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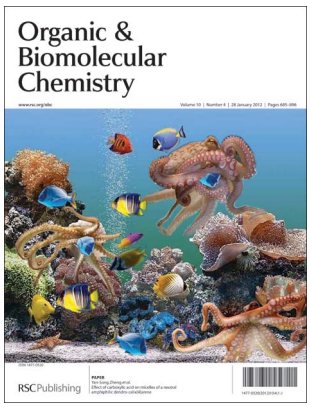
ISSN 1477-0520 CODEN OBCRAK 10(4) 685–896 (2012)



Cover

See Yan-Song Zheng *et al.*, pp. 729–735.

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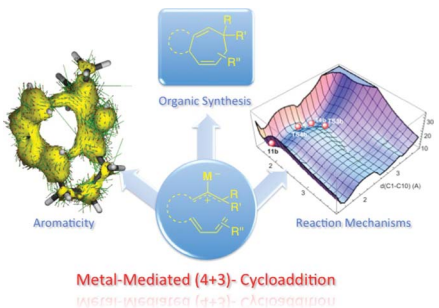
EMERGING AREA

Transition metal-catalysed (4 + 3) cycloaddition reactions involving allyl cations

Israel Fernández* and José Luis Mascareñas

In this emerging area article, we focus on the synthetic applications and reaction mechanisms of novel intramolecular transition metal catalysed (4 + 3)-cycloaddition reactions of allenedienes.

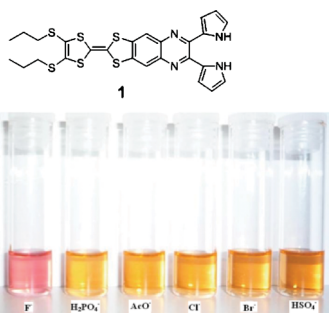


COMMUNICATIONS

Fluoride-selective optical sensor based on the dipyrrolyl-tetrathiafulvalene chromophore

Shadi Rivadehi, Ellen F. Reid, Conor F. Hogan, Sheshanath V. Bhosale and Steven J. Langford*

A chemosensor bearing dipyrrolyl motifs as recognition sites and a tetrathiafulvalene redox tag has been evaluated as an optical and redox sensor for a series of anions (F^-, $H_2PO_4^-$, CH_3COO^-, Cl^-, Br and HSO_4^-) in DCM solution.



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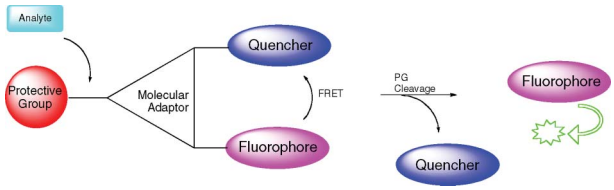

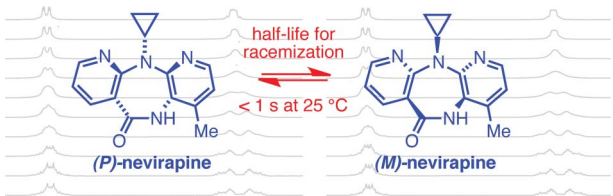

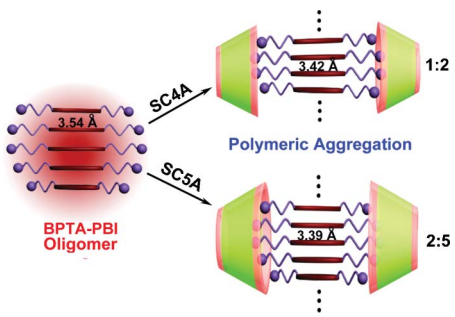

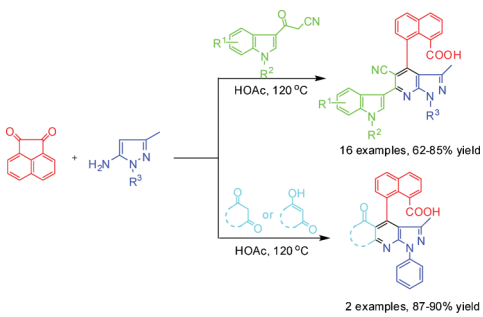

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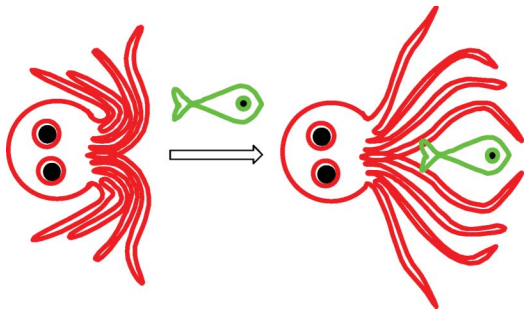

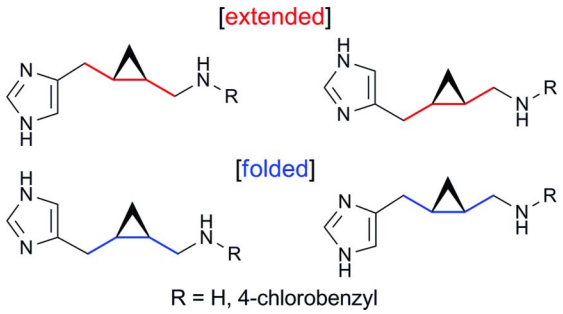

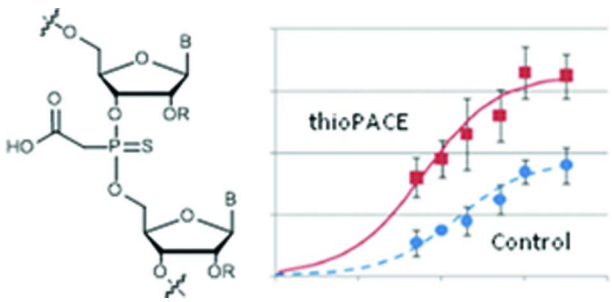

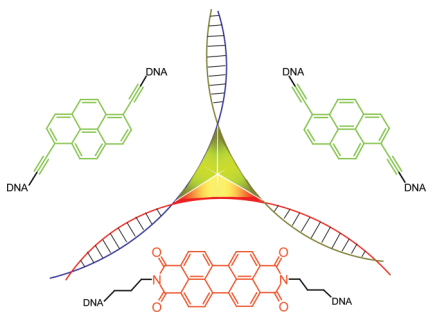

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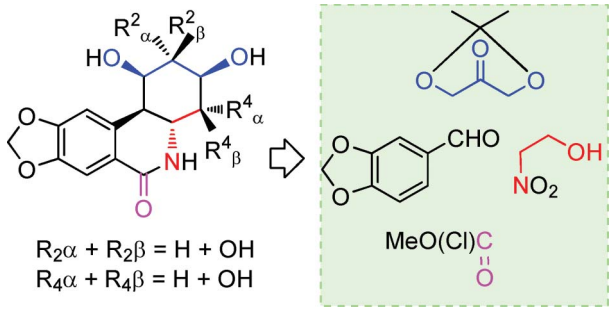

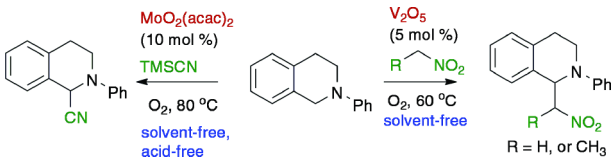

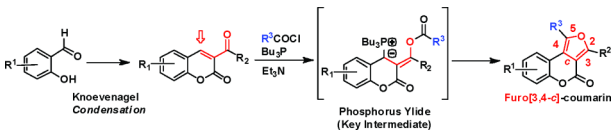

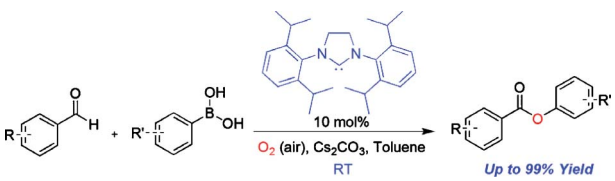

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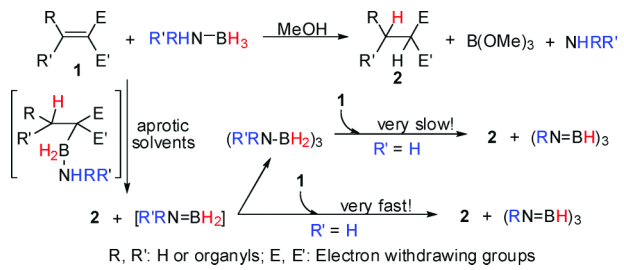

Synthetic and mechanistic studies of metal-free transfer hydrogenations applying polarized olefins as hydrogen acceptors and amine borane adducts as hydrogen donors

Xianghua Yang, Thomas Fox and Heinz Berke*

Metal-free transfer hydrogenation of polarized olefins were studied using amine borane adducts (RR′NH–BH_3) as hydrogen donors.

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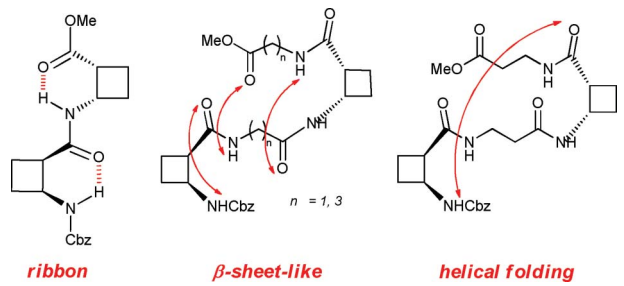
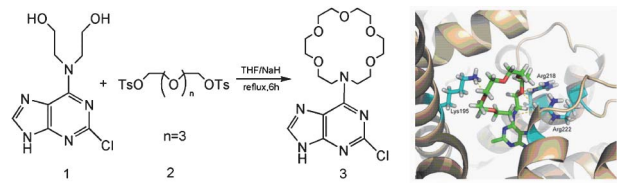


Designing hybrid foldamers: the effect on the peptide conformational bias of β- *versus* α- and γ-linear residues in alternation with (1*R*,2*S*)-2-aminocyclo-butane-1-carboxylic acid

Sergio Celis, Esther Gorrea, Pau Nolis, Ona Illa and Rosa M. Ortuño*

Conformational bias can be tuned from ribbon-type structures to β-sheet-like and helical motifs by intercalating suitable linear segments between *cis*-cyclobutane residues.

869

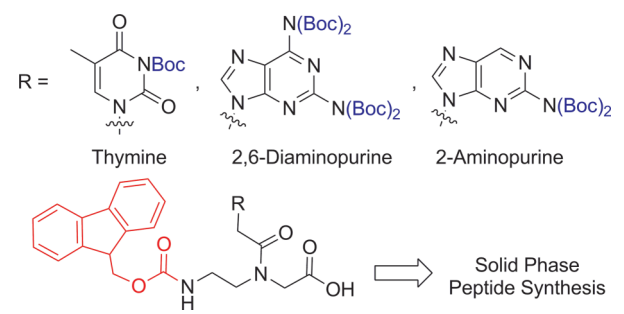


Synthesis of *N*-(2-chloro purin-6-yl) aza-18-crown-6 and its interaction with human serum albumin

Cui Li, Fengling Cui,* Runze Mao, Ruina Huo and Guirong Qu

The novel purine nucleosides-linked azacrown ether in the C6 position was synthesized. This new nucleoside analogue can be prepared from a series of N9-modified nucleosides. The *N*-(2-chloro purin-6-yl) aza-18-crown-6 can bind to human serum albumin through hydrophobic forces.

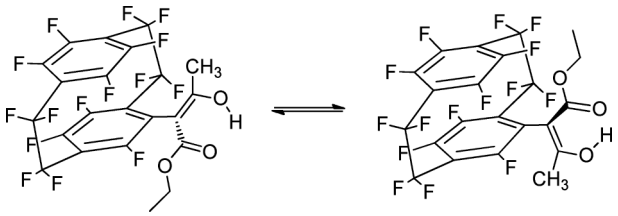
876

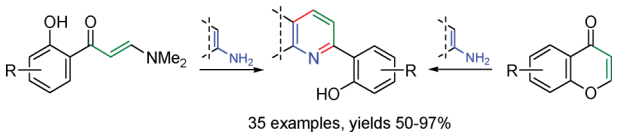


Synthesis and oligomerization of Fmoc/Boc-protected PNA monomers of 2,6-diaminopurine, 2-aminopurine and thymine

André H. St. Amant and Robert H. E. Hudson*

The synthesis and oligomerization of Fmoc/Boc protected PNA monomers is described for 2,6-diaminopurine, 2-aminopurine, and thymine. The mismatch discrimination and fluorescence properties of the PNA were examined.





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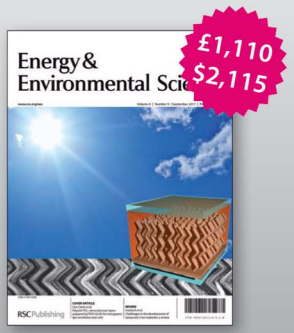

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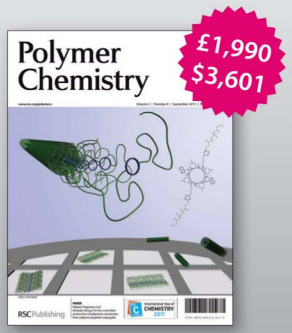

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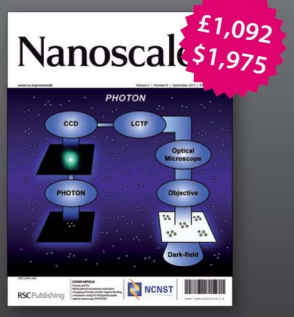

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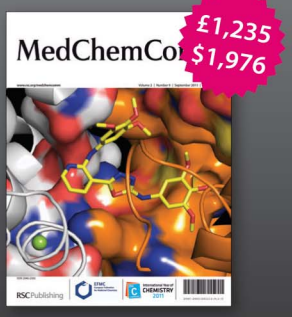

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