**Deployment of Aziridines for the Synthesis of Alkaloids and Their Derivatives**

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**Synthetic Approaches to Nitro-Substituted Isoxazoles**

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Silicon-Tethered Frameworks as Directing Groups for Carbon–Carbon and Carbon–Heteroatom Bond Formation

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Palladium-Catalyzed Formation of Substituted Tetrahydropyrans: Mechanistic Insights and Structural Revision of Natural Products

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Practical Synthesis of Precursors of Cyclohexyne and 1,2-Cyclohexadiene

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From Bioactive Pyrrolidino[3,4-c]pyrrolidines to more Bioactive Pyrrolidino[3,4-b]pyrrolidines via Ring-Opening/Ring-Closing Promoted by Sodium Methoxide

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S. Poyraz
H. A. Dondas
M. Ülger
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M. Ferrándiz-Saperas
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Palladium-Catalyzed C–H Bond Monofluorination of 2-Arylbenzo[d]oxazinone Using Nitrate as Crucial Promoter

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One-Pot Synthesis of N-Arylated Amines by Hydroaminomethylation of 2,5-Dihydrofuran with Aromatic Amines

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An Efficient Catalytic Amidation of Esters Promoted by N-Heterocyclic Carbenes

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An efficient catalytic amidation of esters (R1OAr) promoted by N-heterocyclic carbenes (R3N). The reaction takes place in THF at room temperature for 30 minutes, giving primary and secondary amines compatible with 28 examples, achieving 60–97% yield.

Nickel-Catalyzed Decarboxylative Coupling of Alkynyl Carboxylates with Aryl Tosylates and Mesylates

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S. Klemann  
S. Kolling  
K. Little  
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Nickel-catalyzed decarboxylative coupling of alkynyl carboxylates (R1OAr) with aryl tosylates and mesylates (ArR2O). The reaction is carried out in dioxane or diglyme at 80–140 °C, achieving 47–99% yield.

A Facile Synthetic Approach to Nonracemic Substituted Pyrrolo-allocolchicinoids Starting from Natural Colchicine

E. S. Shchegrechina  
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A facile synthetic approach to nonracemic substituted pyrrolo-allocolchicinoids starting from natural colchicine. The synthesis involves the Fischer indole synthesis and leads to 6 steps with 14 examples.
1,8,10-Substituted Anthracenes – Hexafunctional Frameworks via Head-to-Tail Photodimerisation

P. Niermeier
J.-H. Lamm
J.-H. Peters
B. Neumann
H.-G. Stammler
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Oxidative Dearomatization and Sigmatropic 1,3-Acyl Shift in Excited State: Aromatics to Embellished cis-Hydrindanes

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V. Singh*
Indian Institute of Technology Bombay, Mumbai, India

Morpholin-2-one Derivatives via Intramolecular Acid-Catalyzed Hydroamination

A. Hadi Aldmairi
D. W. Knight*
T. Wirth*
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Selective ortho-Metalation of a Fluoroarene with Knochel–Hauser Base and Reactions with Various Electrophiles

M. Baenziger*
S. Eswaran
Y. Jiang
G. Kasinathan
Novartis Pharma AG, Switzerland

Selective C5-metalation electrophile E
8 examples
high regioselectivity
39–87% yield

C3-Allylation of Indoles via an Iridium-Catalyzed Branch-Selective Ring-Opening Reaction of Vinylcyclopropanes

L. Yu
Z.-Q. Zhu
M. Sun
G.-J. Mei*
F. Shi*
Jiangsu Normal University,
P. R. of China

Copper-Catalyzed Synthesis of Dibenzo[b,f]imidazo[1,2-d][1,4]oxazepine Derivatives via a Double Ullmann Coupling Reaction

X.-Y. Chen
Z.-H. Li
J.-Q. Liu*
X.-S. Wang*
Jiangsu Normal University,
P. R. of China

double Ullmann coupling
20 examples, 79–93% yield
Lewis Acid Catalyzed Regio- and Diastereoselective Synthesis of Spiroisoxazolines via One-Pot Sequential Knoevenagel Condensation/1,3-Dipolar Cycloaddition Reaction

H. Yazdani
A. Bazgir*
Shahid Beheshti University G.C., Iran

- One-pot synthesis
- Gram scale
- Broad synthetic application
- Broad substrate scope
- Mild reaction conditions
- Cheap Lewis acid

Palladium-Catalyzed Carbonylation of Coumarin C(sp²)–H Bonds: A New Entry to Arylcoumarin Ketones

S. Mirzaei
S. Rajai-Daryasarei
M. Soheillizad
R. Kabiri
S. Ansari
M. Shabanian
R. Pashazadeh*
SOHA Pharmaceutical Company, Iran

- 27 examples 68–88% yield
- 5 examples 70–78% yield