

# Organic & Biomolecular Chemistry

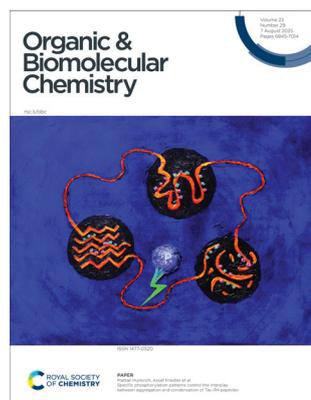
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

## IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 23(29) 6845-7014 (2025)



**Cover**  
See Mattan Hurevich,  
Assaf Friedler *et al.*,  
pp. 6912–6923.

Image reproduced by  
permission of Stefan Rüdiger  
from *Org. Biomol. Chem.*,  
2025, **23**, 6912.

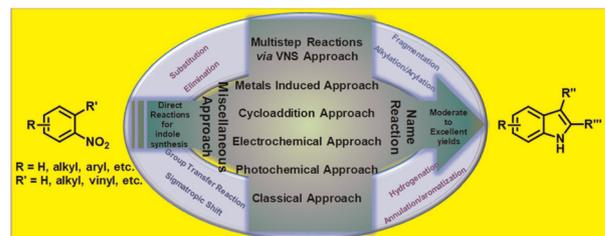
Artwork by Stefan Rüdiger,  
acrylic on canvas.

## REVIEW

6853

### A review on indole synthesis from nitroarenes: classical to modern approaches

Ajeet Chandra,\* Suresh C. Yadav, Subba Rao Cheekatla and Abhijeet Kumar

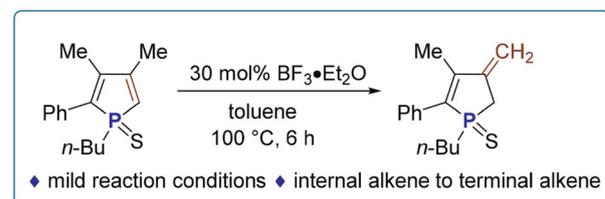


## COMMUNICATIONS

6888

### Access to 4-methylene-phospholenes through $\text{BF}_3 \cdot \text{Et}_2\text{O}$ catalyzed isomerization of 3,4-dimethylphosphole sulfides

Meng Xiao, Yingqiang Wang, Lihui Chen\* and Rongqiang Tian\*



# EES Catalysis

GOLD  
OPEN  
ACCESS

Exceptional research on energy  
and environmental catalysis

Open to everyone. Impactful for all

[rsc.li/EESCatalysis](https://rsc.li/EESCatalysis)

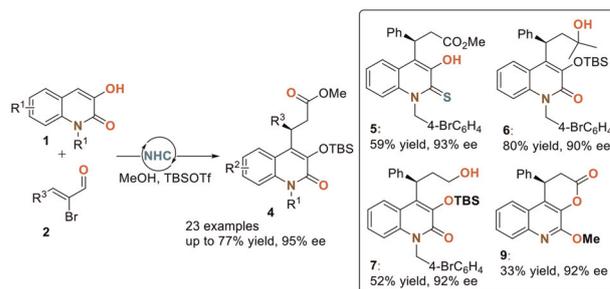
Fundamental questions  
Elemental answers

## COMMUNICATIONS

6892

**Asymmetric [3 + 3] annulation of 3-hydroxyquinolin-2-ones via NHC organocatalysis**

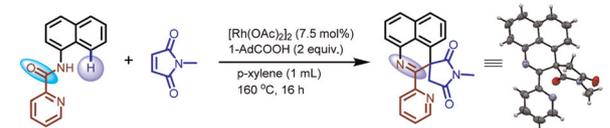
Heping Li, Weijun Yao and Zhen Wang\*



6897

**Synthesis of benzo[d,e]quinoline-spiro-succinimides via rhodium-catalyzed C–H activation/annulation of 1-naphthylamides with maleimides**

Raj Naresh Patel, Dharmik Mahendra Patel, Dinesh Gopichand Thakur, Nileshkumar B Rathod, Sachinkumar D. Patel, Mahesh A. Sonawane and Subhash Chandra Ghosh\*

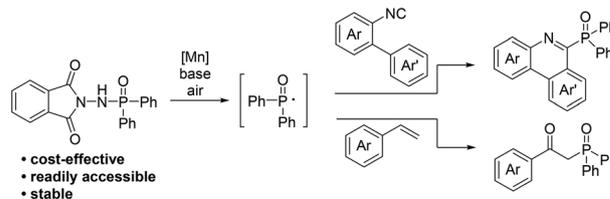


- benzo[d,e]quinoline-spiro-succinimide
- Identified intermediate
- Photoluminescence properties
- first report on C-C spiroannulation
- Very good substrate scope
- KIE = 2.0, C-H activation is RDS

6903

**N-Phosphinoylaminophthalimide: a phosphinoyl radical precursor applied in phosphinoyl-substituted phenanthridine and ketone synthesis**

Zhiqiang Yang, Ziwei Li, Yunfangting Wei, Ze-Feng Xu,\* Mingming Yu and Chuan-Ying Li\*

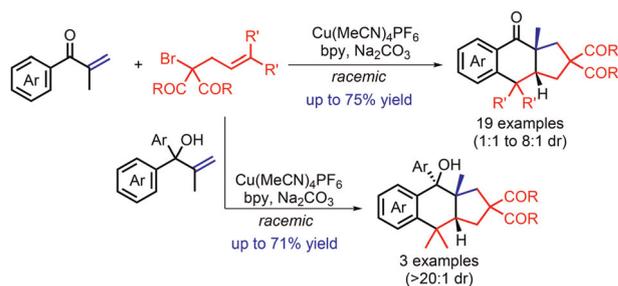


- cost-effective
- readily accessible
- stable

6908

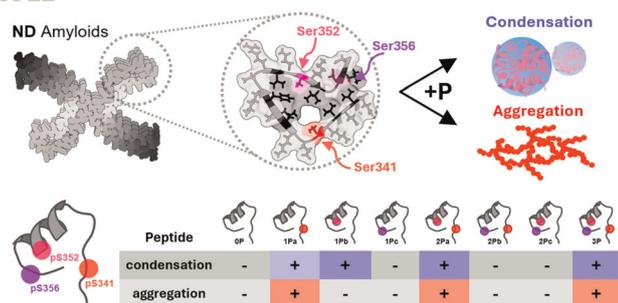
**Copper-catalyzed bi-cyclization of  $\alpha,\beta$ -unsaturated arylketones for accessing cyclopenta[b]tetralines**

Xia-Run Yao, Hao-Nan Shi, Rong Fu, Ke Chen,\* Wen-Huan Hao and Bo Jiang\*



## PAPERS

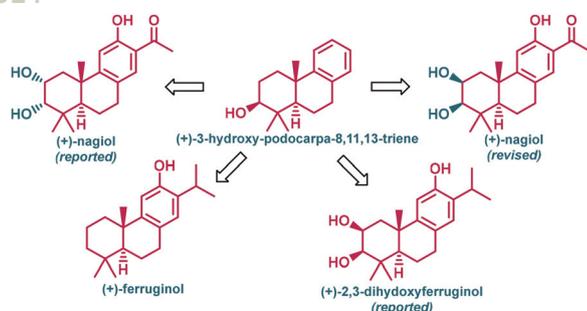
6912



### Specific phosphorylation patterns control the interplay between aggregation and condensation of Tau-R4 peptides

Shachar Guy Bressler, Dana Grunhaus, Amit Aviram, Stefan G. D. Rüdiger, Mattan Hurevich\* and Assaf Friedler\*

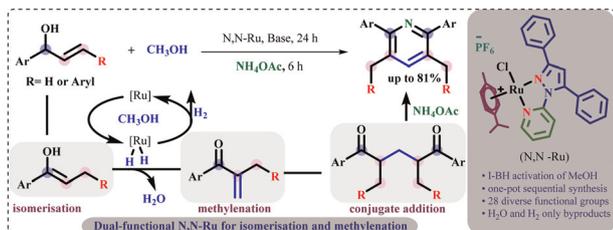
6924



### First stereoselective approach for structure revision of nagiol and syntheses of 2,3-dihydroxyferruginol and ferruginol

Sravya Surendran, Arathi Ramachandran and Rajendar Goreti\*

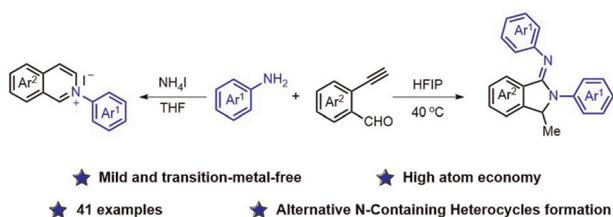
6931



### Ruthenium-catalysed isomerisation–methylenation of allyl alcohols with methanol: a one-pot synthesis of substituted pyridines

Priyabrata Biswal, Sanu Siyad Pullarat, Shaikh Samser, Basava Punna Rao Aradhyula, Vadapalli Chandrasekhar\* and Krishnan Venkatasubbaiah\*

6938



### Mild and efficient construction of nitrogen-containing heterocycles from ortho-ethynylbenzaldehydes and anilines

Juan Zhao, Hui-Min Qian, You Zi,\* Shun-Jun Ji\* and Xiao-Ping Xu\*



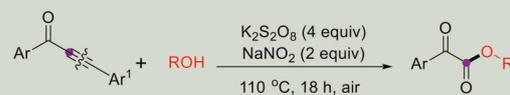
## PAPERS

6943

### Transition-metal-free $K_2S_2O_8$ -promoted oxidative C–C triple bond cleavage and esterification leading to $\alpha$ -ketoesters

Jin-Xin Lan, Yu Shu, Yang Zhou, Liu-Yu Shen, Fei Meng and Wen-Chao Yang\*

C–C triple bond cleavage and oxidation (this work):

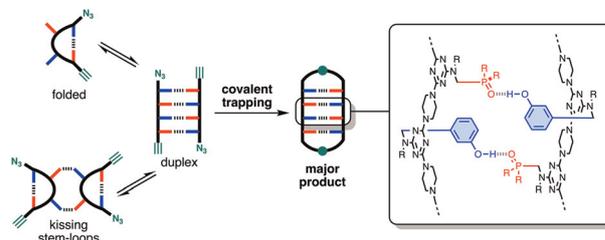


- photocatalyst- & transition metal-free
- broad scope (27 examples)
- C–C triple bond cleavage and oxidation

6948

### Supramolecular assembly properties of a mixed-sequence recognition-encoded melamine oligomer

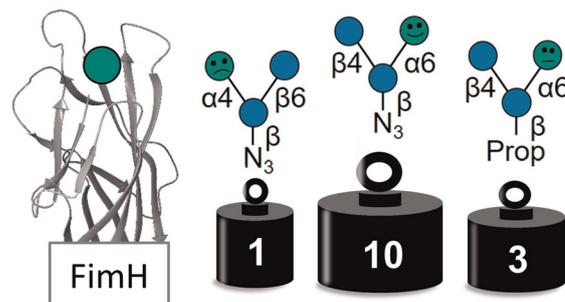
Mohit Dhiman, Joseph T. Smith and Christopher A. Hunter\*



6957

### Regioisomeric branched trisaccharides: a combined synthetic, biological, and computational approach to understand details of FimH-mediated bacterial adhesion

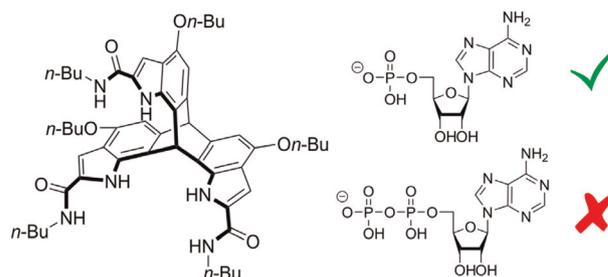
Ingo vom Sondern and Thisbe K. Lindhorst\*



6969

### Selective recognition and sensing of biologically important phosphates using triptycene-based anion receptors

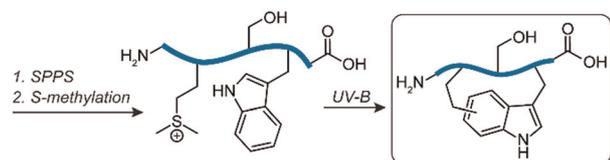
Ahmad F. Kassir, Daniel Lupp, Jakub Grabowski, Jarosław M. Granda\* and Janusz Jurczak\*



## PAPERS

6978

## Peptide cyclization achieved within 3 steps

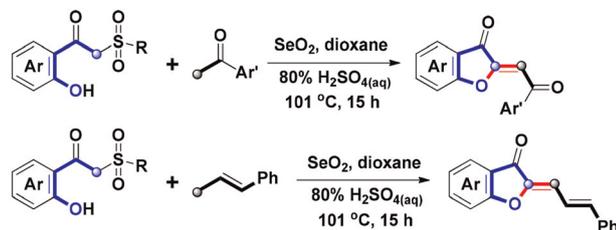


- Start with natural amino acids
- Protective group-free
- No catalyst/additive required

## Peptide cyclization via late-stage functionalization of tryptophan by sulfonium

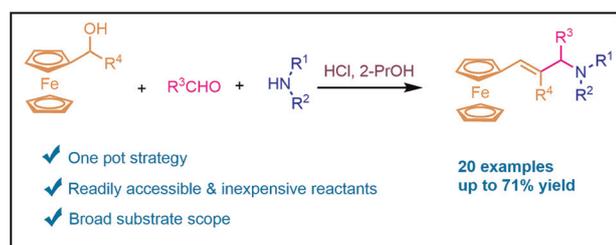
Yusong Han, Jia Chen, Shan Feng and Mingxuan Wu\*

6986

Selenium dioxide-mediated oxidative annulation of sulfonyl *o*-hydroxyacetophenones with acetophenones. One-pot synthesis of aurone analogs

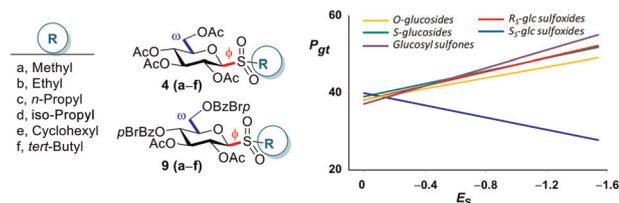
Meng-Yang Chang\* and Yu-Hsuan Liu

6992

One-pot synthesis of ferrocenyl-substituted allylamine derivatives by a three-component reaction of  $\alpha$ -(hydroxy) alkyl ferrocenes, aldehydes and secondary amines

Hao Yang, Jia-An Zheng, Hui Yuan, Meimei Zhang, Wei-Wei Zhang, Zi-Qiang Wang, Jia-Xin He, Yifan Ouyang, Yan-Ru Fan,\* Yu Huang\* and Qi-Peng Zhao\*

7000



## Conformational properties of alkyl glucosyl sulfones in solution

Carlos A. Sanhueza, Rosa L. Dorta and Jesús T. Vázquez\*

