[3,3]- and [5,5]-Sigmatropic Rearrangements of Aryl Sulfoxides Using An 'Assembly/Deprotonation' Technology

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The Trouble with Five: New Synthetic Strategies toward C₅-Symmetric Pillar[5]arenes and Beyond

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Ionic Transfer Reactions with Cyclohexadiene-Based Surrogates

Metal-free ionic transfer reactions

Programmable cyclohexadiene surrogates

Simple starting materials

Wheland intermediate

Chemically inert easily removable byproducts

Surrogates available:


Breaking Carbon–Fluorine Bonds with Main Group Nucleophiles

Mechanistic Insight

Simpler Nucleophiles


Silver-Mediated Intramolecular Friedel–Crafts-Type Cyclizations of 2-Benzoyloxy-3-bromoindolines: Synthesis of Isochromeno[3,4-b]indolines and 3-Arylindoles

Friedel–Crafts-type cyclization

unprecedented deformylative arylation

13 examples, up to 95% yield

11 examples, up to 85% yield
Construction of the ACDE Ring System of Calyciphylline A-type Alkaloids via Intramolecular Diels–Alder Reaction of a Tetrasubstituted Olefin

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Synlett 2019, 30, 2253–2257
DOI: 10.1055/s-0039-1690267

Synthesis of New γ-Lactams with gem-Difluorinated Side Chains

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Synlett 2019, 30, 2258–2262
DOI: 10.1055/s-0039-1690715

Geminal Difunctionalization of Vinylarenes: Concise Synthesis of 1,3-Dioxolan-4-ones

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Synlett 2019, 30, 2263–2267
DOI: 10.1055/s-0039-1690250

18 examples
up to 90% yield

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Gram-Scale Solution-Phase Synthesis of Heptapeptide Side Chain of Teixobactin

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Efficient Synthesis of 3,4-Disubstituted 7-Azaindoles Employing SEM as a Dual Protecting–Activating Group

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Total Synthesis of Endolides A and B

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Enantioselective Total Synthesis of Ligraminol D and Ligraminol E

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D. D. Kumbhar
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A Facile Approach to Catalyst-Free Cyanation and Azidation of Organic Compounds and a One-Pot Preparation of 5-Substituted 1H-Tetrazoles by Using a Dimethyl Sulfoxide–Nitric Acid Combination

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Selectfluor-Mediated Tandem Cyclization of Enaminones for the Synthesis of 3-Fluorochromones

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An Efficient Deprotection of 2,6-Bis(trifluoromethyl)phenylboronic Esters via Catalytic Protodeboronation Using Tetrabutylammonium Fluoride

Catalytic Protodeboronation for Deprotection of o-FXylboronic Esters

13 examples
80 to >99% yield
b.p. 116 °C