Volume 13 | Number 7 | 21 February 2015 | Pages 1917–2198

Organic & Biomolecular Chemistry

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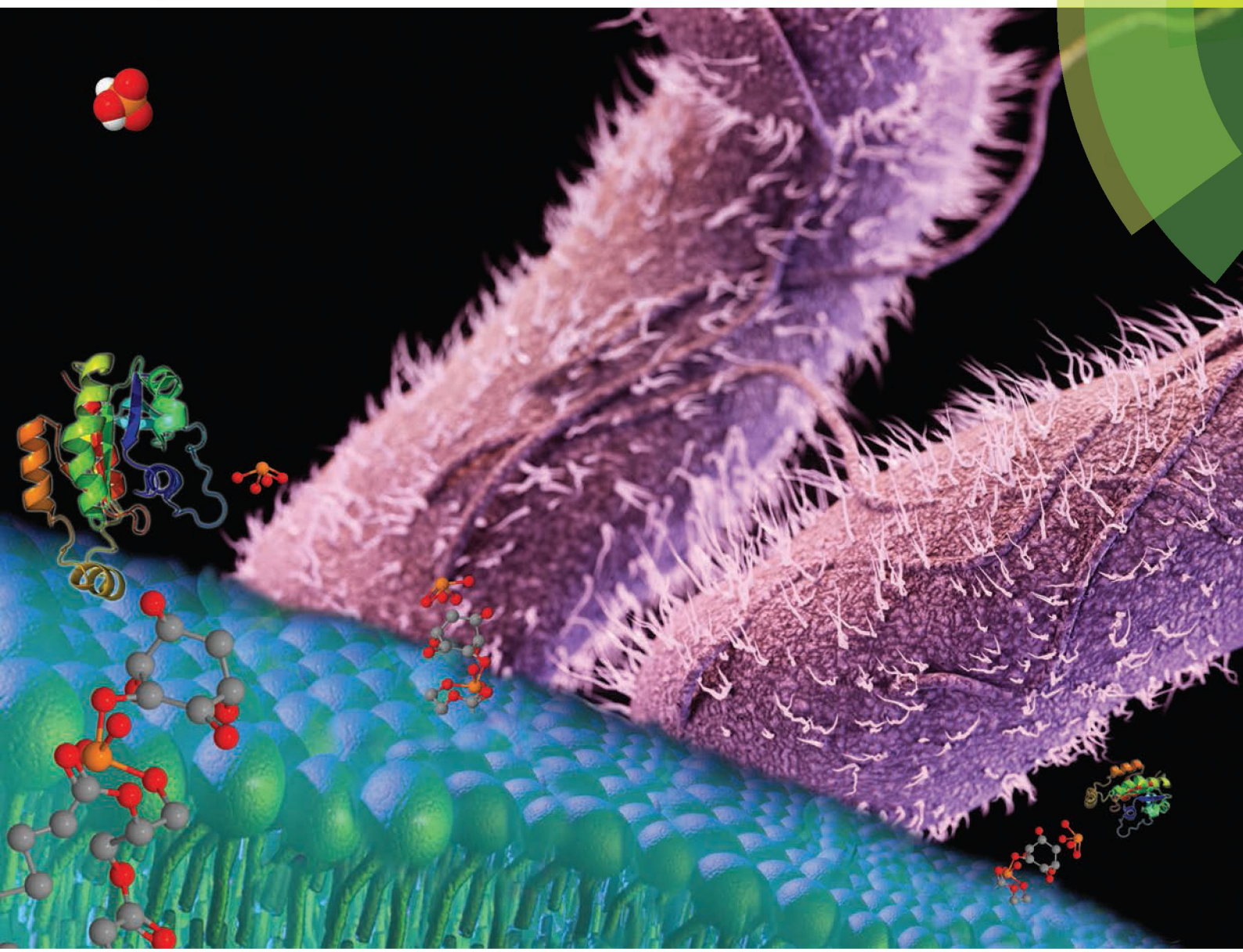

ISSN 1477-0520

ROYAL SOCIETY OF CHEMISTRY

PAPER

Rüdiger Woscholski, Piers R. J. Gaffney *et al.*

Synthesis of unsaturated phosphatidylinositol 4-phosphates and the effects of substrate unsaturation on *Sop*B phosphatase activity

Organic & Biomolecular Chemistry

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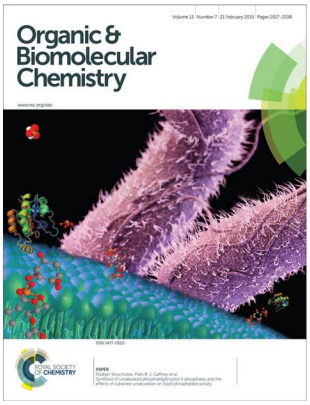

Cover

See Rüdiger Woscholski, Piers R. J. Gaffney *et al.*, pp. 2001–2011.

Cover artwork: Jeanne Nguyen
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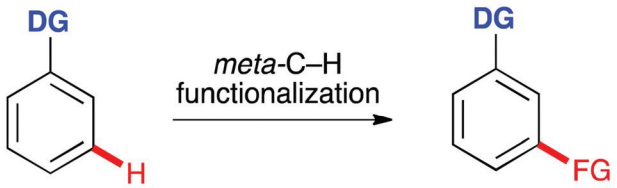
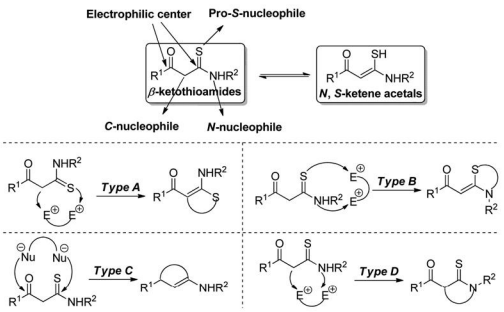
REVIEWS





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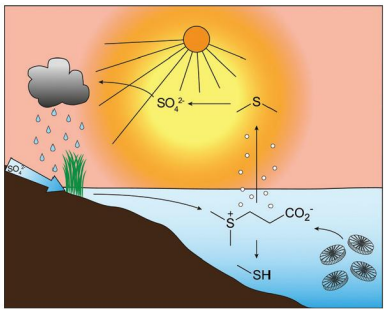
REVIEWS

1954

The chemical biology of dimethylsulfoniopropionate

Jeroen S. Dickschat,* Patrick Rabe and Christian A. Citron

This review addresses synthesis, biosynthesis, transport and degradation of dimethylsulfoniopropionate and its derivatives.



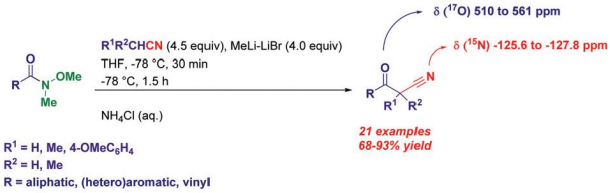
COMMUNICATIONS

1969

Chemoselective efficient synthesis of functionalized β-oxonitriles through cyanomethylation of Weinreb amides

Ashenafi Damtew Mamuye, Laura Castoldi, Ugo Azzena, Wolfgang Holzer and Vittorio Pace*

Homologation of Weinreb amides with cyanomethyllithium: a new route to β-oxonitriles.

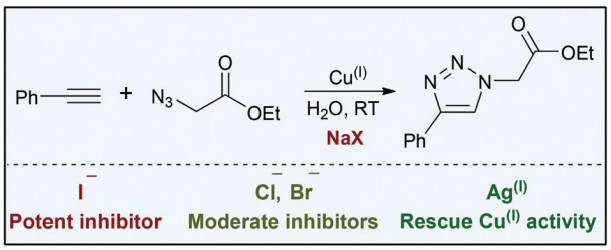


1974

Halide inhibition of the copper-catalysed azide–alkyne cycloaddition

Rebekah M. Moorman, Matthew B. Collier, Bram H. Frohock, Michael D. Womble and Justin M. Chalker*

Halides are inhibitors of the copper-catalysed azide–alkyne cycloaddition. Case studies in this inhibition are presented, along with experimental measures useful in accommodating halides in this widely used reaction.

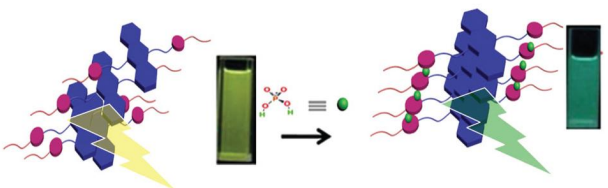


1979

Preassembly-driven ratiometric sensing of $H_2PO_4^-$ anions in organic and aqueous environments

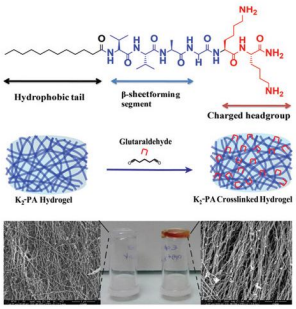
Wei-tao Gong, Duo Na, Le Fang, Hassan Mehdi and Gui-ling Ning*

The preassembly phenomenon of **R1** facilitates novel ratiometric fluorescence sensing of $H_2PO_4^-$ in organic and aqueous environments.



COMMUNICATIONS

1983

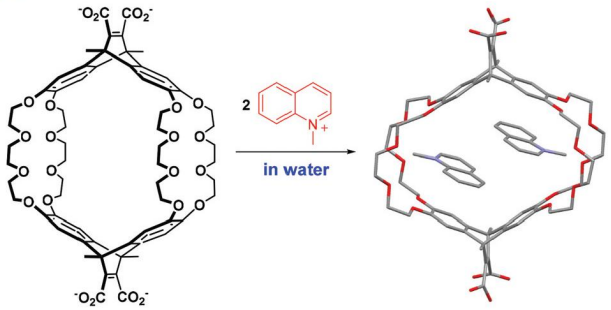


Tuning viscoelastic properties of supramolecular peptide gels *via* dynamic covalent crosslinking

Mohammad Aref Khalily, Melis Goktas and Mustafa O. Guler*

A dynamic covalent crosslinking approach is used to crosslink supramolecular peptide gels.

1988

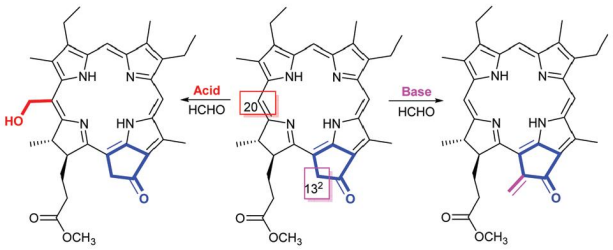


Synthesis of a novel water-soluble cylindrical macrotricyclic host and its complexation with *N*-methylquinolinium and *N*-methylisoquinolinium salts: formation of 1 : 2 complexes in water

Fei Zeng and Chuan-Feng Chen*

A water-soluble cylindrical macrotricyclic host could form 1 : 2 complexes with *N*-methylquinolinium or *N*-methylisoquinolinium salts in water solution and in the solid state.

1992

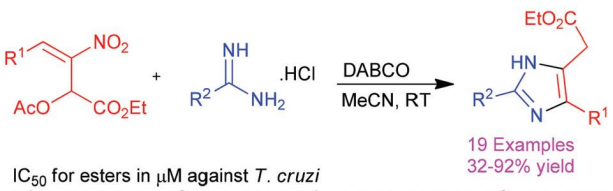


Highly efficient synthesis of novel methyl 13^2-methylene mesopyropheophorbide *a* and its stereoselective Michael addition reaction

Jiazhu Li, Yang Liu, Xi-Sen Xu, Yan-Long Li, Shan-Guo Zhang, Il Yoon, Young Key Shim, Jin-Jun Wang* and Jun-Gang Yin*

pH-Dependent regioselective condensation of methyl mesopyropheophorbide *a* with HCHO is studied and stereoselective Michael reaction of the 13^2-methylene product is also discussed.

1996



IC_{50} for esters in μM against *T. cruzi*
R^1 = 4-MeOC_6H_4, R^2 = Ph: 111.9; R^1 = 2,4-$(MeO)_2C_6H_3$, R^2 = Ph: 102.0
R^1 = 4-Me-C_6H_4, R^2 = Ph: 51.1; Standard (benznidazole): 103.6

Synthesis of imidazoles *via* cascade reaction of nitroallylic acetates with amidines and studies on their trypanocidal activity

Tarun Kumar, Deepti Verma, Rubem F. S. Menna-Barreto, Wagner O. Valença, Eufrânio N. da Silva Júnior* and Irishi N. N. Namboothiri*

Functionalized imidazoles derived from nitroallylic acetates and amidines exhibit potent activity against *T. cruzi*, the etiological agent of Chagas disease.

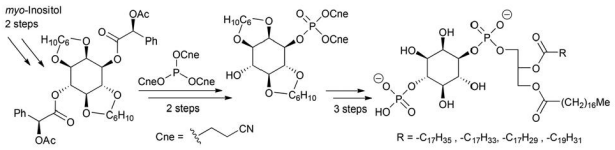
PAPERS

2001

Synthesis of unsaturated phosphatidylinositol 4-phosphates and the effects of substrate unsaturation on *Sop*B phosphatase activity

Samuel Furse, LokHang Mak, Edward W. Tate, Richard H. Templer, Oscar Ces, Rüdiger Woscholski* and Piers R. J. Gaffney*

Single enantiomers of PI-4-*P*, with a range of *sn*-2-fatty acid esters, were prepared efficiently. The effects of the degree of *sn*-2-unsaturation on the kinetic parameters of *Sop*B were determined.

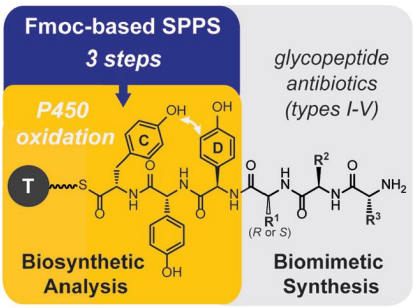


2012

Rapid access to glycopeptide antibiotic precursor peptides coupled with cytochrome P450-mediated catalysis: towards a biomimetic synthesis of glycopeptide antibiotics

Clara Brieke, Veronika Kratzig, Kristina Haslinger, Andreas Winkler and Max J. Cryle*

One Cytochrome P450 enzyme performs the phenolic crosslinking of a range of chemically synthesized, carrier-protein loaded glycopeptide antibiotic precursor peptides.

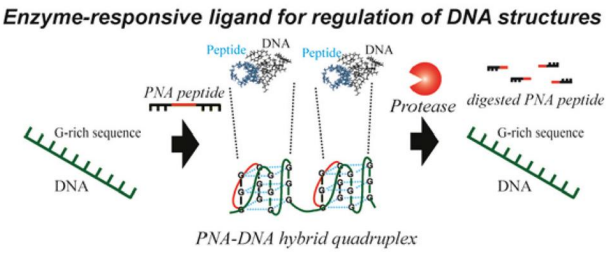


2022

Control of guanine-rich DNA secondary structures depending on the protease activity using a designed PNA peptide

Kenji Usui,* Arisa Okada, Keita Kobayashi and Naoki Sugimoto*

A regulation system for DNA secondary structure formation of G-rich sequences using a designed PNA peptide exhibiting an enzyme-responsive functionality, depending on the protease activity was constructed.

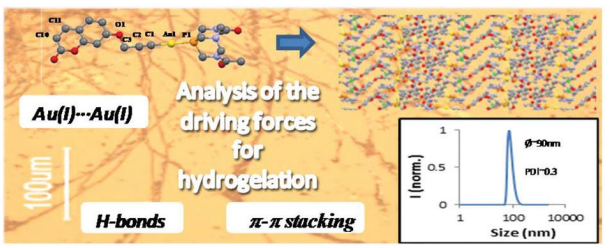


2026

A coumarin based gold(I)-alkynyl complex: a new class of supramolecular hydrogelators

Artur J. Moro, Bertrand Rome, Elisabet Aguiló, Julià Arcau, Rakesh Puttreddy, Kari Rissanen, João Carlos Lima* and Laura Rodríguez*

A phosphine-gold(I)-alkynyl-coumarin complex, [Au{7-(prop-2-ine-1-yloxy)-1-benzopyran-2-one}(DAPTA)] (**1**), was synthesized and the formation of long luminescent fibers in solution was characterized *via* fluorescence microscopy and dynamic light scattering.



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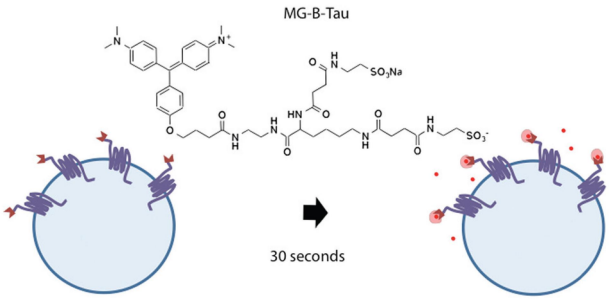

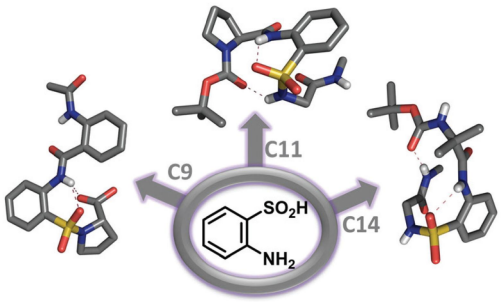

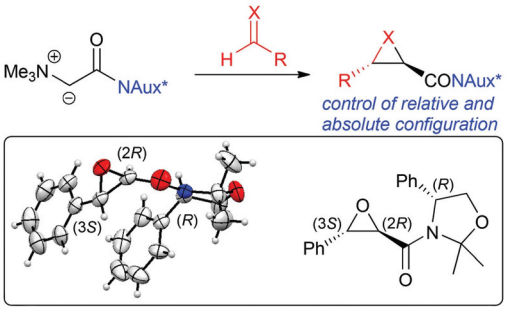

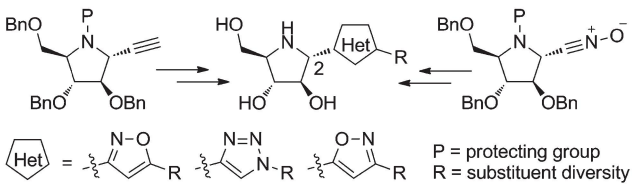

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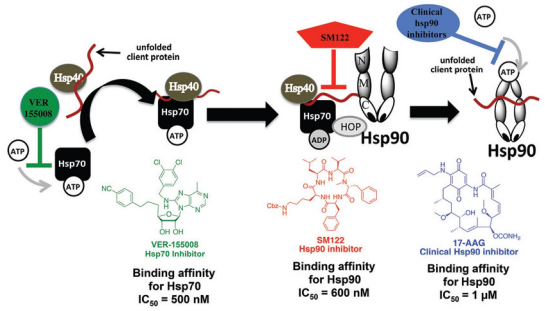


Regulating the cytoprotective response in cancer cells using simultaneous inhibition of Hsp90 and Hsp70

Y. Wang and S. R. McAlpine*

Both heat shock protein 90 and 70 (Hsp90, Hsp70) are cytoprotective proteins that regulate cell function and faciliate cell growth by stabilizing and folding proteins.

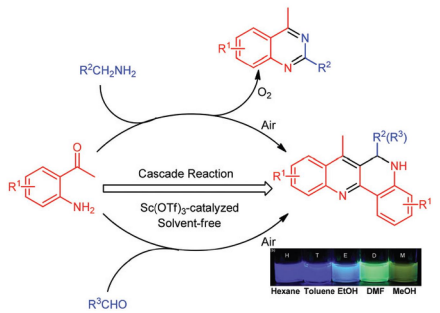
2117

Rapid and scalable assembly of firefly luciferase substrates

David C. McCutcheon, William B. Porterfield and Jennifer A. Prescher*

Improved access to luciferins will bolster bioluminescence imaging applications.

2122

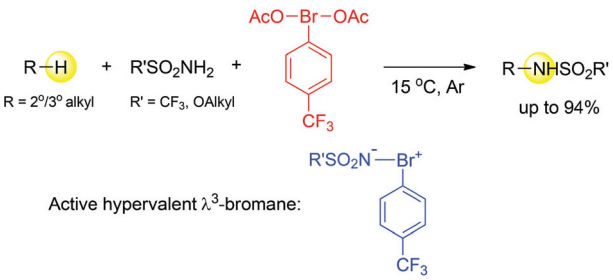


A $Sc(OTf)_3$-catalyzed cascade reaction of *o*-aminoacetophenone with methanamine: construction of dibenzo[*b*,*h*][1,6]naphthyridine derivatives

Dan Mao, Jun Tang, Wenbo Wang, Xin Liu, Shengying Wu, Jianjun Yu and Limin Wang*

A $Sc(OTf)_3$-catalyzed and air-mediated cascade reaction was discovered as an efficient approach to the novel fluorescent fused-four-ring dibenzo[*b*,*h*][1,6]naphthyridine derivatives.

2129



Metal-free C–H amination of unactivated hydrocarbons with sulfonylimino-λ^3-bromanes generated *in situ* from (diacetoxybromo)benzene

Kazunori Miyamoto,* Taiga Ota, Md. Mahbubul Hoque and Masahito Ochiai

A simple method for direct metal-free C–H amination of unactivated hydrocarbons using easy-handling diacetoxy-λ^3-bromane and triflylamide or sulfamate esters was developed.

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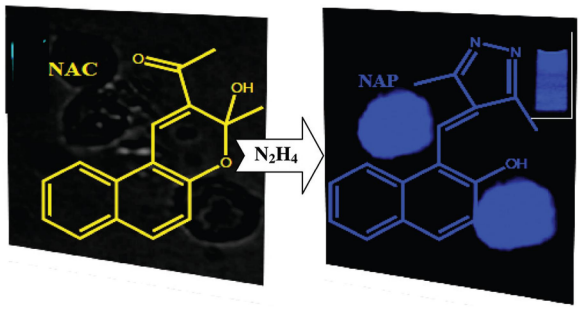

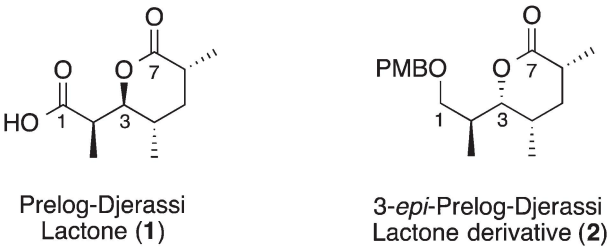

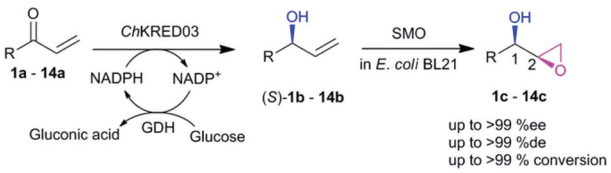

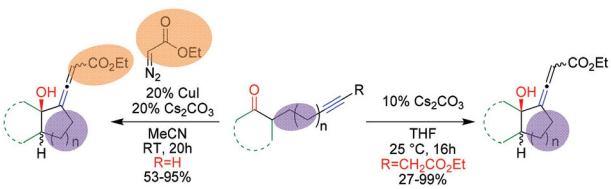

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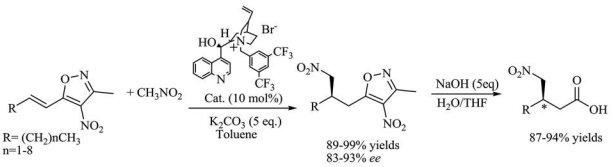

CORRECTION