Organic & Biomolecular Chemistry

An international journal of synthetic, physical and biomolecular organic chemistry

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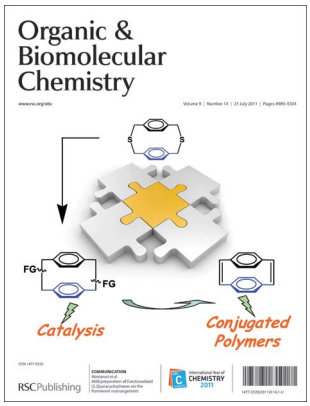
ISSN 1477-0520 CODEN OBCRAK 9(14) 4989–5304 (2011)



Cover

See Montanari *et al.*, pp. 5018–5020.

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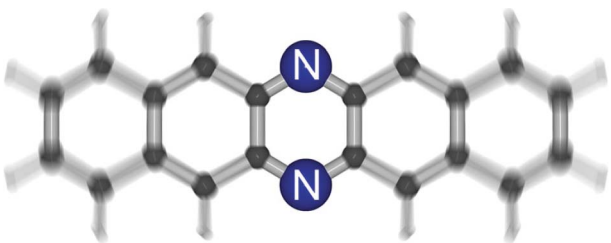
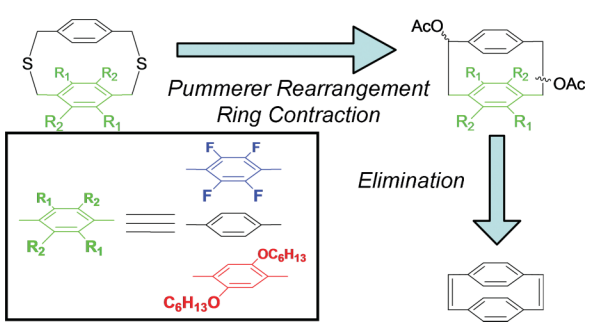
PERSPECTIVE



COMMUNICATIONS



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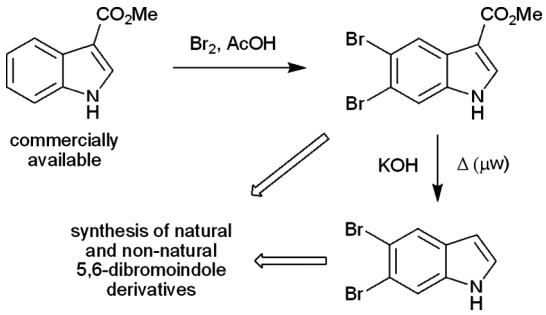
5021

Regioselective dibromination of methyl indole-3-carboxylate and application in the synthesis of 5,6-dibromoindoles

Thomas B. Parsons, Cédric Ghellamallah, Louise Male, Neil Spencer and Richard S. Grainger*

5,6-Dibromoindole derivatives are readily accessible through bromination of commercially available methyl indole-3-carboxylate and microwave-mediated ester hydrolysis and decarboxylation.

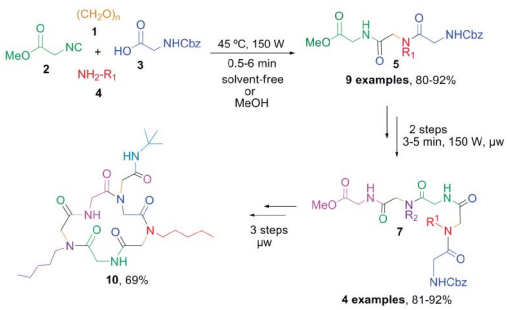


5024

Fast and efficient microwave-assisted synthesis of functionalized peptoids *via* Ugi reactions

Angélica de Fátima S. Barreto, Otilie E. Vercillo, Mike A. Birkett, John C. Caulfield, Ludger A. Wessjohann and Carlos Kleber Z. Andrade*

A wide range of functionalized *N*-alkylglycines (peptoids) can be efficiently prepared *via* Ugi reactions using microwave irradiations.

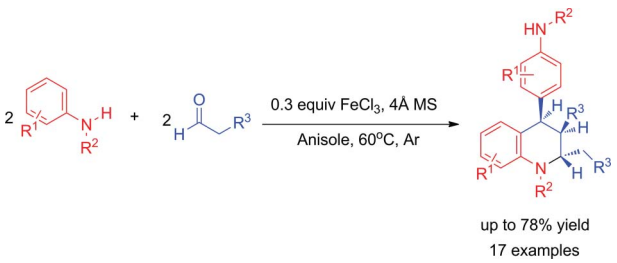


5028

$FeCl_3$-Mediated synthesis of polysubstituted tetrahydroquinolines *via* domino Mannich/Friedel–Crafts reactions of aldehydes and amines

Yan-Fang Yang, Xing-Zhong Shu, Hai-Long Wei, Jian-Yi Luo, Shaukat Ali, Xue-Yuan Liu and Yong-Min Liang*

A useful method to construct polysubstituted tetrahydroquinolines has been developed through an iron(III) chloride-mediated domino reactions of aliphatic aldehydes with aromatic amines.

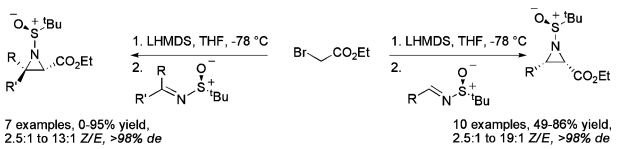


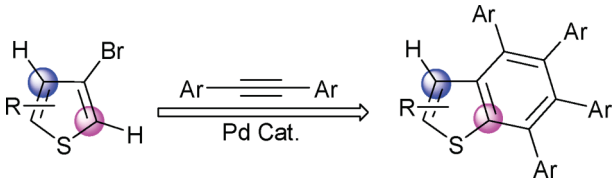
5034

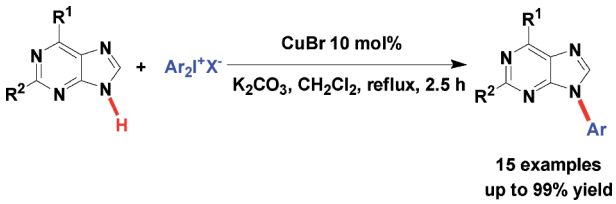
Stereoselective aza-Darzens reactions of *tert*-butanesulfinimines: convenient access to chiral aziridines

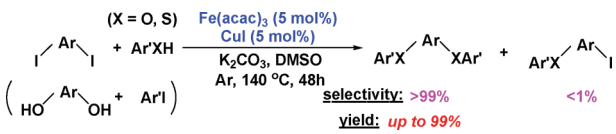
Toni Moragas Solá, Ian Churcher, William Lewis and Robert A. Stockman*

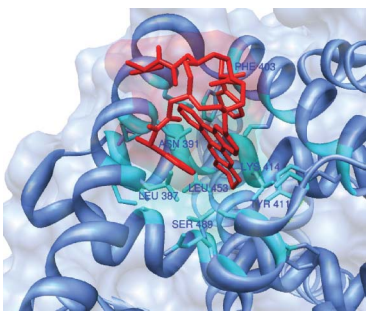
Stereoselective synthesis of 2,3-di- and 2,2′,3-tri-substituted aziridines in good yields and excellent diastereoselectivities are achieved through aza-Darzens reactions of a range of *tert*-butanesulfinyl aldimines and ketimines with ethyl bromoacetate.











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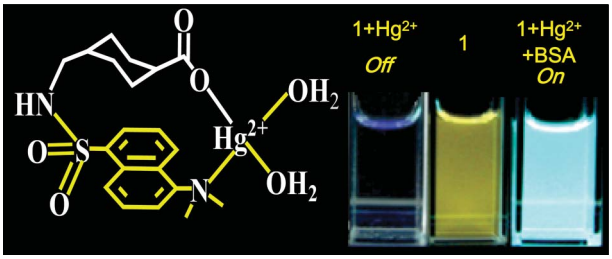
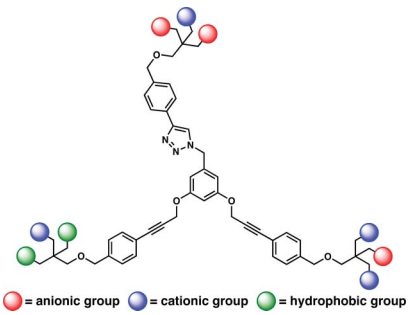


Protein assisted fluorescence enhancement of a dansyl containing fluorescent reagent: Detection of Hg^{+} ion in aqueous medium

Priyanka Srivastava, Mohammad Shahid and Arvind Misra*

Protein assisted fluorescence enhancement for detection of Hg^{2+} ion in aqueous medium.

5056

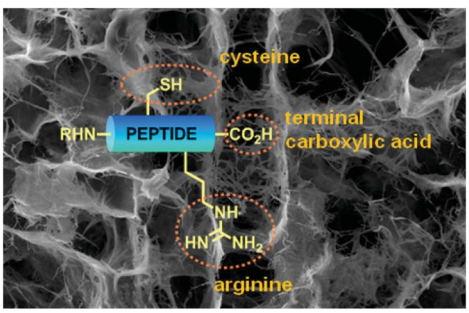


A programmable "build–couple" approach to the synthesis of heterofunctionalized polyvalent molecules

Ritwik Burai, Jaruwan Chatwichien and Brian R. McNaughton*

A modular and programmable synthesis of heterofunctionalized polyvalent molecules is described. A maximally divergent "build–couple" strategy was employed, wherein heterofunctionalized polyvalent modules are first synthesized, then selectively attached to a multi-podal core structure.

5059

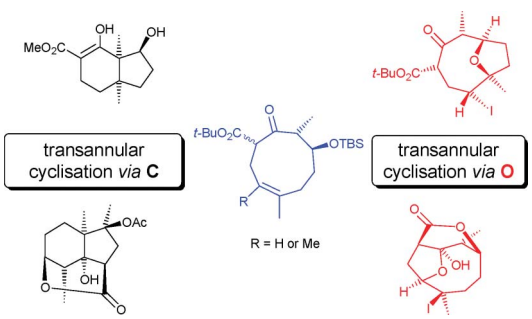


Designing neutral metallophilic hydrogels from di- and tripeptides

Ibon Odriozola,* Pablo Casuso, Iraida Loinaz, Germán Cabañero and Hans. J. Grande

How could we design a low molecular weight peptide to behave as a hydrogelator at neutral pH values?

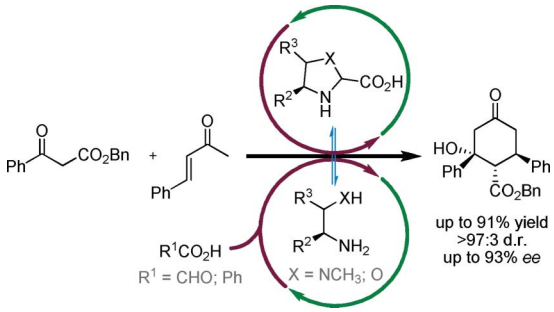
5062

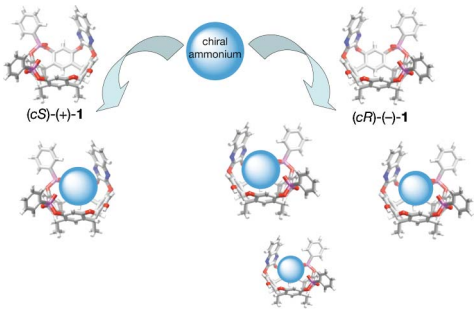


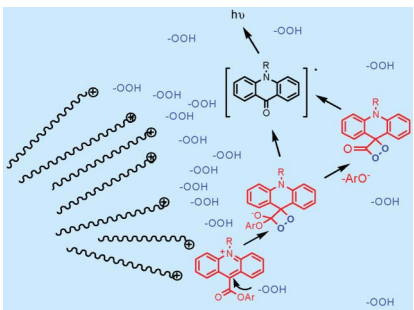
Studies on transannulation reactions across a nine-membered ring: the synthesis of natural product-like structures

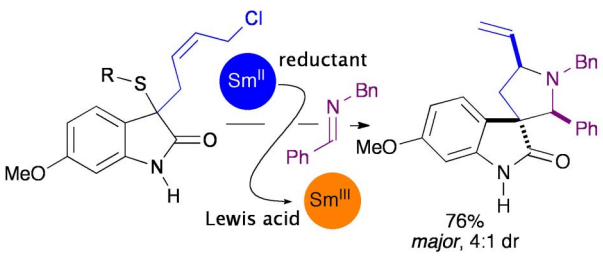
Mudassar Iqbal, Richard J. G. Black, Joby Winn, Andrew T. Reeder, Alexander J. Blake and Paul A. Clarke*

Novel transannulation reactions *via* oxygen or carbon generated the cores of hexacyclinic acid analogues, the pinguisane and austrodorane sesquiterpenoids respectively.









• *exploiting Sm(II) and Sm(III) in SmI_2–mediated cascades* •

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- Plant Nutrition
- Soil and Ecosystems
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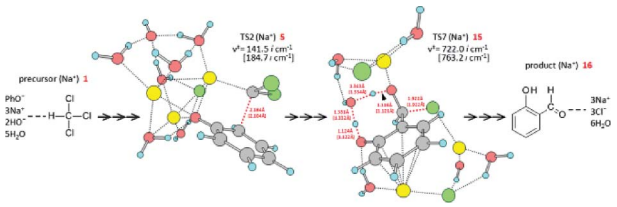

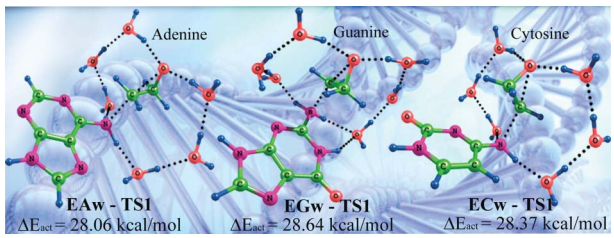

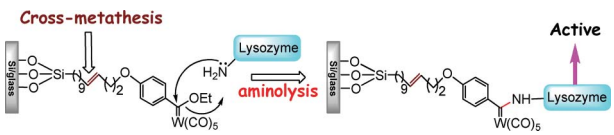

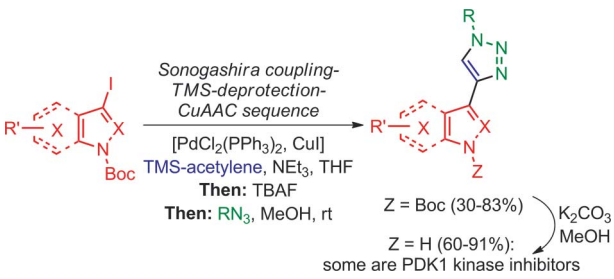

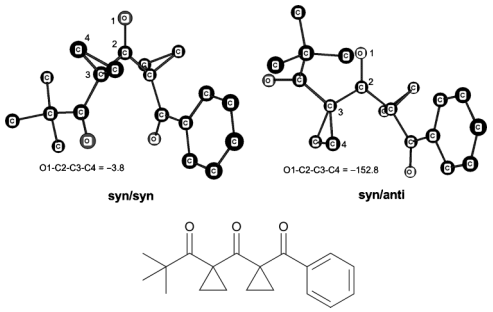

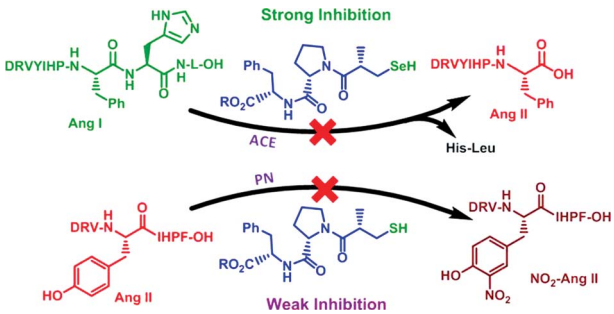

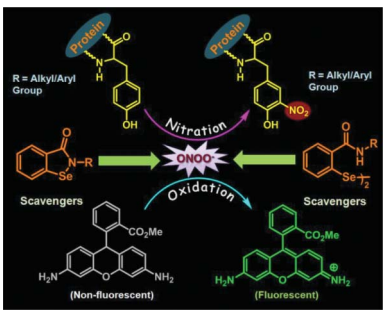

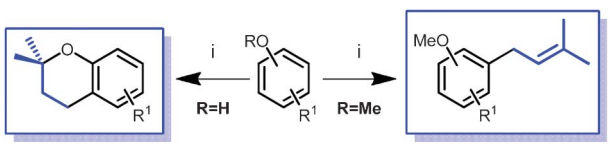

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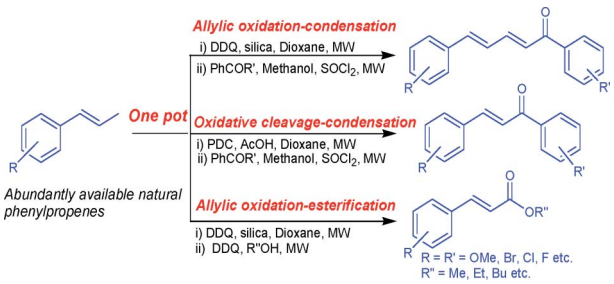
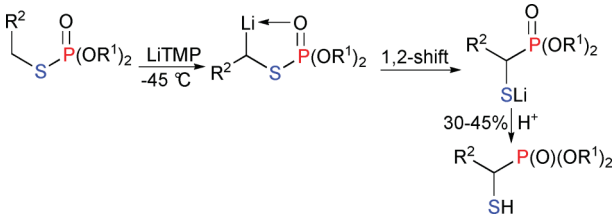


Tandem allylic oxidation–condensation/esterification catalyzed by silica gel: an expeditious approach towards antimalarial diaryldienones and enones from natural methoxylated phenylpropenes

Abhishek Sharma, Naina Sharma, Amit Shard, Rakesh Kumar, Dinesh Mohanakrishnan, Saima, Arun K. Sinha* and Dinkar Sahal

A new one-pot strategy affords the direct transformation of methoxylated phenylpropenes into diaryldienones and enones possessing promising antimalarial activity.

5220

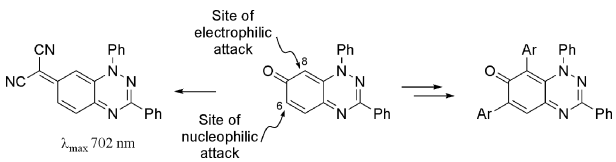


Rearrangement of lithiated *S*-alkyl *O*,*O*-dialkyl thiophosphates: Scope and stereochemistry of the thiophosphate–mercaptophosphonate rearrangement

Violeta Philippitsch and Friedrich Hammerschmidt*

LiTMP converts *S*-alkyl thiophosphates to microscopically configurationally stable α-thioalkyllithiums that rearrange to α-mercaptophosphonates with retention of configuration.

5228

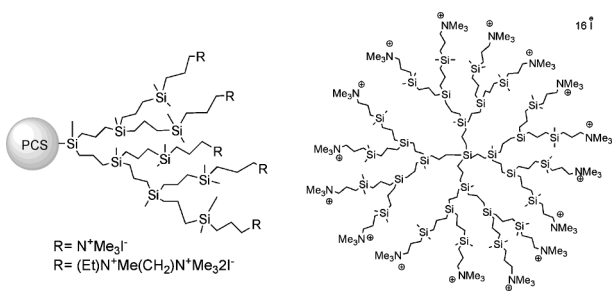


1,3-Diphenylbenzo[*e*][1,2,4]triazin-7(1*H*)-one: Selected Chemistry at the C-6, C-7 and C-8 Positions

Panayiotis A. Koutentis,* Harry Krassos and Daniele Lo Re

The chemistry of 1,3-diphenylbenzo[1,2,4]triazin-7(1*H*)-one is explored. Regioselective nucleophilic addition occurs at C-6 while electrophilic addition occurs at C-8.

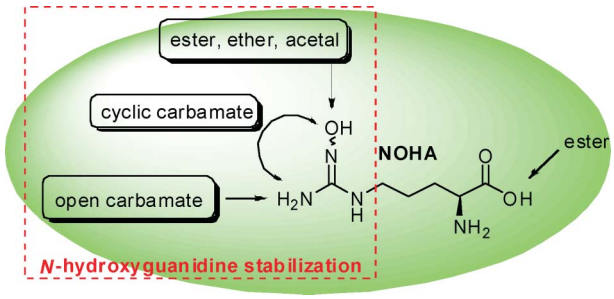
5238

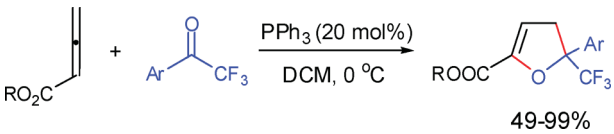


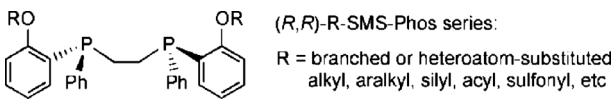
Hyperbranched polymers *versus* dendrimers containing a carbosilane framework and terminal ammonium groups as antimicrobial agents

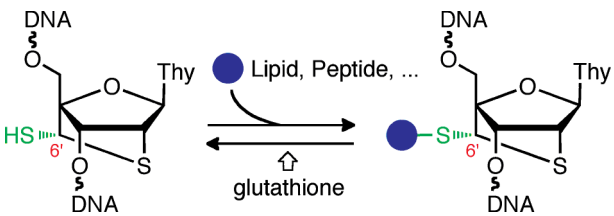
Paula Ortega, Beatriz Macarena Cobaleda, Jose Manuel Hernández-Ros, Elena Fuentes-Paniagua, Javier Sánchez-Nieves, Mª Pilar Tarazona, Jose Luis Copa-Patiño, Juan Soliveri, Fco. Javier de la Mata* and Rafael Gómez*

Ammonium-terminated-PCS *versus* analogous carbosilane dendrimers as antimicrobial agents.









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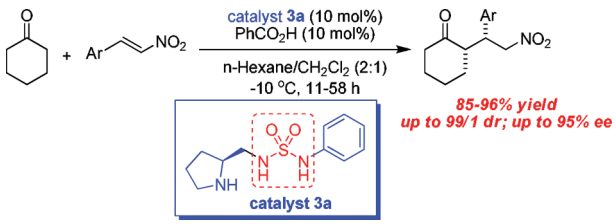
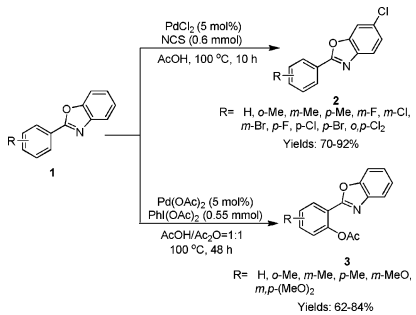


Pyrrolidinyl-sulfamide derivatives as a new class of bifunctional organocatalysts for direct asymmetric Michael addition of cyclohexanone to nitroalkenes

Jia-Rong Chen,* Liang Fu, You-Quan Zou, Ning-Jie Chang, Jian Rong and Wen-Jing Xiao*

A series of chiral pyrrolidinyl-sulfamide derivatives have been identified as efficient bifunctional organocatalysts for the direct Michael addition of cyclohexanone to a wide range of nitroalkenes. The desired Michael adducts were obtained in high chemical yields and excellent stereoselectivities (up to 99/1 dr and 95% ee).

5288

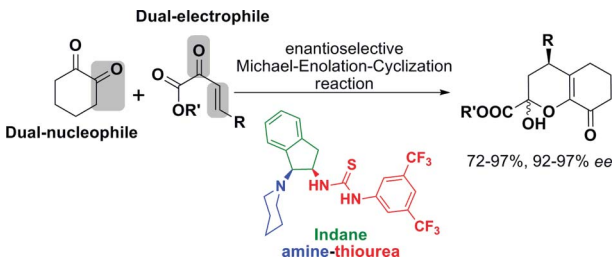


Chlorination and *ortho*-acetoxylation of 2-arylbenzoxazoles

Yuting Leng, Fan Yang,* Weiguo Zhu, Yangjie Wu* and Xiang Li

Efficient and facile protocols for palladium-catalyzed chlorination and *ortho*-acetoxylation of 2-arylbenzoxazoles have been developed. The chlorination is the classical aromatic electrophilic substitution, while the acetoxylation is the ligand-directed *ortho*-C–H bond activation process.

5297



Chiral indane skeleton based thiourea catalyzed highly stereoselective cascade Michael–enolation–cyclization reaction

Qiao Ren, Yaojun Gao and Jian Wang*

An efficient asymmetric reaction catalyzed by a chiral indane amine–thiourea catalyst is described. This process provides an efficient route to the enantioselective synthesis of dihydro-2*H*-pyran complexes.

