Volume 12 | Number 16 | 28 April 2014 | Pages 2491–2628

Organic & Biomolecular Chemistry

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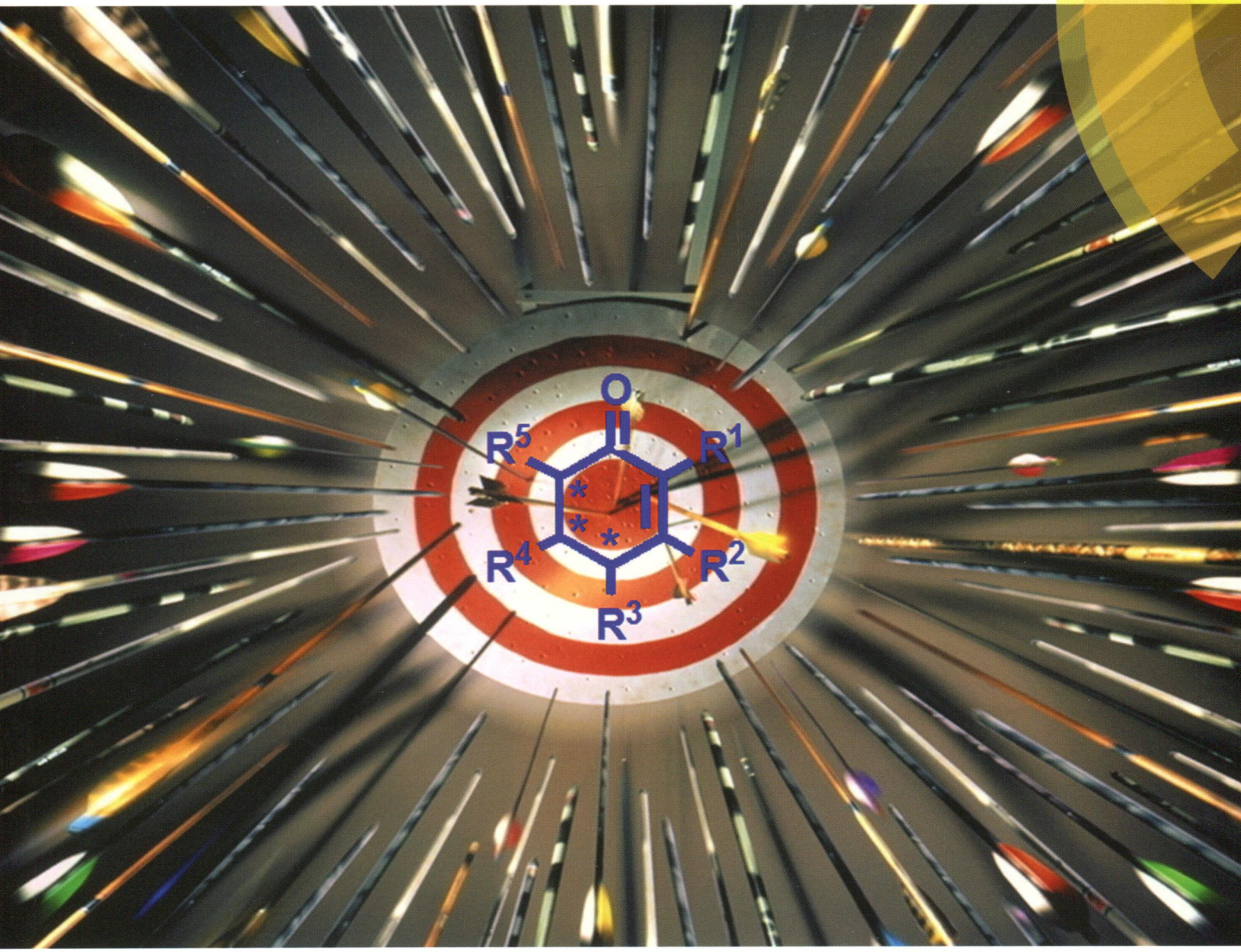

ISSN 1477-0520

ROYAL SOCIETY OF CHEMISTRY

REVIEW ARTICLE
Jun Wang, Pengfei Li *et al.*
Recent progress on asymmetric organocatalytic construction of chiral cyclohexenone skeletons

Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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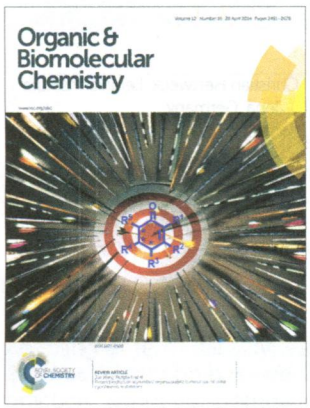
IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 12(16) 2491–2628 (2014)



Cover
See Jun Wang, Pengfei Li *et al.*, pp. 2499–2513.

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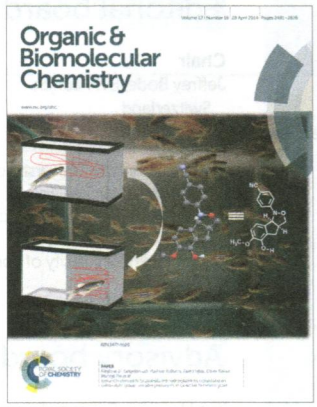

Inside cover
See Neelima D. Tangellamudi, Pushkar Kulkarni, Javed Iqbal, Oliver Reiser, Manojit Pal *et al.*, pp. 2552–2558.

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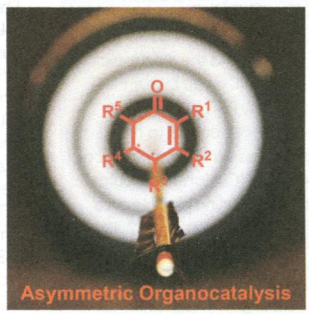
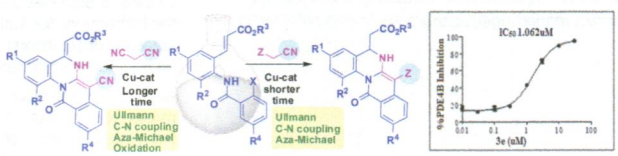
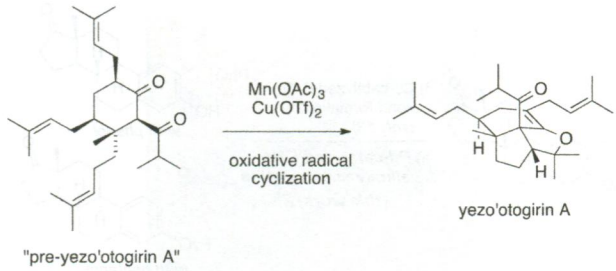
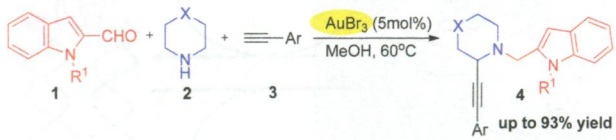
REVIEW

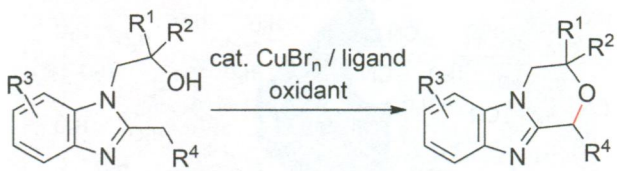


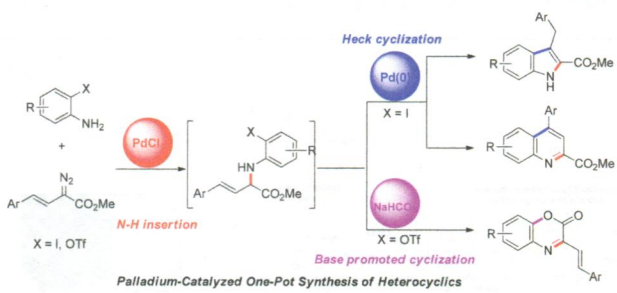
COMMUNICATIONS











COMMUNICATIONS

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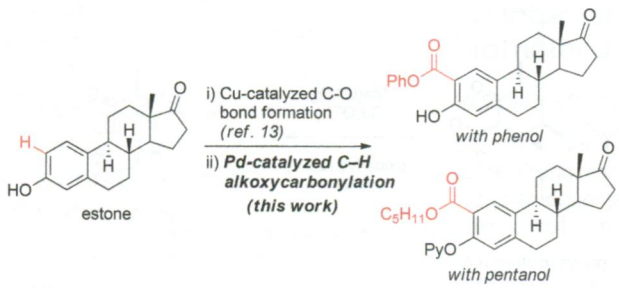
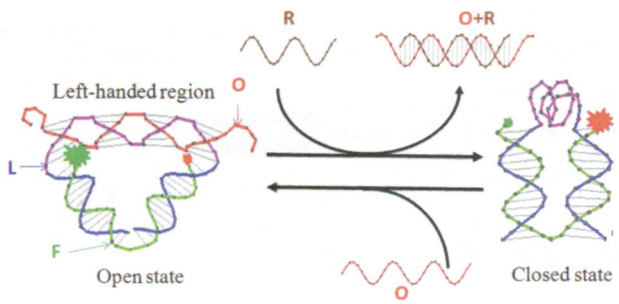


Pd(II)-catalyzed oxidative alkoxycarbonylation of 2-phenoxypyridine derivatives with CO and alcohols

Bin Liu, Huai-Zhi Jiang and Bing-Feng Shi*

A Pd(II)-catalyzed oxidative alkoxycarbonylation of phenol derivatives with atmospheric pressure of $CO–O_2$ and alcohols has been achieved.

2543

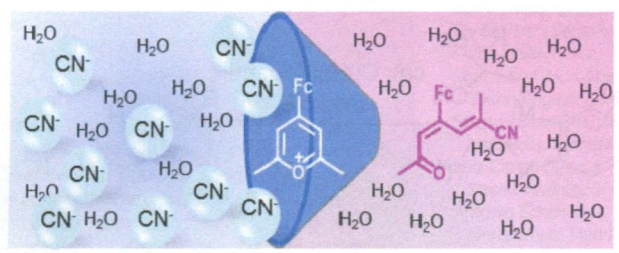


A nanomotor involves a metastable, left-handed DNA duplex

Yingmei Li, Chuan Zhang, Cheng Tian and Chengde Mao*

A metastable left-handed DNA is used to power a DNA nanomotor by non-toehold-mediated strand displacement.

2547



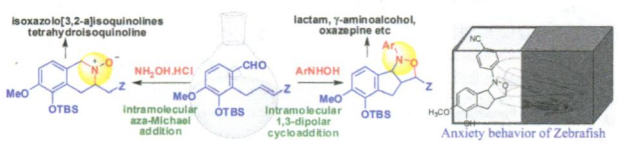
The ferrocene-pyrylium dyad as a selective colorimetric chemodosimeter for the toxic cyanide and hydrogen sulfide anions in water

Antonia Sola, Alberto Tárraga* and Pedro Molina*

A pyrylium derivative showing a remarkable ability to recognize cyanide and hydrogen sulfide anions in aqueous media through two different channels, electrochemical and chromogenic, is described.

PAPERS

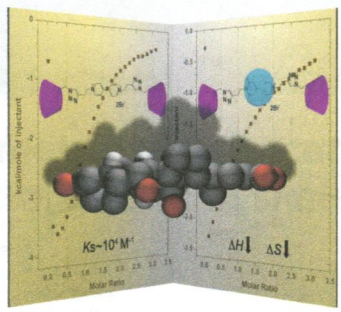
2552

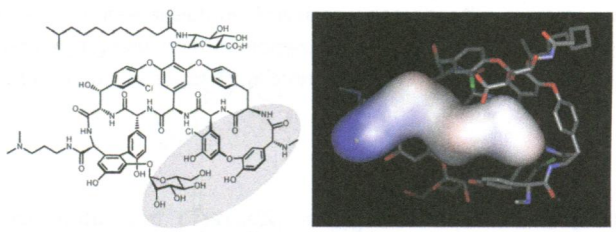


Isovanillin derived *N*-(un)substituted hydroxylamines possessing an *ortho*-allylic group: valuable precursors to bioactive N-heterocycles

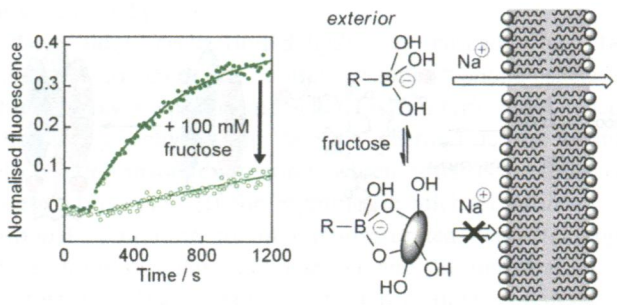
Balakrishna Dulla, Neelima D. Tangellamudi,* Sridhar Balasubramanian, Swapna Yellanki, Raghavender Medishetti, Rakesh Kumar Banote, Girish Hari Chaudhari, Pushkar Kulkarni,* Javed Iqbal,* Oliver Reiser* and Manojit Pal*

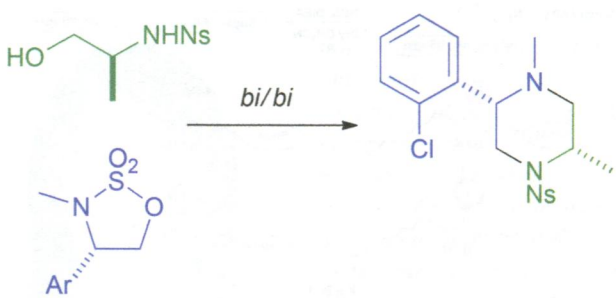
Isovannillin based N-heterocycles are synthesized and evaluated for their potential anxiogenic properties.

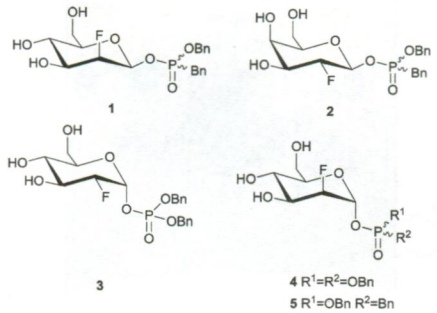




Ligand-bound 'closed' conformation in dalbavancin monomer



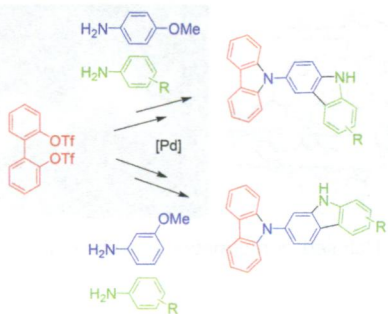




Phosphodiesters serve as potentially tunable aglycones for fluoro sugar inactivators of retaining β-glycosidases

B. P. Rempel and S. G. Withers*

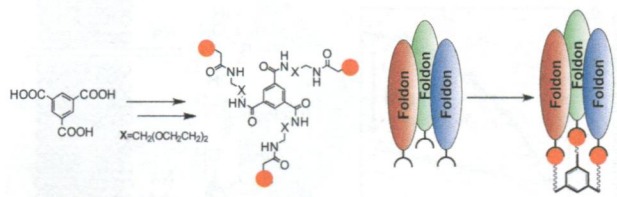
2-Deoxy-2-fluoroglycosides were synthesised and tested as covalent glycosidase inactivators. β-D-Gluco-, -manno- and -galacto-configured benzyl-benzylphosphonate derivatives efficiently inactivate β-gluco-, β-manno- and β-galactosidases, while α-gluco- and α-manno-configured phosphate and phosphonate derivatives instead served as slow substrates for their cognate α-glycosidases.



Efficient synthesis of biscarbazoles by palladium-catalyzed twofold C–N coupling and C–H activation reactions

Tran Quang Hung, Ngo Ngoc Thang, Do Huy Hoang, Tuan Thanh Dang,* Alexander Villinger and Peter Langer*

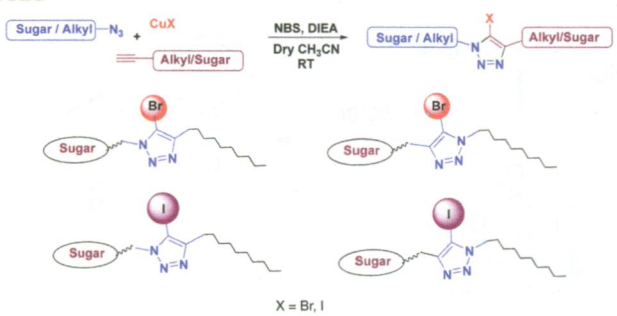
Biscarbazoles were efficiently prepared by palladium catalyzed C–N coupling and C–H activation reactions.



Versatile C_3-symmetric scaffolds and their use for covalent stabilization of the foldon trimer

Arne Berthelmann, Johannes Lach, Melissa A. Gräwert, Michael Groll and Jutta Eichler*

Attachment of foldon monomers to a trimesic acid scaffold enhances thermal stability of the trimer, while maintaining the correct fold.



Diversity oriented synthesis of novel haloglycolipids potentially useful for crystallization of integral membrane proteins

Laxminarayan Sahoo,* Anadi Singhamahapatra and Duraikkannu Loganathan

5-Halo triazole linked glycolipids, potentially useful for extraction and crystallization of integral membrane proteins synthesized by Cu(I) catalyzed *click* reaction.