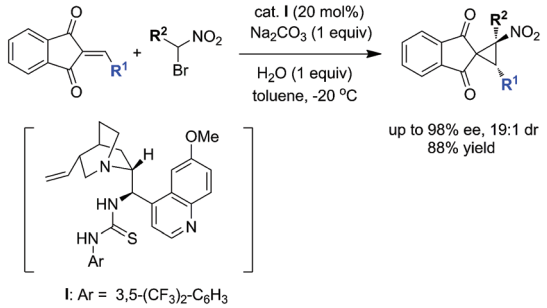

An efficient organocatalytic enantioselective synthesis of spironitrocyclopropanes

Utpal Das, Yi-Ling Tsai and Wenwei Lin*

An organocatalytic construction of substituted spironitrocyclopropanes starting from 2-arylidene-1,3-indandiones and bromonitroalkanes has been described.

PAPERS

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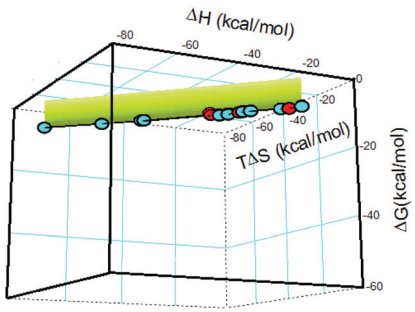

Energetic studies on DNA–peptide interaction in relation to the enthalpy–entropy compensation paradox

Robin C. K. Yang, Jonathan T. B. Huang, Shih-Chuan Chien, Roy Huang, Kee-Ching G. Jeng, Yen-Chung Chen, Mokai Liao, Jia-Rong Wu, Wei-Kang Hung, Chia-Chun Hung, Yu-Ling Chen, Michael J. Waring and Leung Sheh*

The energetic basis for molecular recognition of peptides to DNA enlightens the universal EEC paradox.

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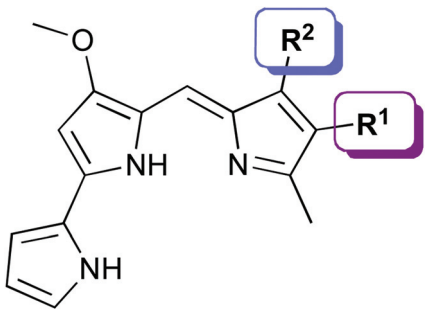

Investigations regarding the utility of prodigiosenes to treat leukemia

Deborah A. Smithen, A. Michael Forrester, Dale P. Corkery, Graham Dellaire, Julie Colpitts, Sherri A. McFarland, Jason N. Berman and Alison Thompson*

Structural modification of the C-ring resulted in a series of prodigiosenes that displayed interesting activity *in vitro* and *in vivo*.

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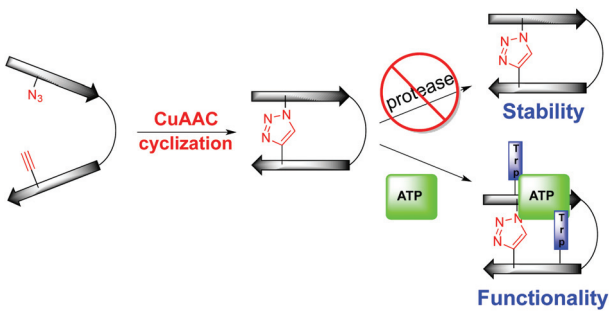

Positional effects of click cyclization on β-hairpin structure, stability, and function

Jessica H. Park and Marcey L. Waters*

"Clicking" of β-hairpin peptides at several different positions was explored as a method to influence folding, protease resistance, and function.

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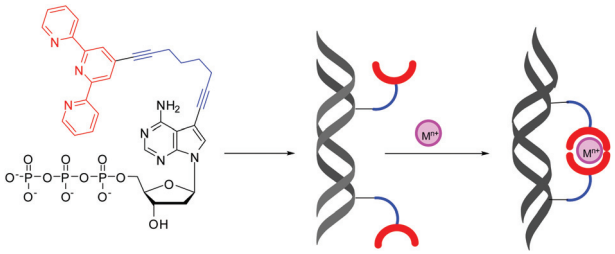
Synthesis of nucleosides and dNTPs bearing oligopyridine ligands linked through an octadiyne tether, their incorporation into DNA and complexation with transition metal cations

Lubica Kalachova, Radek Pohl, Lucie Bednárová, Jindřich Fanfrlík and Michal Hocek*

Nucleotides bearing terpyridine ligands attached *via* a flexible octadiynyl tether were prepared and enzymatically incorporated into DNA where formation of intra-strand complexes with Fe^{2+} and Ni^{2+} was observed.



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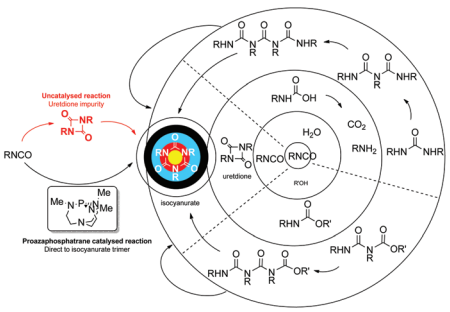
The formation of high-purity isocyanurate through proazaphosphatrane-catalysed isocyanate cyclo-trimerisation: computational insights

Jack N. Gibb and Jonathan M. Goodman*

Polyurethane foams are widely used materials and control of their physical properties is a significant challenge.



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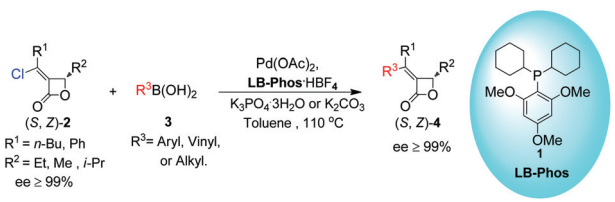
Pd-catalyzed Suzuki coupling reaction of chloroalkylidene-β-lactones with LB-Phos as the ligand

Pengbin Li, Bo Lü, Chunling Fu and Shengming Ma*

The LB-Phos·HBF_4 salt was applied for the Pd-catalysed Suzuki coupling reactions of optically active (*Z*)-α-choroalkylidene-β-lactones.



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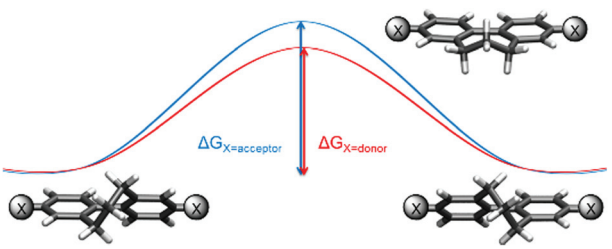
Atropisomerization of di-*para*-substituted propyl-bridged biphenyl cyclophanes

Jürgen Rotzler, Heiko Gsellinger, Angela Bihlmeier, Markus Gantenbein, David Vonlanthen, Daniel Häussinger,* Wim Klopper* and Marcel Mayor*

The influence of electron donors and electron acceptors of variable strength in the 4 and 4′ position of 2 and 2′ propyl-bridged axial chiral biphenyl cyclophanes on their atropisomerization process was studied.



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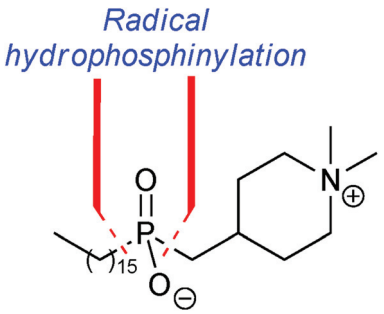

Synthesis of a phosphinate analogue of the anti-tumour phosphate di-ester perifosine *via* sequential radical processes

Marios S. Markoulides and Andrew C. Regan*

A phosphinate analogue of the anti-tumour phosphate di-ester perifosine has been prepared using two sequential radical hydrophosphinylation reactions.

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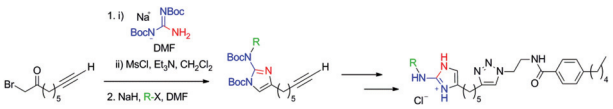

N-Substituted 2-aminoimidazole inhibitors of MRSA biofilm formation accessed through direct 1,3-bis(*tert*-butoxycarbonyl)guanidine cyclization

Andrew A. Yeagley, Zhaoming Su, Kára D. McCullough, Roberta J. Worthington and Christian Melander*

A method to access 2-substituted derivatives of a known 2-aminoimidazole/triazole biofilm modulator was developed. Analogues possessing aliphatic substituents exhibited increased biofilm inhibition activity against MRSA compared to the parent compound. Several analogues also displayed synergy with oxacillin against MRSA.

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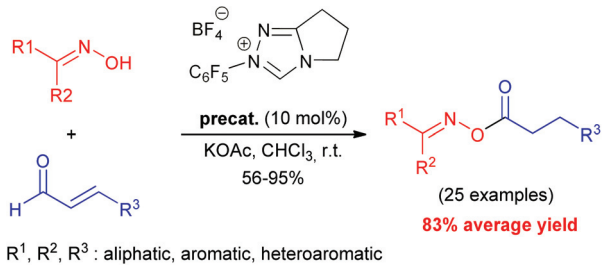

N-Heterocyclic carbene catalyzed synthesis of oxime esters

Dieter Enders,* André Grossmann and David Van Craen

A selective, redox- and atom economical synthesis of oxime esters *via* *N*-heterocyclic carbene catalyzed redox esterification has been developed. The new protocol opens a convenient and direct entry to the title compounds in very high yields without any significant limitations in the substrate scope.

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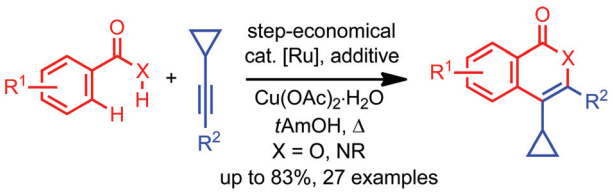
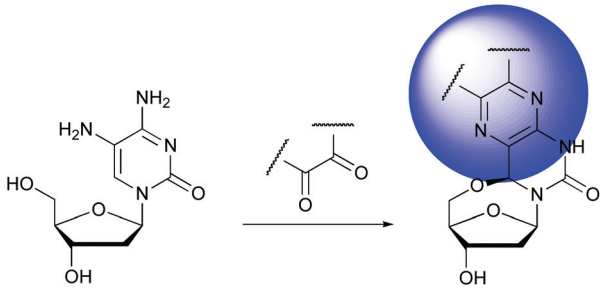
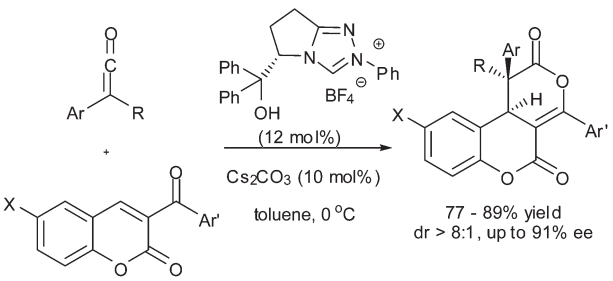


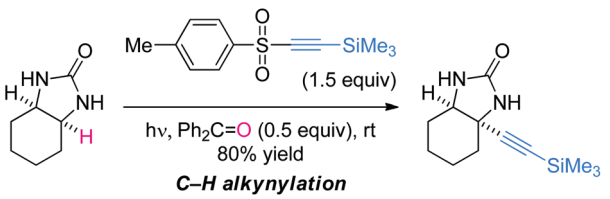
Ruthenium-catalyzed C–H/O–H and C–H/N–H bond functionalizations: oxidative annulations of cyclopropyl-substituted alkynes

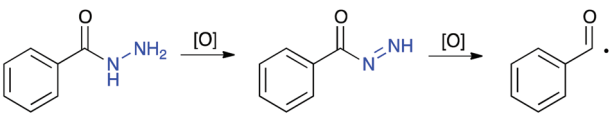
Monica Deponti, Sergei I. Kozhushkov, Dmitry S. Yufit and Lutz Ackermann*

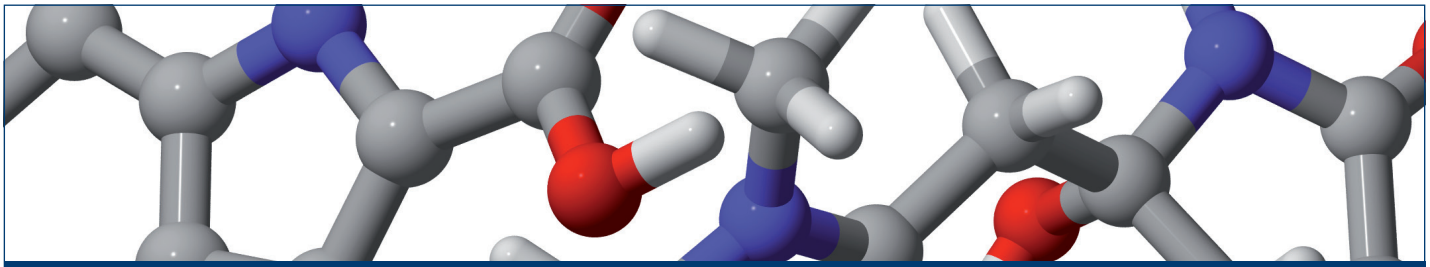
Ruthenium-catalyzed syntheses of cyclopropyl-substituted isocoumarins and isoquinolones were accomplished through highly chemo-, site- and regioselective C–H/O–H and C–H/N–H bond functionalizations with cyclopropylacetylenes.











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