Nickel-Catalyzed Asymmetric Cross-Electrophile Coupling Reactions

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C. Wang*
University of Science and Technology of China, P. R. of China

C–H Functionalization Reactions of Phenyl and Vinyl Carbocations Paired with Weakly Coordinating Anions

S. Popov
B. Shao
A. L. Bagdasarian
B. Wigman
H. M. Nelson*
University of California, USA
Metal-Free Catalytic Aromatic C–H Borylation

H. Zhang*
L. Wang
Nanchang University, P. R. of China

20 examples up to 81% yield
C2-regioselectivity

Bumpy Roads Lead to Beautiful Places: The Twists and Turns in Developing a New Class of PN-Heterocycles

J. P. Bard
D. W. Johnson*
M. M. Haley*
University of Oregon, USA

Cluster Preface: Integrated Synthesis Using Continuous-Flow Technologies

S. Fuse*
Nagoya University, Japan
**Continuous-Flow Reactions Mediated by Main Group Organometallics**

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N. Weidmann  
P. Knochel*  
Ludwig-Maximilians-Universität  
München, Germany

Continuous-flow reactions at 
\(-78^\circ\text{C}, 0.1\text{ s}\)

- For example:
  - 62% yield
  - For another example:
    - 92% yield

**Continuous-Flow Synthesis of Tramadol from Cyclohexanone**

T. M. Monos  
J. N. Jaworski  
J. C. Stephens  
T. F. Jamison*  
Massachusetts Institute of Technology, USA

Continuous-flow synthesis of tramadol: 
- 7.45 g\(\cdot\)h\(^{-1}\) production
- 13.7 g\(\cdot\)h\(^{-1}\) production

**Accelerating Electrochemical Synthesis through Automated Flow: Efficient Synthesis of Chalcogenophosphites**

N. Amri  
T. Wirth*  
Cardiff University, UK
Integrated Synthesis Using Isothiocyanate-Substituted Aryllithiums by Flow Chemistry

H.-J. Lee
D. Torii
Y. Jeon
J.-i. Yoshida*
H. Kim*
University, Korea
Kyoto University, Japan

Integrated Flow Synthesis via Sequential Reactions

\[ \text{X = I or Br} \]

within 6 s of reaction time

3-step integrated
continuous and rapid

Flow Synthesis of Triptycene via Triple Cycloaddition of Ynolate to Benzene

T. Iwata
T. Yoshinaga
M. Shindo*
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Photochemical Flow Oximation of Alkanes

O. M. Griffiths
M. Ruggeri
I. R. Baxendale*
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Trapping of Transient Thienyllithiums Generated by Deprotonation of 2,3- or 2,5-Dibromothiophene in a Flow Microreactor

K. Okano*
Y. Yamane
A. Nagaki
A. Mori
Kobe University, Japan

Fine-Bubble–Slug-Flow Hydrogenation of Multiple Bonds and Phenols

T. Iio
K. Nagai
T. Kozuka
A. M. Sammi
K. Sato
T. Narumi
N. Mase*
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Continuous-Flow Synthesis of (−)-Oseltamivir Phosphate (Tamiflu)

C. R. Sagandira
P. Watts*
Nelson Mandela University, South Africa
Umpolung Reactions of α-Tosyloximino Esters in a Flow System

K. Ota
S. Fukumoto
T. Iwase
I. Mizota
M. Shimizu*
I. Hachiya*
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Nanjing Tech University, Japan

M. Oltmanns
A. Kirschning*
Leibniz Universität Hannover, Germany

Accelerating Heat-Initiated Radical Reactions of Organic Halides with Tin Hydride Using Flow Microreactor Technologies

Y. Jiang
Y. Ashikari
K. Guan
A. Nagaki*
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Subsupercritical Water Generated by Inductive Heating Inside Flow Reactors Facilitates the Claisen Rearrangement

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A. Kirschning*
Leibniz Universität Hannover, Germany
Integrated Synthesis of Thienyl Thioethers and Thieno[3,2-b]thiophenes via 1-Benzothiophen-3(2H)-ones

K. Mitsudo,*
N. Habara
Y. Kobashi
Y. Kurimoto
H. Mandai
S. Suga*
Okayama University, Japan

Total Synthesis of 1-Oxomiltirone and Arucadiol

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J. Kang
U. Chai
D. H. Mac
C. H. Oh*
Hanyang University, Korea