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Organic & Biomolecular Chemistry

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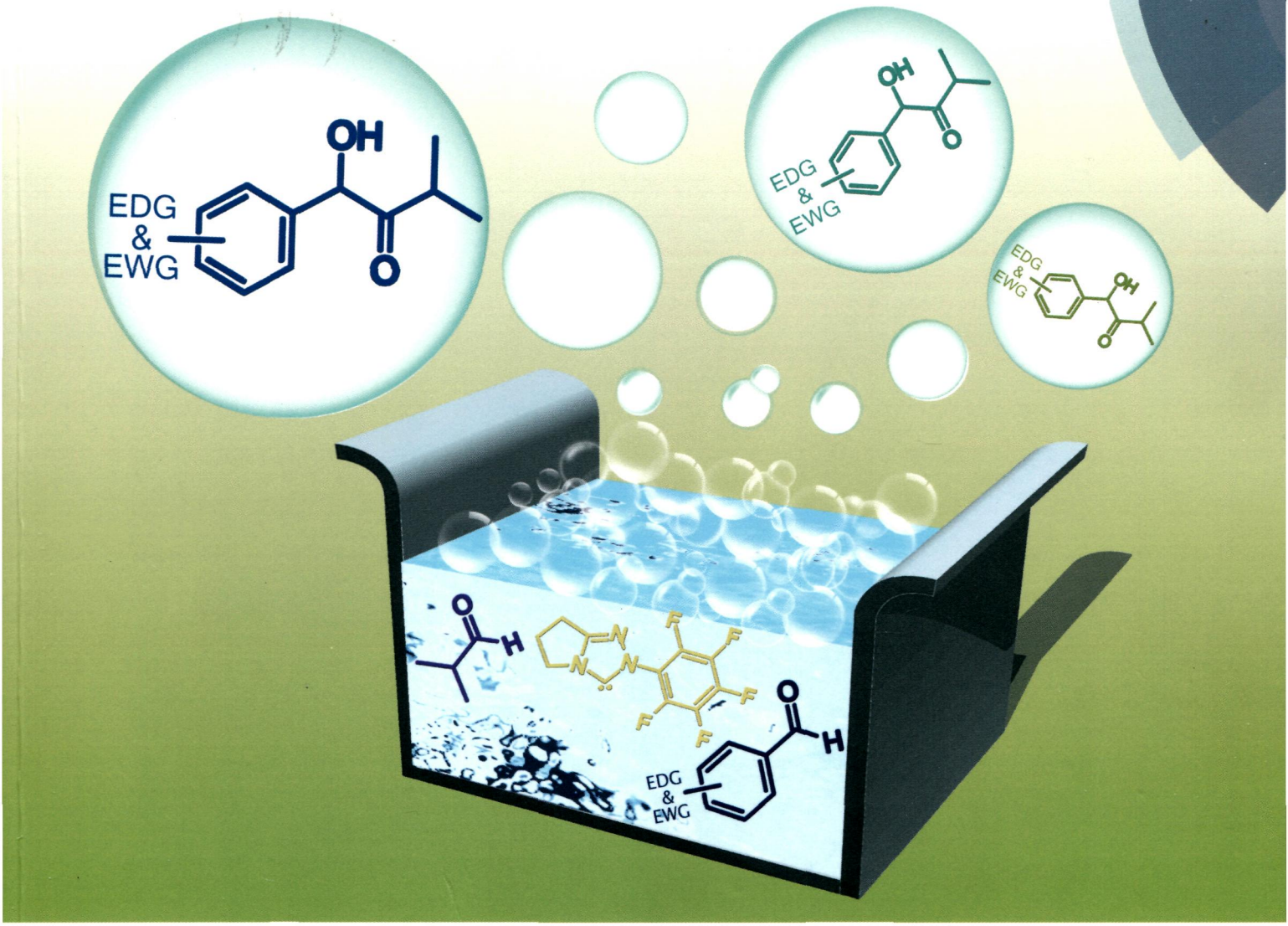

ISSN 1477-0520

ROYAL SOCIETY OF CHEMISTRY

COMMUNICATION

Jung Woon Yang *et al.*

Chemoselective and repetitive intermolecular cross-acyloin condensation reactions between a variety of aromatic and aliphatic aldehydes using a robust N-heterocyclic carbene catalyst

Organic & Biomolecular Chemistry

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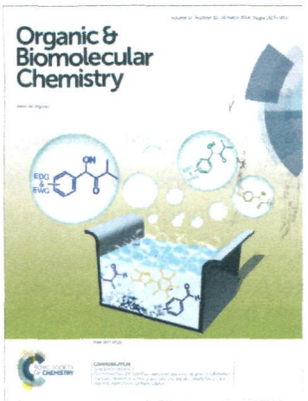

Cover

See Jung Woon Yang *et al.*, pp. 1547–1550.

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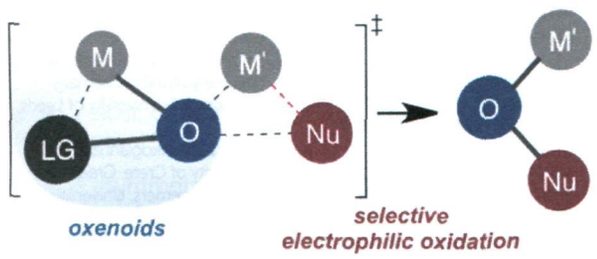
REVIEW

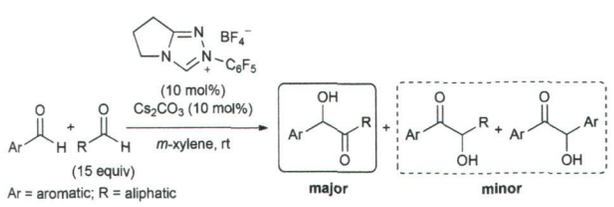


Oxenoids in organic synthesis

Yury Minko and Ilan Marek*

Recent advances on the use of oxenoid compounds in organic synthesis are highlighted in this review.

COMMUNICATIONS



Chemoselective and repetitive intermolecular cross-acyloin condensation reactions between a variety of aromatic and aliphatic aldehydes using a robust N-heterocyclic carbene catalyst

Ming Yu Jin, Sun Min Kim, Hui Mao, Do Hyun Ryu, Choong Eui Song and Jung Woon Yang*

Chemoselectivity of the crossed acyloin product is controlled by the adjustment of the aromatic aldehyde/aliphatic aldehyde ratio.

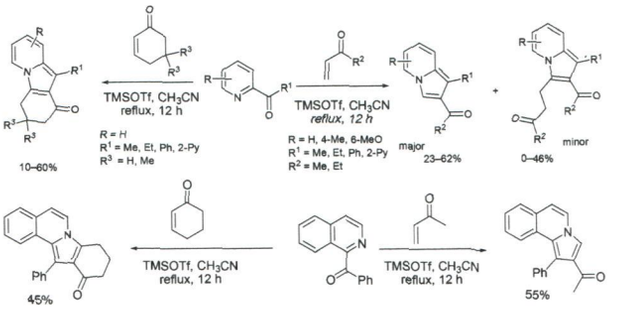
COMMUNICATIONS

1551

Ketones as electrophiles in two component Baylis–Hillman reaction: a facile one-pot synthesis of substituted indolizines

Deevi Basavaiah,* Gorre Veeraraghavaiah and Satpal Singh Badsara

2-Alkanoyl(aroyl)-pyridines were used for coupling with alkyl vinyl ketones under the influence of TMSOTf providing a facile protocol for synthesis of substituted indolizines, demonstrating the application of ketones as electrophiles in a two component Baylis–Hillman reaction.

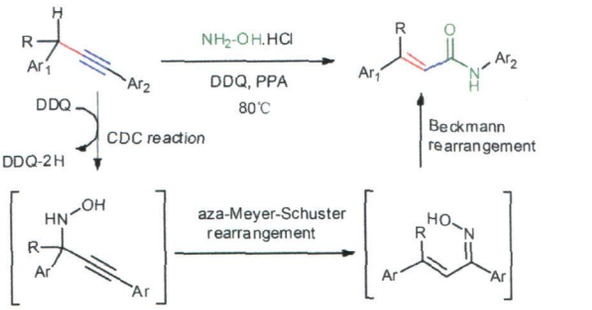


1556

Direct transformation of arylpropynes to acrylamides *via* a three-step tandem reaction

Jun Qiu and Ronghua Zhang*

A novel and metal-free acrylamides formation between arylpropynes and hydroxylamine hydrochloride through sp^3 C–H and C–C bond cleavage has been achieved with DDQ as an oxidant.



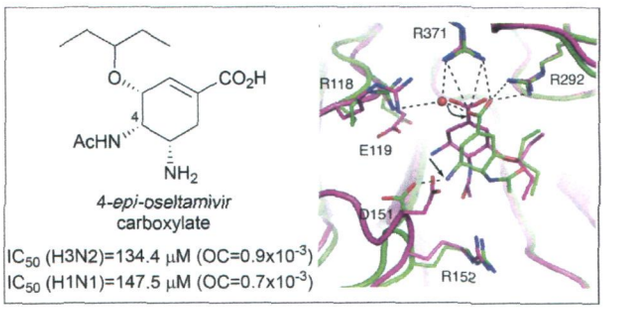
PAPERS

1561

Synthesis, structure and inhibitory activity of a stereoisomer of oseltamivir carboxylate

Andrea Sartori,* Luca Dell'Amico, Lucia Battistini, Claudio Curti, Silvia Rivara, Daniele Pala, Philip S. Kerry, Giorgio Pelosi, Giovanni Casiraghi, Gloria Rassu and Franca Zanardi*

A versatile asymmetric synthesis of the C-4 epimer of oseltamivir carboxylate (OC) is reported. A marked drop in inhibitory activity toward influenza virus neuraminidase was observed and rationalized.

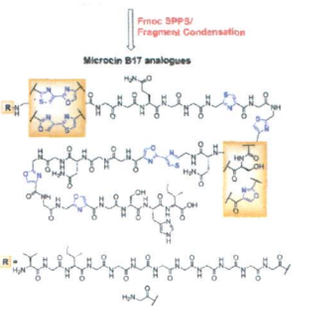


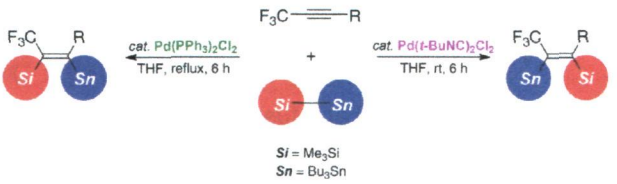
1570

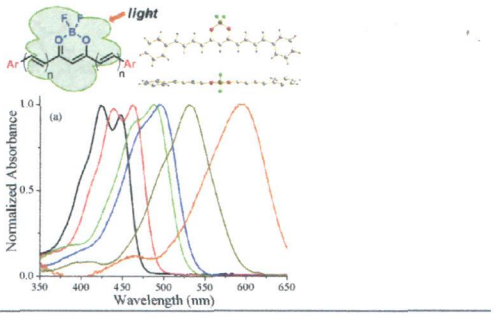
Synthesis of full length and truncated microcin B17 analogues as DNA gyrase poisons

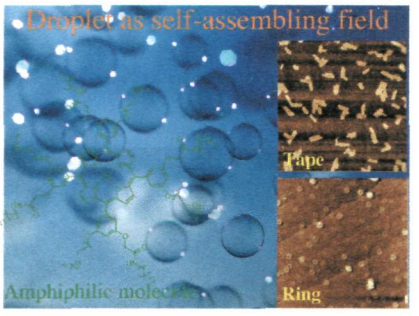
Robert E. Thompson, Frédéric Collin, Anthony Maxwell, Katrina A. Jolliffe* and Richard J. Payne*

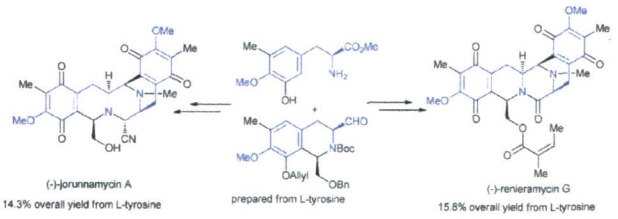
Using a combination of solid-phase peptide synthesis and fragment assembly strategies a library of full-length and truncated analogues of the antibacterial post-translationally modified peptide microcin B17 have been synthesised. Both antibacterial and DNA gyrase poisoning activities are also described for the synthetic analogues.











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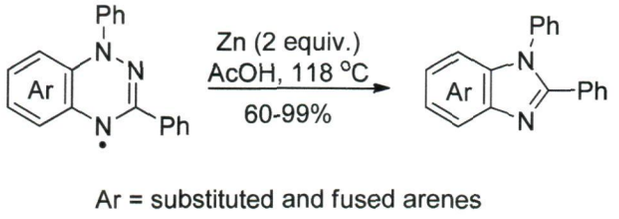
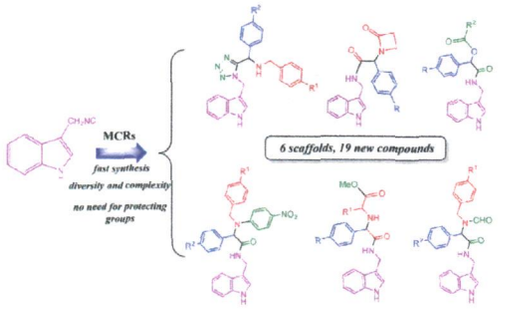


Ring contraction of 1,3-diphenylbenzo[1,2,4]-triazinyl radicals to 1,2-diphenylbenzimidazoles

Andrey A. Berezin and Panayiotis A. Koutentis*

Optimized conditions for the reductive ring contraction of benzotriazinyl radicals and related analogues afford benzimidazoles in near quantitative yields.

1649

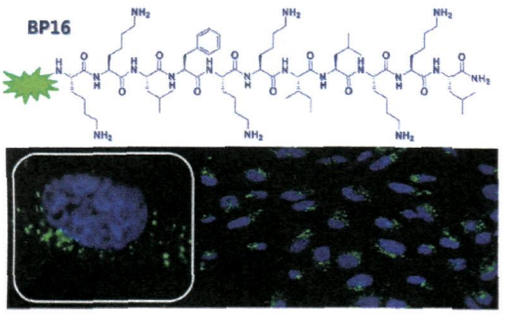


Towards a facile and convenient synthesis of highly functionalized indole derivatives based on multi-component reactions

Constantinos G. Neochoritis and Alexander Dömling*

A library of potentially bioactive compounds through the novel 1*H*-indole-methyl-isocyanide and MCRs has been described.

1652

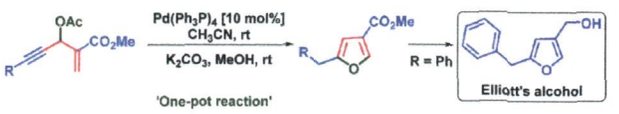


Identification of BP16 as a non-toxic cell-penetrating peptide with highly efficient drug delivery properties

Marta Soler, Marta González-Bártulos, *David Soriano-Castell*, *Xavi Ribas*, *Miquel Costas*, Francesc Tebar, Anna Massaguer,* Lidia Feliu* and Marta Planas*

BP16 is a non-toxic cell-penetrating peptide with high cellular uptake *in vitro*. This peptide is an efficient vector for the delivery of therapeutic agents into cells, as has been shown for the anticancer drug chlorambucil.

1664



Synthesis of substituted 3-furanoates from MBH-acetates of acetylenic aldehydes *via* tandem isomerization–deacetylation–cycloisomerization: access to Elliott's alcohol

Chada Raji Reddy,* Gaddam Krishna and Motatipally Damoder Reddy

A new approach for the synthesis of 5-substituted 3-furoates from MBH-acetates of acetylenic aldehydes has been developed. This methodology provided an entry to Elliott's alcohol, a key subunit of resmethrin.