Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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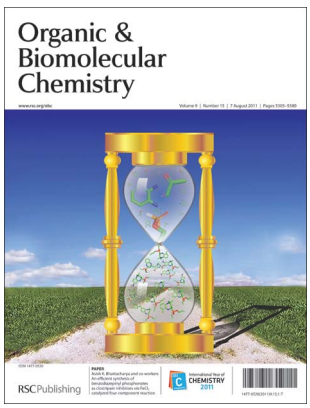
IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 9(15) 5305–5580 (2011)



Cover

See Asish K. Bhattacharya and co-workers, pp. 5407–5413.

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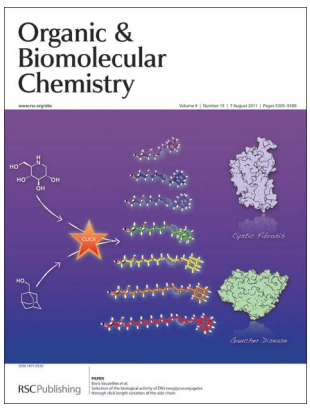
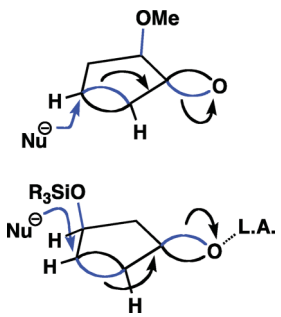


Inside cover

See Boris Vauzeilles *et al.*, pp. 5373–5388.
Click-chemistry allows easy modulation of the biological activity of deoxynojirimycin-derived neoglycoconjugates (protein structures are from the pdb; F508del-CFTR, 1xmj, and glucocerebrosidase, 2v3f).

Image reproduced by permission of Boris Vauzeilles from *Org. Biomol. Chem.*, 2011, **9**, 5373.

PERSPECTIVE



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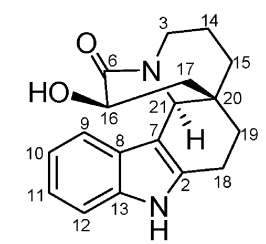
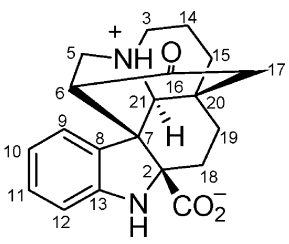


Kopsihainanine A (**1**)



Kopsihainanine B (**2**)

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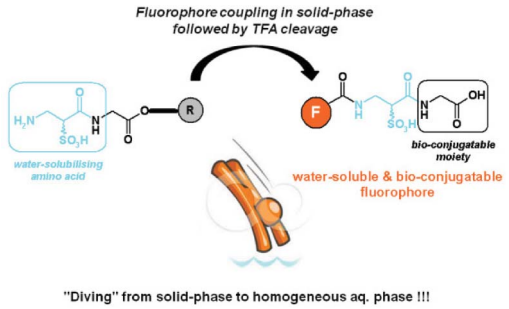

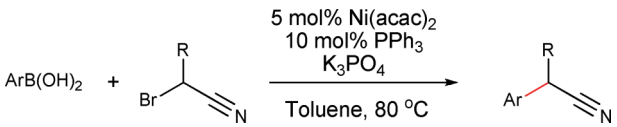

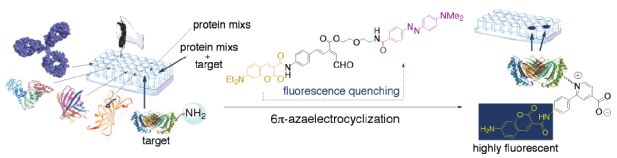

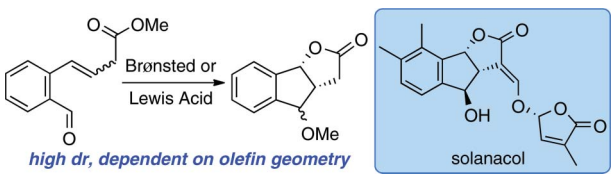

29 Jan – 2 Feb, 2012, Dunedin, New Zealand

OTAGO 2012 ISMSC-7

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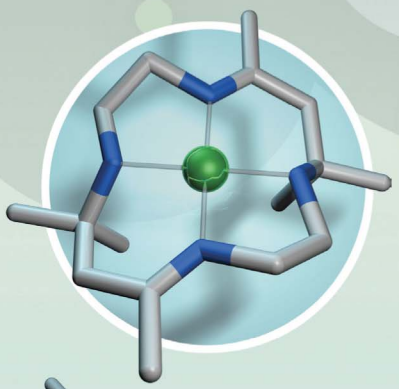
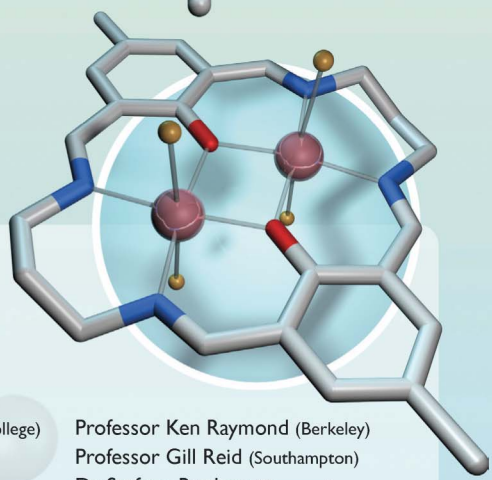
It is with great pleasure that we extend an invitation to you to join us at the University of Otago in Dunedin, in our summer, for the **2012 International Symposium on Macrocyclic and Supramolecular Chemistry, 29 January – 2 February 2012.**





Dunedin and Otago Peninsula are renowned for their beauty. Dunedin is also a gateway to the beautiful scenery of Central Otago, the Catlins and Stewart Island.

Majestic Victorian and Edwardian architecture, a proximity to an abundance of wildlife and a healthy youth culture will make for an exciting and fascinating visit.

We have an impressive list of invited speakers lined up and are confident that attendees will find their trip to the far south, "downunder", both valuable and rewarding.

We promise you a lively and invigorating scientific programme – so why not come and join us!
– Professors Sally Brooker & Keith Gordon

Confirmed plenary public lecture:

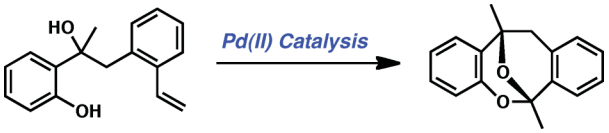
Professor Sir Fraser Stoddart (Northwestern)

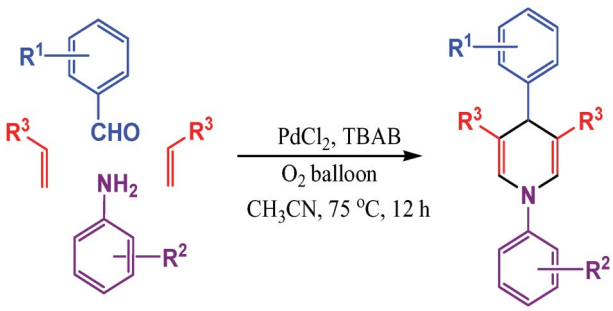
Confirmed invited keynote speakers to date:

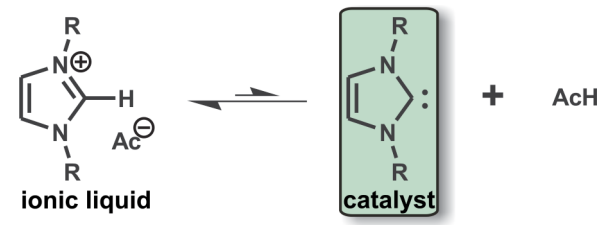
Professor Paul Beer (Oxford)
Professor Terry Collins (Carnegie Mellon)
Professor Tony Davis (Bristol)
Professor Luisa de Cola (Munster)
Professor Sylvia Draper (Trinity Dublin)
Professor Kim Dunbar (Texas A&M)
Professor Makoto Fujita (Tokyo)
Professor Phil Gale (Southampton)
Professor Juan Granja (Santiago de Compostela)
Professor Thorri Gunnlaugsson (Trinity College)
Professor Mir Wais Hosseini (Strasbourg)
Professor Christopher Hunter (Sheffield)
Professor Cameron Kepert (Sydney)
Professor Bert Kersting (Leipzig)
Professor Mark MacLachlan (UBC)
Professor Christine McKenzie (Southern Denmark)
Dr Jonathan Nitschke (Cambridge)
Professor Annie Powell (Karlsruhe)
Professor Ken Raymond (Berkeley)
Professor Gill Reid (Southampton)
Dr. Stefano Roelens (Florence)
Professor Alan Rowan (Nijmegen)
Professor Jonathan Sessler (Texas)
Professor Hanadi Sleiman (McGill)
Professor Jonathan Steed (Durham)
Professor Michael Ward (Sheffield)
Professor Vivian Yam (Hong Kong)

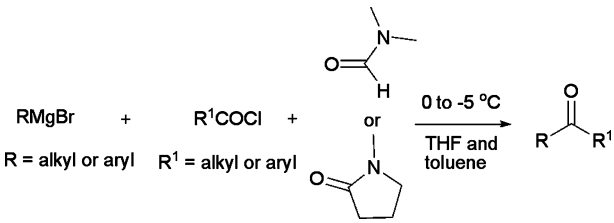
N.B. The list of confirmed invited keynote lecturers will be updated periodically so please keep an eye on the conference website.

For further information and to register your interest please go to our conference website: **www.otago.ac.nz/ismsc2012**









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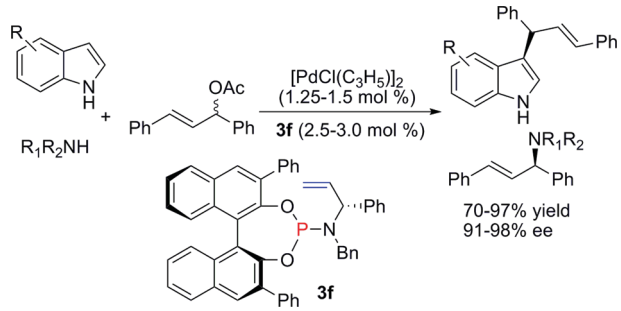


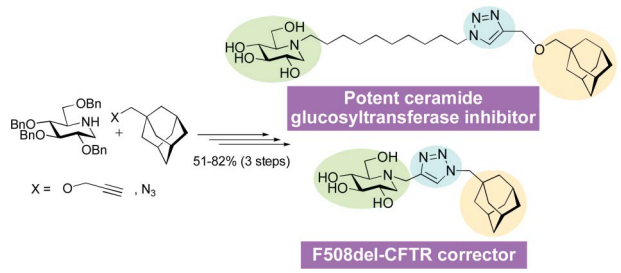
Highly effective chiral phosphorus amidite–olefin ligands for palladium-catalyzed asymmetric allylic substitutions

Zhaoqun Liu, Ziping Cao and Haifeng Du*

Novel P–olefin hybrid ligands have been successfully developed for palladium-catalyzed asymmetric allylic alkylations to furnish high yields with excellent ee's.

PAPERS

5373

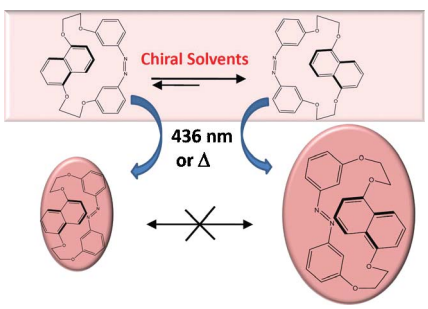


Selection of the biological activity of DNJ neoglycoconjugates through click length variation of the side chain

N. Ardes-Guisot, D. S. Alonzi, G. Reinkensmeier, T. D. Butters, C. Norez, F. Becq, Y. Shimada, S. Nakagawa, A. Kato, Y. Blériot,* M. Sollogoub and B. Vauzeilles*

Click connection between functionalised deoxynojirimycins and adamantanes allows easy tuning of the biological activity profile of the resulting neoglycoconjugates.

5389

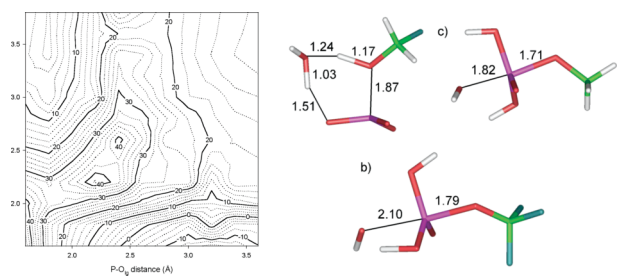


Chirality transfer from chiral solvents and its memory in an azobenzene derivative exhibiting photo-switchable racemization

Reji Thomas and Nobuyuki Tamaoki*

Chirality is transferred from a chiral solvent and memorized as a well defined planar chirality of the single small molecule.

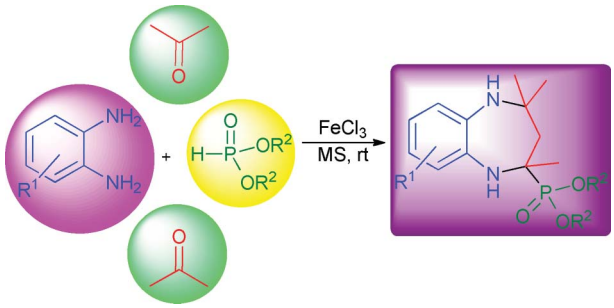
5394

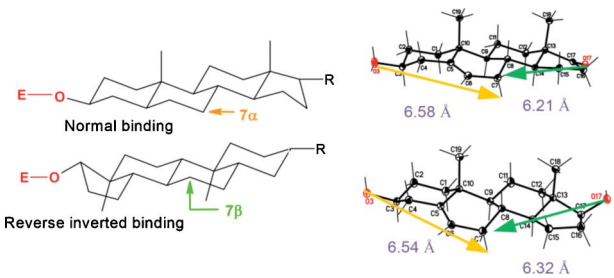


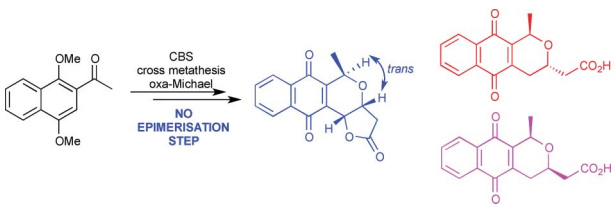
The effect of leaving group on mechanistic preference in phosphate monoester hydrolysis

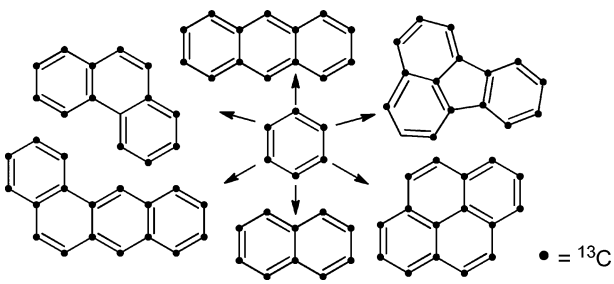
Shina C. L. Kamerlin and John Wilkie*

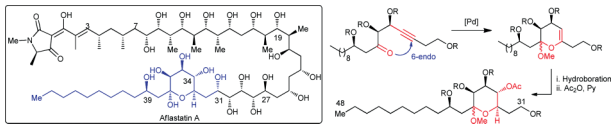
Increasing leaving group stability in phosphate monoester hydrolysis leads to progressive favouring of a dissociative ($D_N + A_N$) mechanism in small model systems, while for the most stable leaving group, the associative mechanism switches from a step-wise ($A_N + D_N$) mechanism to a concerted (A_ND_N) mechanism.

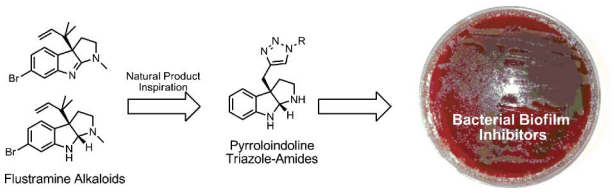


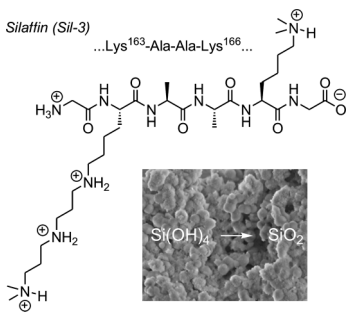


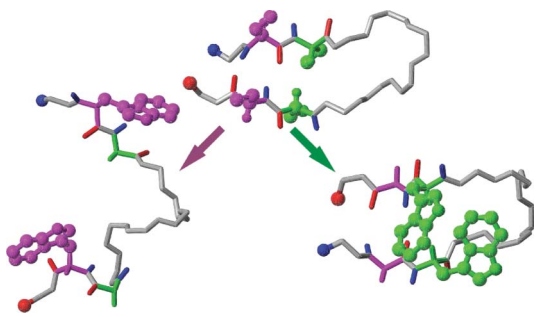












1st PACN Congress on Agricultural Productivity

How the chemical sciences can help to feed the world

21 – 23 November 2011

Accra International Convention Centre, Accra, Ghana

The Royal Society of Chemistry (RSC) is joining together with Syngenta to host the first Pan Africa Chemistry Network (PACN) Congress on Agricultural Productivity. This innovative conference will bring leading scientists together to discuss current research and ideas in the agricultural sciences - helping to feed the world!

Themes

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- Crop Protection
- Plant Nutrition
- Soil and Ecosystems
- Innovation in Agricultural Practices
- Adaptation to Climate Change

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19 September 2011

Bursary application deadline:
19 September 2011

Registration deadline:
17 October 2011

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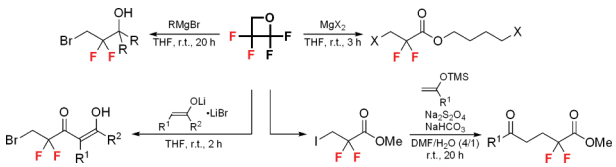
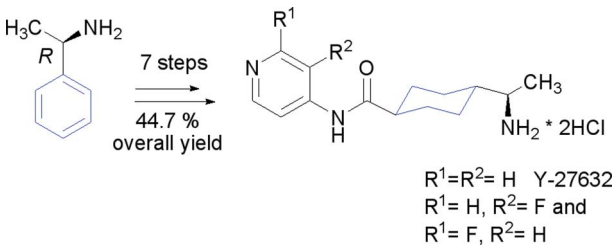
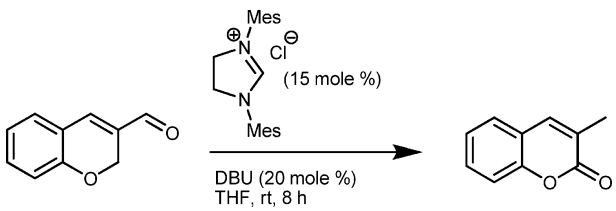
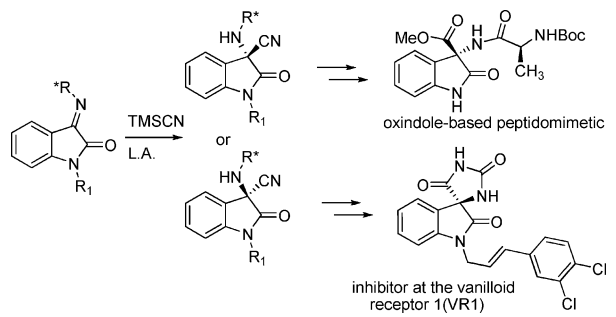
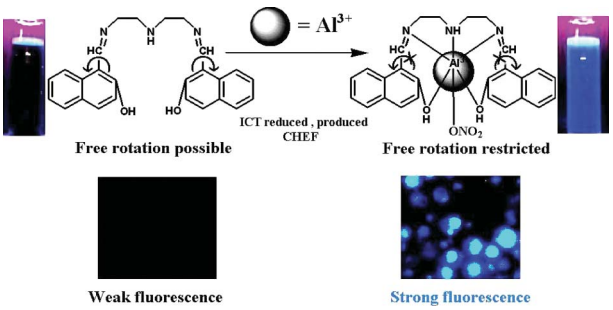






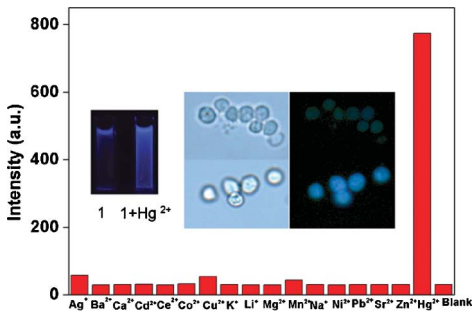




A naphthalene-based Al^{3+} selective fluorescent sensor for living cell imaging

Animesh Sahana, Arnab Banerjee, Sudipta Das, Sisir Lohar, Debasis Karak, Bidisha Sarkar, Subhra Kanti Mukhopadhyay, Asok K. Mukherjee* and Debasis Das*

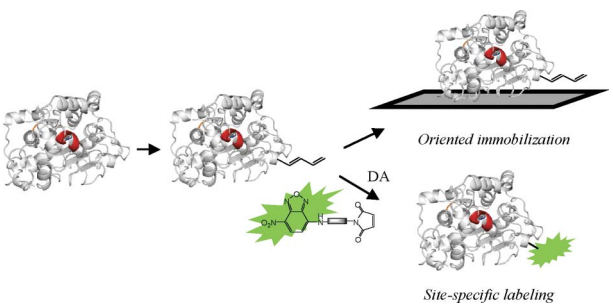
An efficient Al^{3+} selective naphthalene-based fluorescent probe (**L**) capable of imaging intracellular Al^{3+} in living cells at physiological pH range (7–7.6) is reported.



Naphthylthiourea-modified permethylcyclodextrin as a highly sensitive and selective "turn-on" fluorescent chemosensor for Hg^{2+} in water and living cells

Yong Chen, Zhan-Hu Sun, Bao-E Song and Yu Liu*

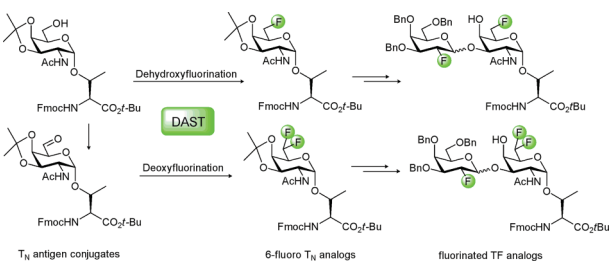
A naphthylthiourea-modified cyclodextrin showed highly sensitive and selective fluorescence sensing to Hg^{2+} in both water and living cells.



trans,*trans*-2,4-Hexadiene incorporation on enzymes for site-specific immobilization and fluorescent labeling

Marco Filice, Oscar Romero, Jose M. Guisan and Jose M. Palomo*

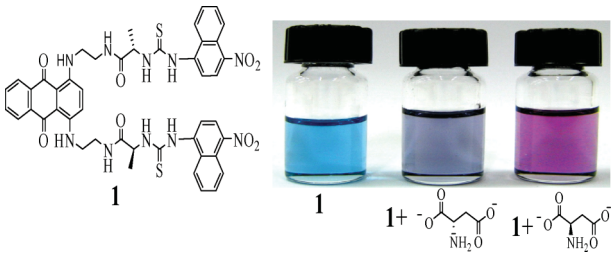
Chemical incorporation of a hexadiene moiety on an enzyme molecule permitted protein immobilization and site-specific labeling with NBD fluorophore by Diels–Alder reaction.

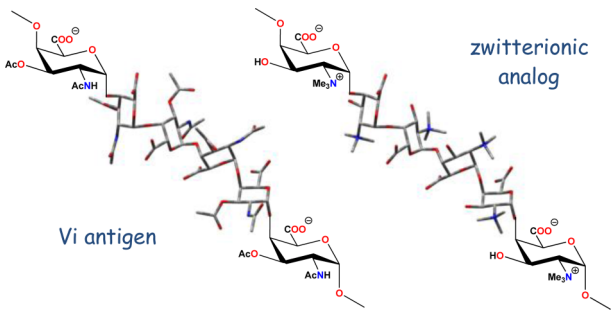


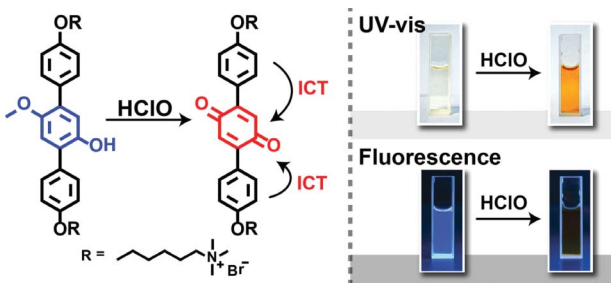
Synthesis of fluorinated Thomsen–Friedenreich antigens: direct deoxyfluorination of αGalNAc-threonine *tert*-butyl esters

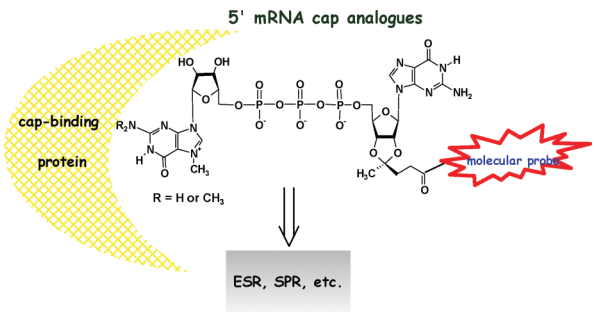
Manuel Johannes, Thomas Oberbillig and Anja Hoffmann-Röder*

Selectively fluorinated analogs of the tumor-associated T_N and Thomsen–Friedenreich antigens can be efficiently prepared *via* direct DAST-mediated de(hydr)oxyfluorination of orthogonally protected Fmoc-Thr(αGalNAc)-O*t*Bu building blocks.









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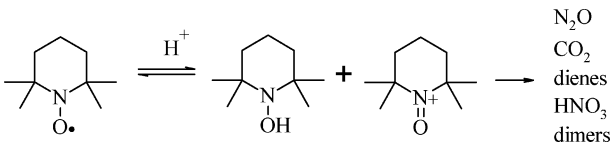

Thermal decay of TEMPO in acidic media *via* an *N*-oxoammonium salt intermediate

Yun Ma, Colin Loyns, Peter Price and Victor Chechik*

Thermal decay of TEMPO in acids proceeds *via* an *N*-oxoammonium salt intermediate. The main product (*ca.* 80%) is the corresponding hydroxylamine.

