Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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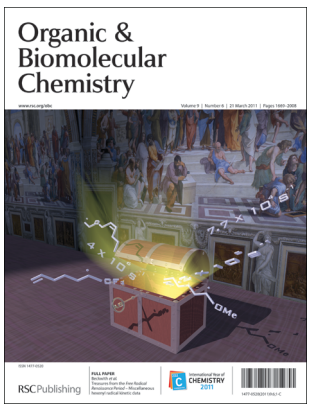
ISSN 1477-0520 CODEN OBCRAK 9(6) 1669–2008 (2011)



Cover

See Beckwith *et al.*, pp. 1736–1743.

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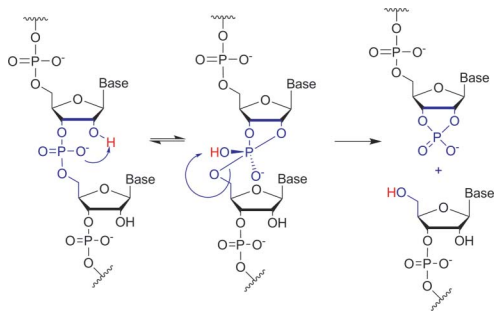
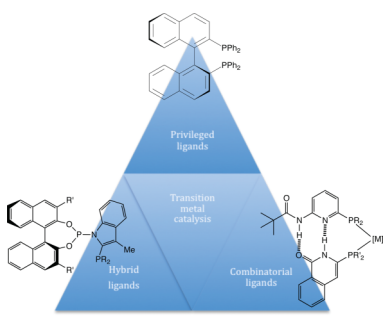
PERSPECTIVES





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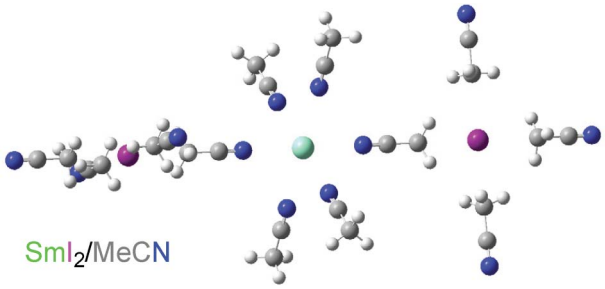

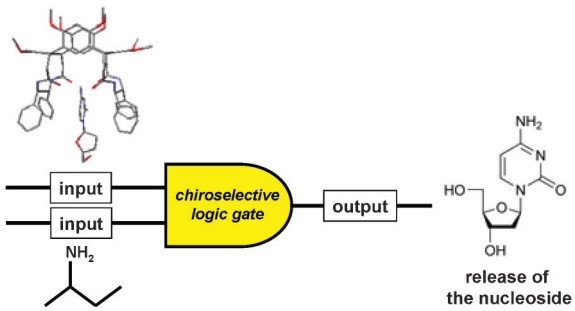

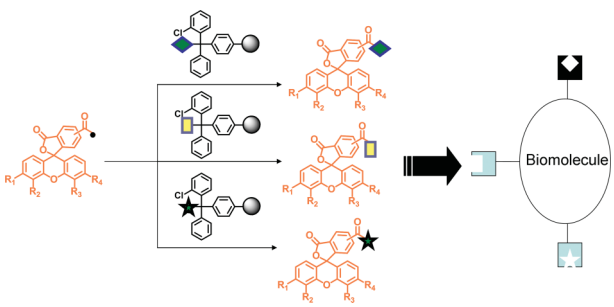

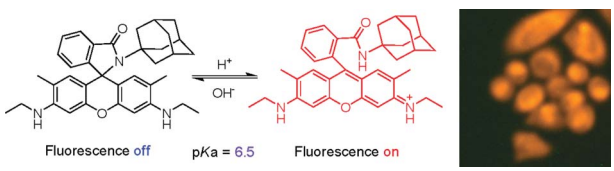

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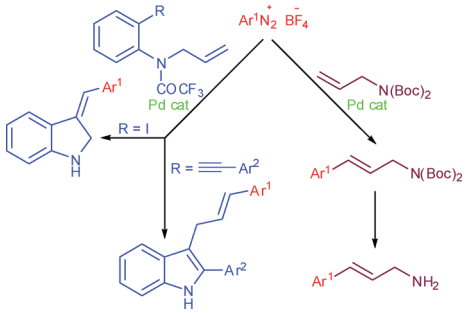

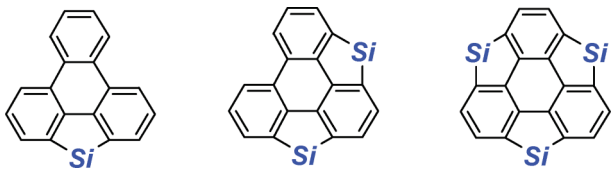

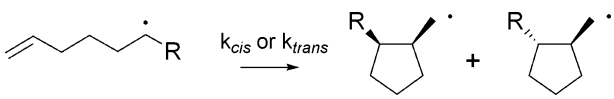

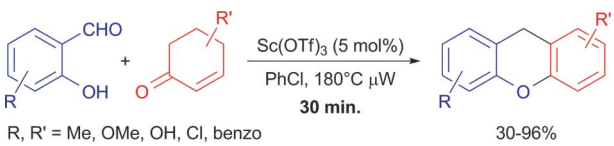

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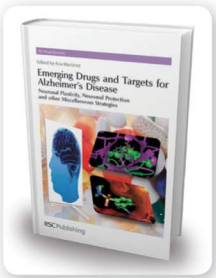

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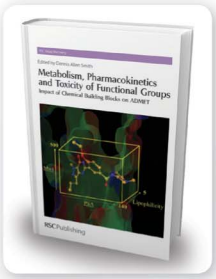

Metabolism, Pharmacokinetics and Toxicity of Functional Groups: Impact of Chemical Building Blocks on ADMET

Edited by Dennis A Smith | Pfizer Global R & D, UK
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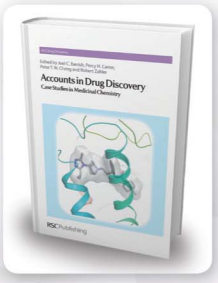
Written by medicinal chemists and ADMET scientists with a combined experience of 300 years this aid to discovering drugs provides detailed coverage on absorption, distribution, metabolism, excretion and toxicity issues associated with new drugs.



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Edited by Joel Barrish, Percy Carter, Robert Zahler, Peter Cheng
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This book provides up-to-date information on the use of transgenic mouse models in the study of neurodegenerative disorders such as Alzheimer's and Huntington's disease The editors have extensive knowledge and experience in this field and the book is aimed at undergraduates, postgraduates and academics.

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Price: £121.99 | ISBN 9781849730501

This exemplary new book provides an up-date perspective on the latest developments in this fast moving field. Traditional views concerning the relationship between the physio-pathological cycles of copper, zinc, iron, aluminium and the evolution of life, are compared with emerging ideas in the neuroscience of metal ions. Essential reading for neuroscientists working in both industry and academia.

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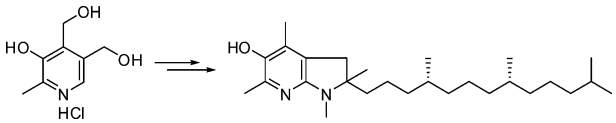
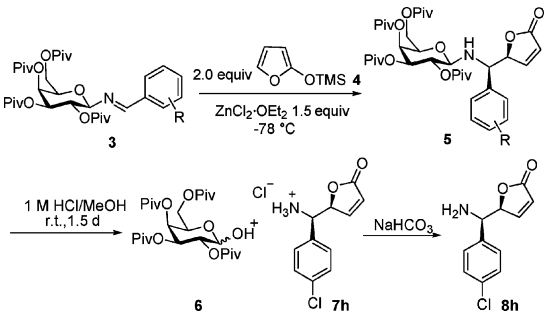
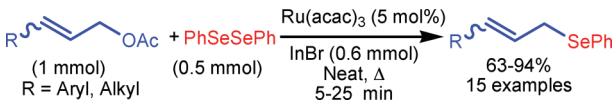
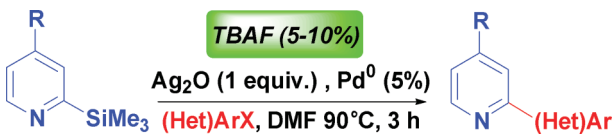
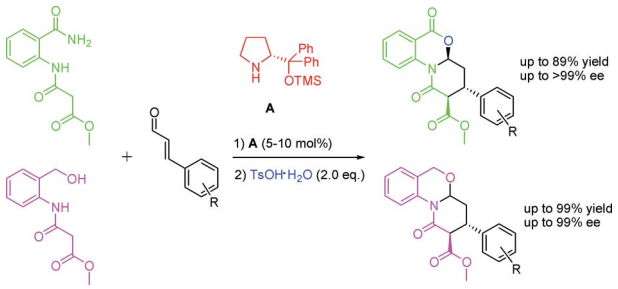
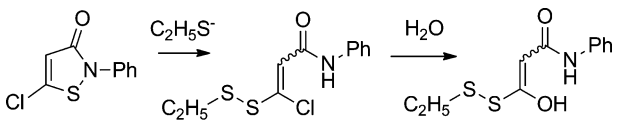


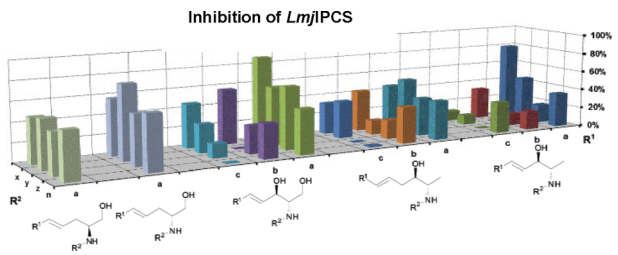


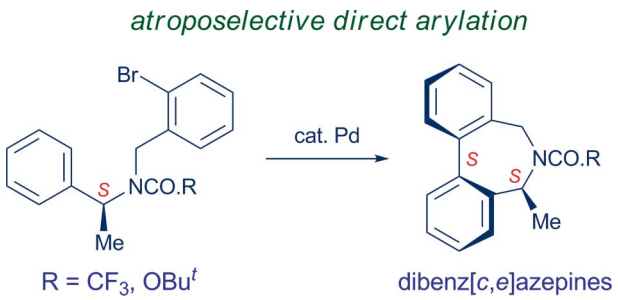


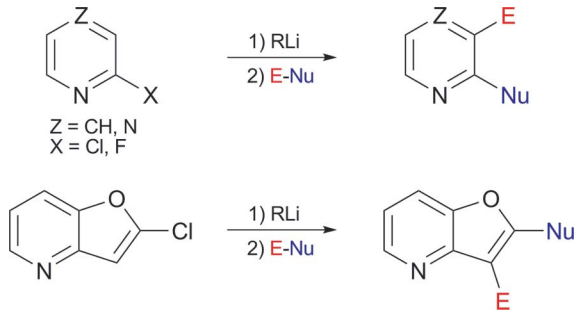


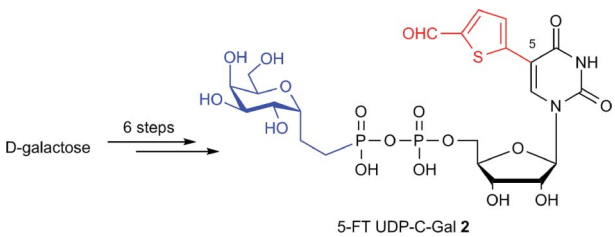


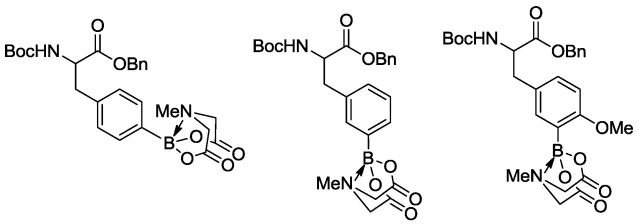




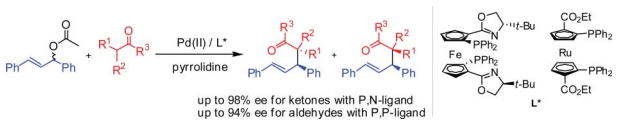








1871

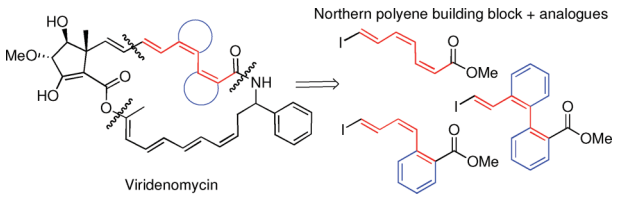


Efficient palladium-catalyzed asymmetric allylic alkylation of ketones and aldehydes

Xiaohu Zhao, Delong Liu, Fang Xie, Yangang Liu and Wanbin Zhang*

The first palladium-catalyzed asymmetric allylic alkylation of ketones and aldehydes *via* enamines generated *in situ* as nucleophiles with excellent enantioselectivities and yields is reported.

1876

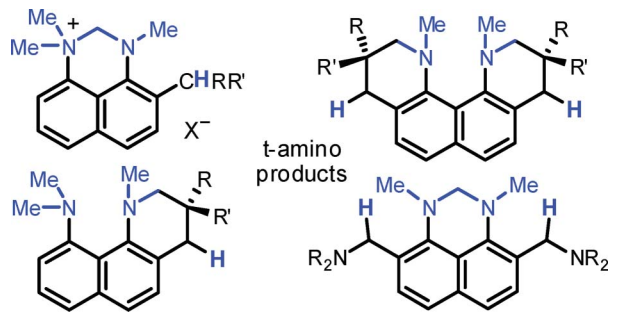


Studies towards the synthesis of the northern polyene of viridenomycin and synthesis of *Z*-double bond analogues

Jonathan P. Knowles, Victoria E. O′Connor and Andrew Whiting*

The development of highly stereoselective coupling methods is reported, which are suitable for the construction of models of the northern hemisphere of viridenomycin, together with arylated analogues.

1887

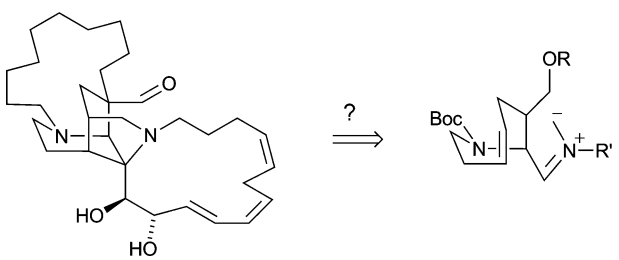


Naphthalene proton sponges as hydride donors: diverse appearances of the *tert*-amino-effect

Alexander F. Pozharskii,* Maria A. Povalyakhina, Alexander V. Degtyarev, Oxana V. Ryabtsova, Valery A. Ozeryanskii, Olga V. Dyablo, Anna V. Tkachuk, Olga N. Kazheva, Anatolii N. Chekhlov and Oleg A. Dyachenko

Hydrogen atoms (bold blue in the image) of *peri*-NMe_2 groups in the naphthalene proton sponge can intramolecularly migrate to an electron-accepting *ortho*-substituent(s) to give benzo[*h*]quinolines, quino[7,8:7′,8′]quinolines, *ortho*-Mannich bases and so on.

1901



Transannular dipolar cycloaddition as an approach towards the synthesis of the core ring system of the sarain alkaloids

Andrew I. Franklin, David Bensa, Harry Adams and Iain Coldham*

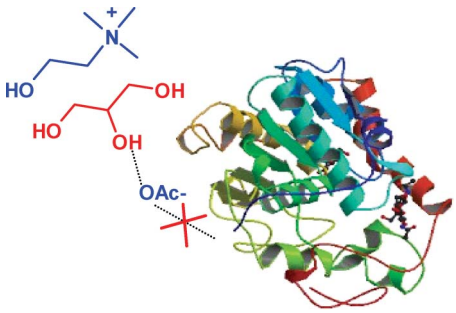
Attempted transannular cycloaddition was unsuccessful towards the core of the sarain alkaloids

1908

New eutectic ionic liquids for lipase activation and enzymatic preparation of biodiesel

Hua Zhao,* Gary A. Baker and Shaletha Holmes

A new eutectic ionic liquid based on choline acetate and glycerol is compatible with lipase B from *Candida antarctica* [structure from PDB ID: 1TCB].



1917

Polymer supported synthesis of novel benzoxazole linked benzimidazoles under microwave conditions: *In vitro* evaluation of VEGFR-3 kinase inhibition activity

Kaushik Chanda, Barnali Maiti, Gorakh S. Yellol, Ming-Hsien Chien, Min-Liang Kuo and Chung-Ming Sun*

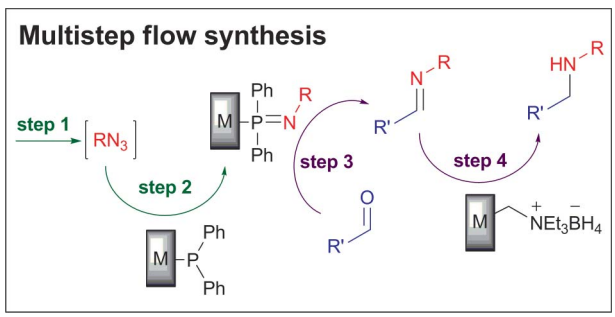
Efficient soluble polymer supported synthesis of novel benzoxazole-benzimidazole hybrids using microwave irradiation. The compounds show promising *in vitro* VEGFR-3 kinase inhibition activity.

1927

Flow synthesis of organic azides and the multistep synthesis of imines and amines using a new monolithic triphenylphosphine reagent

Catherine J. Smith, Christopher D. Smith, Nikzad Nikbin, Steven V. Ley and Ian R. Baxendale

In situ generated azides are applied to Staudinger aza-Wittig reactions in flow with a new, conveniently formatted monolithic triphenylphosphine reagent.

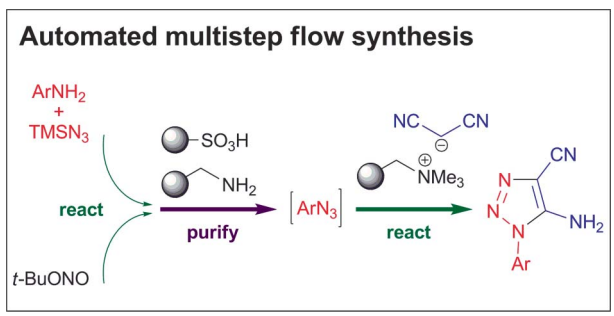


1938

A fully automated, multistep flow synthesis of 5-amino-4-cyano-1,2,3-triazoles

Catherine J. Smith, Nikzad Nikbin, Steven V. Ley, Heiko Lange and Ian R. Baxendale

Aryl azides are generated and purified in flow, then carried on directly to the synthesis of triazole building blocks.

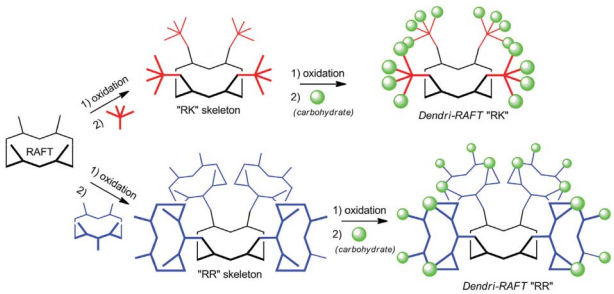


1948

Dendri-RAFTs: a second generation of cyclopeptide-based glycoclusters

Isabelle Bossu, Miroslav Šulc, Karel Křenek, Emilie Dufour, Julian Garcia, Nathalie Berthet, Pascal Dumy, Vladimír Křen* and Olivier Renaudet*

We describe a new series of hexadecavalent glycoclusters, namely "dendri-RAFTs", differing in their spatial arrangement and glycosidic density.

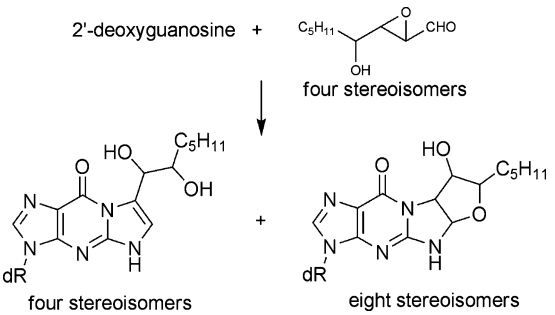


1960

Synthesis of the four stereoisomers of 2,3-epoxy-4-hydroxynonanal and their reactivity with deoxyguanosine

Katya V. Petrova, Donald F. Stec, Markus Voehler and Carmelo J. Rizzo*

Individual stereoisomers of 2,3-epoxy-4-hydroxynonanal (EHN) were synthesized and reacted with deoxyguanosine to afford a 7-(1,2-dihydroxyheptyl)-1,N^2-etheno-2′-deoxyguanosine and two tetracyclic adducts. The adducts were characterized by NMR, CD, and molecular mechanics calculations.

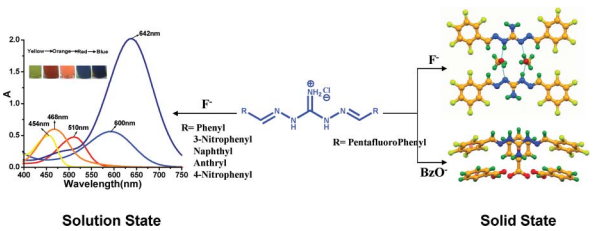


1972

Functionalized guanidinium chloride based colourimetric sensors for fluoride and acetate: single crystal X-ray structural evidence of -NH deprotonation and complexation

Purnandhu Bose, B. Nisar Ahamed and Pradyut Ghosh*

A series of simple guanidinium based receptors acts as a newer type of colourimetric sensor for fluoride in general by deprotonation. Using one of the receptors distinguishable colour changes are observed for F^-, AcO^- and $H_2PO_4^-$.

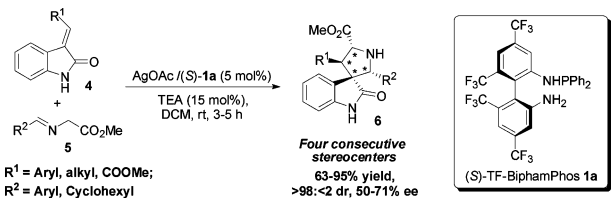


1980

Catalytic asymmetric 1,3-dipolar cycloaddition of *N*-unprotected 2-oxoindolin-3-ylidene derivatives and azomethine ylides for the construction of spirooxindole-pyrrolidines

Tang-Lin Liu, Zhi-Yong Xue, Hai-Yan Tao and Chun-Jiang Wang*

Asymmetric 1,3-dipolar cycloaddition of *N*-unprotected 2-oxoindolin-3-ylidene with azomethine ylides for the construction of spirooxindole-pyrrolidines has been achieved with AgOAc/TF-BiphamPhos complexes for the first time.



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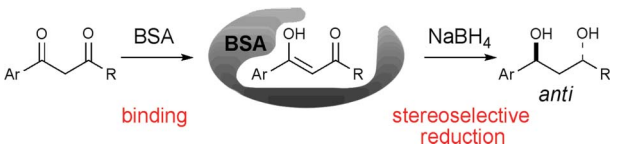
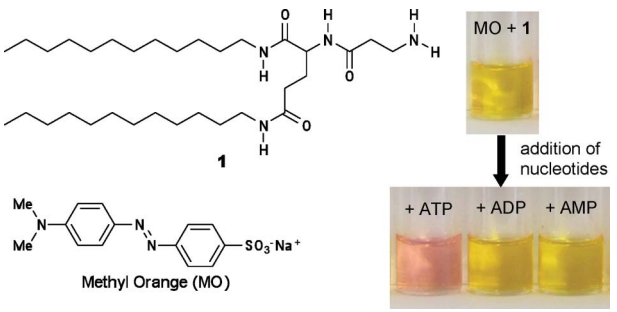


Albumin-directed stereoselective reduction of 1,3-diketones and β-hydroxyketones to *anti* diols

Federico Berti,* Simone Bincoletto, Ivan Donati, Giampaolo Fontanive, Massimo Fregonese and Fabio Benedetti*

Complexation of aromatic 1,3-diketones and hydroxyketones by albumin allows total control of the selectivity in the $NaBH_4$ reduction giving *anti*-diols.

2000



Functionalization of methyl orange using cationic peptide amphiphile: colorimetric discrimination between ATP and ADP at pH 2.0

Naoya Ryu and Hiroshi Hachisako*

A solvatochromic acid–base indicator, methyl orange (MO), was applied to colorimetric discrimination between adenosine 5′-triphosphate (ATP) and the corresponding diphosphate (ADP) in water at pH 2.0 using an L-glutamic acid-derived cationic peptide amphiphile **1**.