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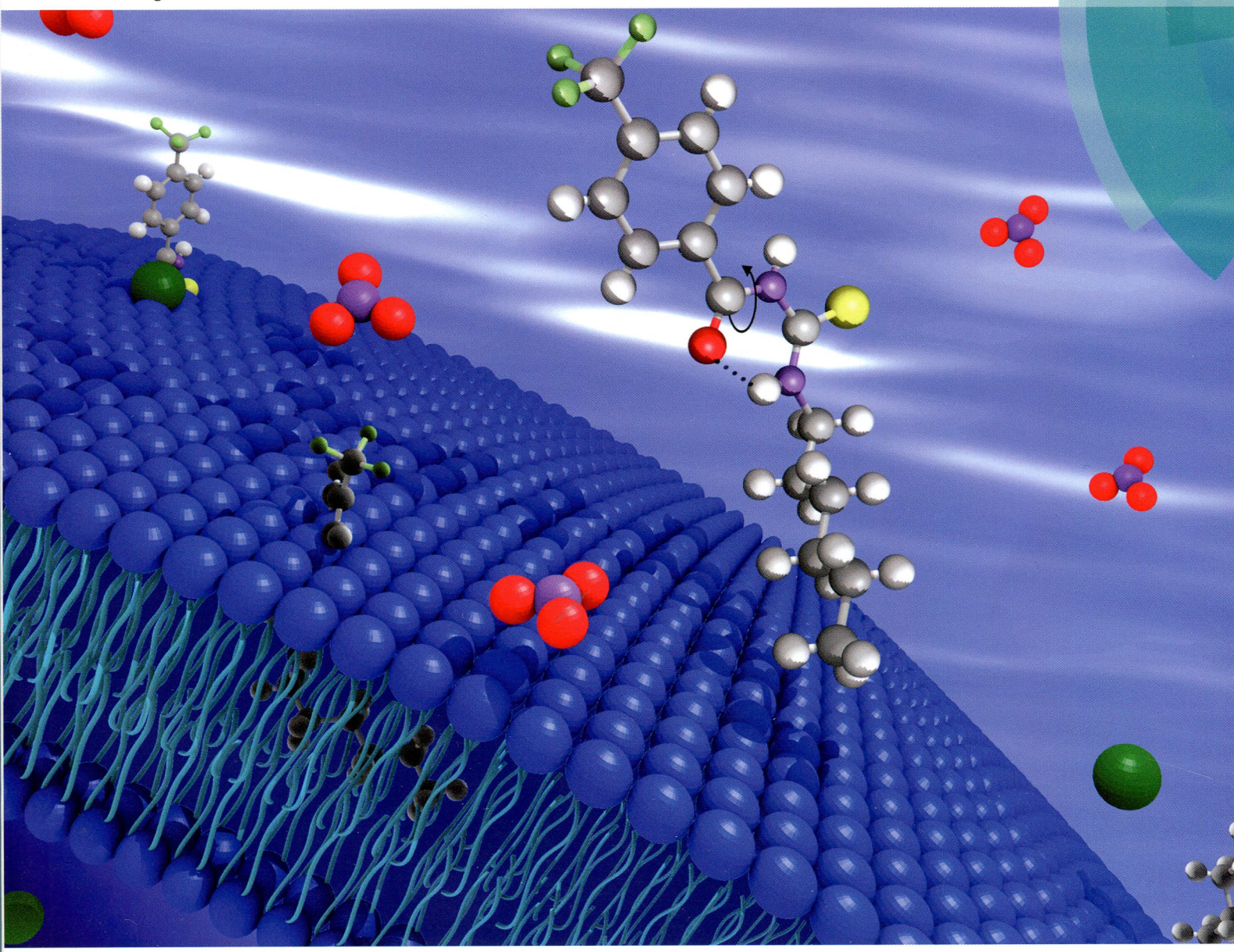

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PAPER
Philip A. Gale *et al.*
Acylthioureas as anion transporters: the effect of intramolecular hydrogen bonding

Organic & Biomolecular Chemistry

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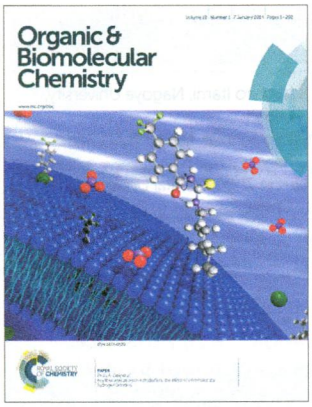

Cover
See Philip A. Gale *et al.*, pp. 62–72.

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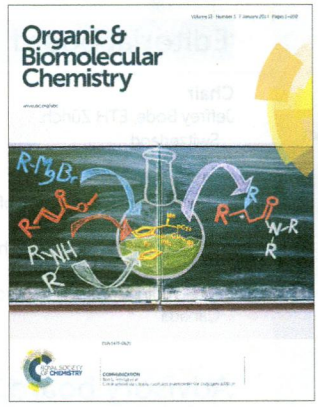

Inside cover
See Ben L. Feringa *et al.*, pp. 36–41.

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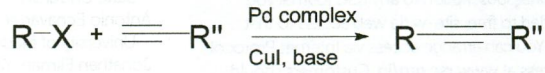
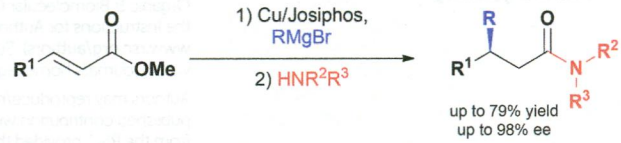
REVIEW



COMMUNICATIONS



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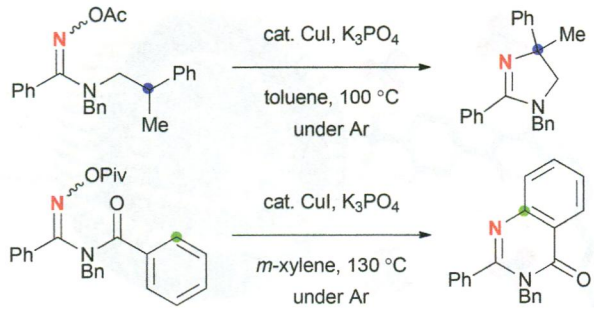
Copper-catalyzed redox-neutral C–H amination with amidoximes

Hui Chen and Shunsuke Chiba*

CuI-catalyzed reactions of *N*-alkylamidoximes afforded dihydroimidazoles *via* sp^3 C–H amination. On the other hand, the reactions of *N*-benzoylamidoximes resulted in sp^2 C–H amination to form quinazolinones. The reaction mechanisms could be characterized as a redox-neutral radical pathway including a Cu(I)–Cu(II) redox catalytic cycle.



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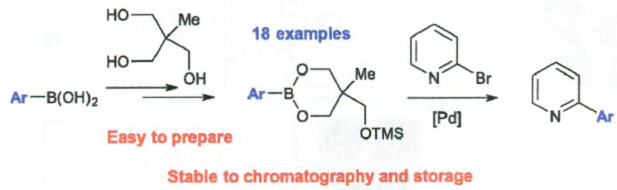
Silyl-protected dioxaborinanes: application in the Suzuki cross-coupling reaction

Sean Goggins, Eleanor Rosevere, Clément Bellini, Joseph C. Allen, Barrie J. Marsh, Mary F. Mahon and Christopher G. Frost*

The synthesis of a range of novel silyl-protected dioxaborinanes as a column- and bench-stable boron reagent were found to be advantageous to achieving good yields of 2-arylpyridines *via* palladium-catalysed cross-coupling reactions.



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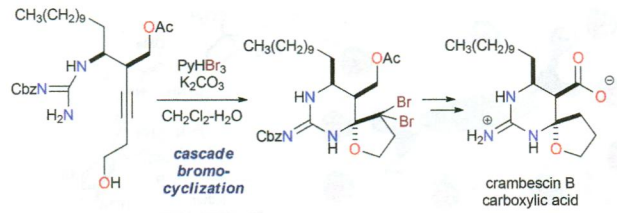
Synthesis of crambescin B carboxylic acid, a potent inhibitor of voltage-gated sodium channels

Atsuo Nakazaki, Yuki Ishikawa, Yusuke Sawayama, Mari Yotsu-Yamashita and Toshio Nishikawa*

Stereocontrolled cascade cyclization of a guanidino-acetylene with bromocations provided crambescin B carboxylic acid, which exhibited a potent inhibitory activity of voltage-gated sodium channels.



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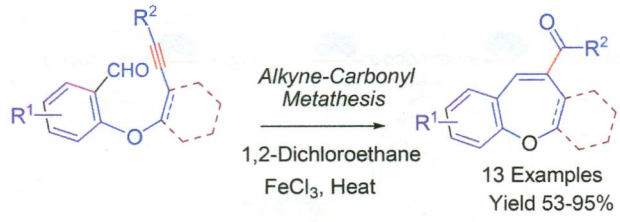
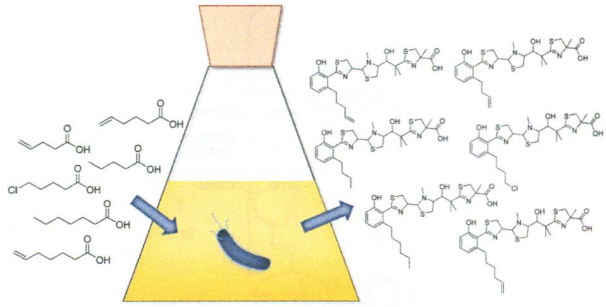
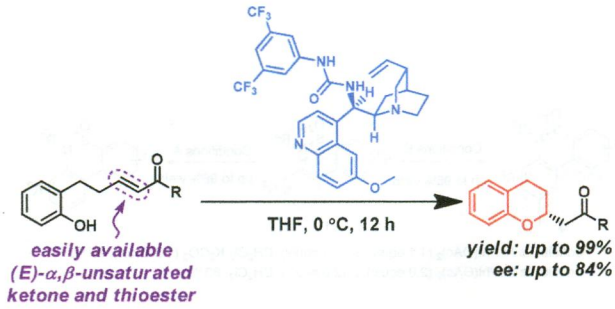
$FeCl_3$-catalyzed synthesis of functionally diverse dibenzo[*b*,*f*]oxepines and benzo[*b*]oxepines *via* alkyne–aldehyde metathesis

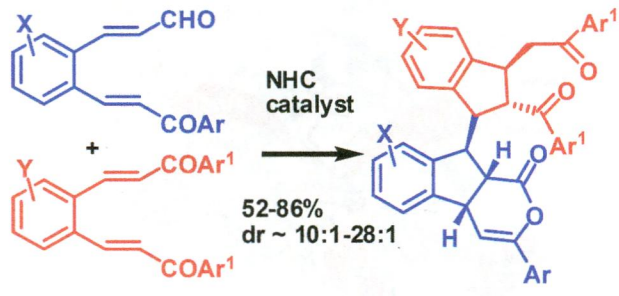
Krishnendu Bera, Swapnadeep Jalal, Soumen Sarkar and Umasish Jana*

An efficient synthesis of dibenzo[*b*,*f*]oxepines and benzo[*b*]-oxepines *via* $FeCl_3$-catalyzed alkyne–aldehyde metathesis reaction is described.









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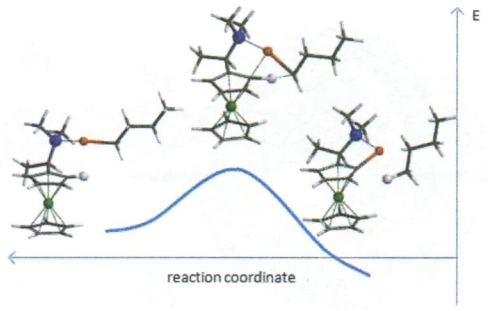

Computational study of diastereoselective *ortho*-lithiations of chiral ferrocenes

Andrea Škvorcová and Radovan Šebesta*

DFT calculations provide an explanation of the governing effects of diastereoselective *ortho*-lithiations of chiral ferrocenes.

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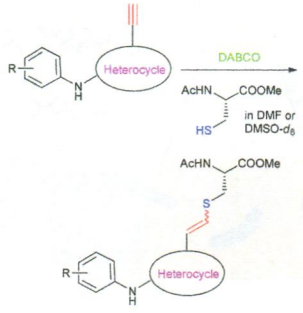

Model system for irreversible inhibition of Nek2: thiol addition to ethynylpurines and related substituted heterocycles

H. Lebraud, C. R. Coxon, V. S. Archard, C. M. Bawn, B. Carbain, C. J. Matheson, D. M. Turner, C. Cano, R. J. Griffin, I. R. Hardcastle, U. Baisch, R. W. Harrington and B. T. Golding*

Model studies reveal a 50-fold rate variation for the capture of the ethynyl group in a series of ethynyl-heterocycles by *N*-acetylcysteine methyl ester catalysed by 1,4-diazabicyclo[2.2.2] octane in dimethyl sulfoxide.

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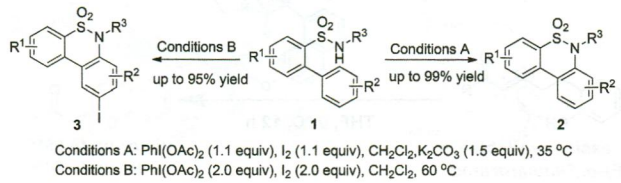

Synthesis of benzosultams *via* an intramolecular sp^2 C–H bond amination reaction of *o*-arylbenzenesulfonamides under metal-free conditions

Yuewen Li, Qiuping Ding,* Guanyinsheng Qiu and Jie Wu*

A practical synthetic method for the generation of benzosultams *via* an intramolecular sp^2 C–H bond amination reaction of *o*-arylbenzenesulfonamides with PhI(OAc)$_2$–I_2 under metal-free conditions is developed.

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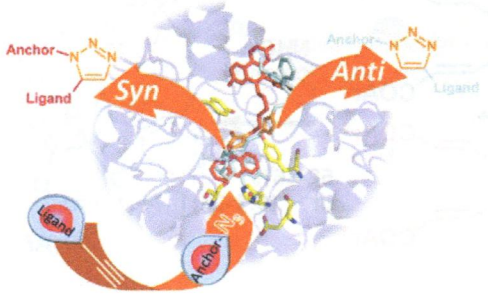

Reaction site-driven regioselective synthesis of AChE inhibitors

Emilia Oueis, Gianluca Santoni, Cyril Ronco, Olga Syzgantseva, Vincent Tognetti, Laurent Joubert, Anthony Romieu, Martin Weik, Ludovic Jean,* Cyrille Sabot,* Florian Nachon and Pierre-Yves Renard*

The use of the human acetylcholinesterase as a target enzyme is reported for the first time for the regioselective synthesis of potent heterodimeric huprine-based inhibitors.