Rh Homo Diels–Alder  
2 x  
Ph Ar–H  
R Me  
Ar a b g  
Au Asymmetric hydroarylations  
CO2Et EtO2C Me  
Au [2+2] cycloaditions  
α-Cationic Phosphines: from Curiosities to Powerful Ancillary Ligands  
C. J. Rugen, M. Alcarazo
Confining the Inner Space of Strained Carbon Nanorings

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Recent Progress in Synthesizing Polyethers by Use of Organocatalysts

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α-Cationic Phosphines: from Curiosities to Powerful Ancillary Ligands

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Long Journey on Daptomycin

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Bis(η5-cyclopentadienyl)[μ-(4b,5,5a-η3:9b,10,10a-η3)-2,3,7,8-tetrakis(trimethylsilyl)benzo[3,4]cyclobuta[1,2-b]biphenylene]-syn-di-cobalt (Co–Co), a Dinuclear π-Complex of the Linear [3]Phenylene Framework

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A Chiral, Dendralenic C–H Acid

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Cyanide-Free Cyanation of Aryl Iodides with Nitromethane by Using an Amphiphilic Polymer-Supported Palladium Catalyst

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A Chiral Sulfoxide-Based C–H Acid

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Diastereoselective Synthesis of the ABCD Ring System of Rubriflorldilactone B

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Pd-Catalyzed Arylation of 1,2-Amino Alcohol Derivatives via β-Carbon Elimination

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M. A. Pericàs*
R. Martin*
Institute of Chemical Research of Catalonia (ICIQ), the Barcelona Institute of Science and Technology (BIST) and Universitat de Barcelona, Spain

Suzuki–Miyaura Cross-Coupling Reaction with Potassium Aryltrifluoroborate in Pure Water Using Recyclable Nanoparticle Catalyst

M. Kawase
K. Matsuoka
T. Shinagawa
G. Hamasaka
Y. Uozumi
O. Shimomura
A. Ohtaka*
Osaka Institute of Technology, Japan
First Total Synthesis of the Marine-Derived Anti-inflammatory Natural Product (–)-Herdmanine D through a Steglich Esterification

P. Sharma
N. Sharma
G. Kashyap
S. Bhagat*
University of Delhi, India

Highlights:
• total 8 steps, overall 18% yield
• highly efficient, scalable total synthesis
• regioselective synthesis
• rare 6-bromo-5-hydroxyindole moiety synthesized

One-Pot Synthesis of 3-(1,2,3,4-Tetrahydroisoquinolin-1-yl)-isoquinolin-1(2H)-ones by DEAD-Promoted Oxidative Ugi–Wittig Reaction Starting from Phosphonium Salt Precursors

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M.-L. Yang
M. Sun
M.-W. Ding*
Central China Normal University, P. R. of China

DEAD as an efficient metal-free oxidant
Simple operation, mild reaction conditions
A first example of oxidative Ugi–Wittig sequence starting from phosphonium salt precursors

S₈-Mediated Cyclization of Bis(2-aminophenyl) Disulfide/Diselenide with Arylacetylenes/Styrenes: Access to 2-(Arylmethyl)-1,3-benzothi azoles/benzoselenazoles

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C. Feng
L. Zhao
M. Cao
H. Wu*
Nanjing Tech University, P. R. of China

1) transition-metal-free
2) readily available starting materials

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Total Synthesis of Resolvin T4

N. Ogawa*
K. Arai
Y. Kobayashi
Meiji University, Japan

Enantioselective Synthesis of the Sex Pheromone of Lichen Moth, *Miltochrista calamine*, and Its Diastereomer

G. Yuan
J. Liu
S. Yu
X. Wang
Q. Bian
M. Wang
J. Zhong*
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Intermolecular Nucleophilic Addition Reaction of a C-7 Anion from N-[Bis(dimethylamino)phosphoryl]indole to Electrophiles/Arynes: Synthesis of 7-Substituted Indoles

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M. Kaur
B. Kaur
A. Kaur
P. Singh
K. N. Singh*
Panjab University, India
**C–H Amination of Nitro Azaheterocyclic Compounds by Vicarious Nucleophilic Substitution**

_**Direct C-H amination via a VNS route**_

Heteroarenes = pyrazole, triazole, indazole, benzoazolazole, and pyrazol(5,4-b)pyridine

- Only one-step reaction
- Moderate to excellent yield
- Good regioselectivity
- Amination reagent used is inexpensive, commercially available and less toxic
- Mild reaction conditions and simple operation
- Reaction time is very short, only 2-4 h
- No additional catalysts or reagents
- Nucleophilic amination complementary to electrophilic amination

**Indium(III)-Catalyzed Synthesis of Primary Carbamates and N-Substituted Ureas**

- Readily available starting materials
- Nontoxic catalyst
- High atom economy
- Short reaction times
- Good to excellent yields

**Palladium-Catalyzed [1,3]-O-to-N Rearrangement of Allylic Imidates**

8 examples, 52–92% yield