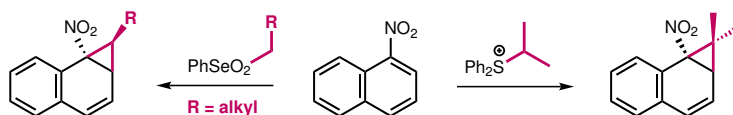
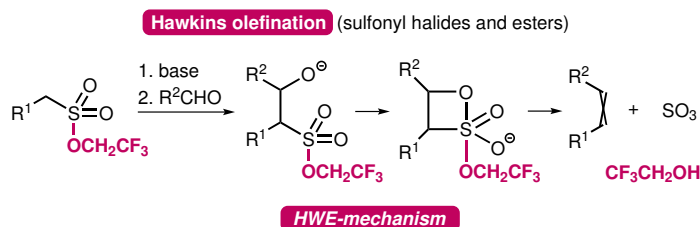


## Functionalization of Nitroarenes with Corey-Chaykovsky Reagents



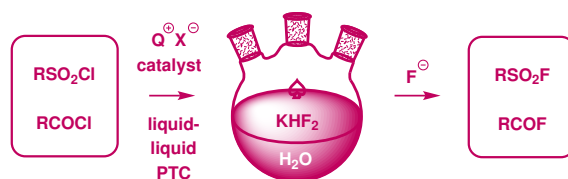
- ▶ D. Antoniak, M. Barbasiewicz,\* *Reactions of Nitroarenes with Corey-Chaykovsky Reagents*; *Synlett* **2022**, *33*, accepted article (invited Synfacts article). [[link](#)]
- ▶ D. Antoniak, B. Pałuba, T. Basak, K. Błaziak, M. Barbasiewicz,\* *Alkylation of Nitroarenes via Vicarious Nucleophilic Substitution – Experimental and DFT Mechanistic Studies*; *Chem. Eur. J.* **2022**, *28*, e202201153. [[link](#)]
- ▶ D. Antoniak, M. Barbasiewicz,\* *Alkylation of Nitropyridines via Vicarious Nucleophilic Substitution*; *Org. Lett.* **2022**, *24*, 516–519 (one of the most viewed articles in February). [[link](#)]
- ▶ D. Antoniak, M. Barbasiewicz,\* *Corey-Chaykovsky Cyclopropanation of Nitronaphthalenes: Access to Benzonorcaradienes and Related Systems*; *Org. Lett.* **2019**, *21*, 9320–9325. [[link](#)]

## Olefination with Sulfonyl Halides and Esters



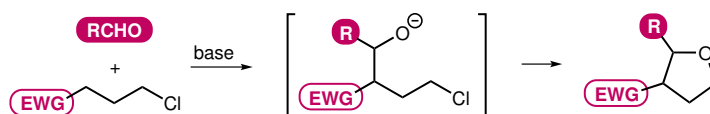
- ▶ M. Tryniszewski, D. Basiak, M. Barbasiewicz,\* *Olefination with Sulfonyl Halides and Esters: Synthesis of Unsaturated Sulfonyl Fluorides*; *Org. Lett.* **2022**, *24*, 4270–4274. [[link](#)]
- ▶ D. Basiak, M. Barbasiewicz,\* *Olefination with sulfonyl halides and esters – sulfur-based variant of the Horner-Wadsworth-Emmons reaction*; *Arkivoc* **2021**, part ii, 118–135. [[link](#)]
- ▶ B. Górski, D. Basiak, Ł. Grześniński, M. Barbasiewicz,\* *Stereodivergent synthesis of alkenes by controllable syn-/anti-fragmentation of  $\beta$ -hydroxysulfonyl intermediates*; *Org. Biomol. Chem.* **2019**, *17*, 7660–7663. [[link](#)]
- ▶ B. Górski, D. Basiak, A. Talko, T. Basak, T. Mazurek, M. Barbasiewicz,\* *Olefination with Sulfonyl Halides and Esters: E-Selective Synthesis of Alkenes from Semistabilized Carbanion Precursors*; *Eur. J. Org. Chem.* **2018**, *2018*, 1774–1784 (VIP paper). [[link](#)]
- ▶ B. Górski, A. Talko, T. Basak, M. Barbasiewicz,\* *Olefination with Sulfonyl Halides and Esters: Scope, Limitations, and Mechanistic Studies of the Hawkins Reaction*; *Org. Lett.* **2017**, *19*, 1756–1759 (highlighted in *Synfacts*). [[link](#)]

## Phase-transfer catalyzed reactions



- ▶ M. Tryniszewski, M. Barbasiewicz,\* *Gram-Scale Preparation of Acyl Fluorides and Their Reactions with Hindered Nucleophiles*; *Synthesis* **2022**, 54, 1446–1460. [[link](#)]
- ▶ A. Talko, M. Barbasiewicz,\* *Nucleophilic Fluorination with Aqueous Bifluoride Solution: Effect of the Phase-Transfer Catalyst*; *ACS Sustainable Chem. Eng* **2018**, 6, 6693–6701 (invited article). [[link](#)]
- ▶ K. Grudzień, T. Basak, M. Barbasiewicz,\* T. M. Wojciechowski, M. Fedoryński, *Synthesis, properties and application of electronically-tuned tetraarylarsonium salts as phase transfer catalysts (PTC) for the synthesis of gem-difluorocyclopropanes*; *J. Fluorine Chem.* **2017**, 197, 106–110. [[link](#)]
- ▶ M. Barbasiewicz, K. Marciniak, M. Fedoryński,\* *Phase transfer alkylation of arylcetonitriles revisited*; *Tetrahedron Lett.* **2006**, 47, 3871–3874. [[link](#)]

## Homologous Darzens Reaction



- ▶ M. Barbasiewicz, M. Mąkosza,\* *Intermolecular Reactions of  $\gamma$ -Halocarbanions—Stepwise Analogs of 1,3-Dipolar Cycloaddition*; *Helv. Chim. Acta*, **2012**, 95, 1871–1890 (a review). [[link](#)]
- ▶ Z. Komsta, M. Barbasiewicz, M. Mąkosza,\* *Diastereoselective synthesis of tetrahydrofurans from aryl 3-chloropropylsulfoxides and aldehydes*; *J. Org. Chem.* **2010**, 75, 3251–3259. [[link](#)]
- ▶ A. Wojtasiewicz, M. Barbasiewicz, M. Mąkosza,\* *Intramolecular Addition of  $\gamma$ -Chlorocarbanions to Electrophilic Groups – Synthesis of Tricyclic Tetrahydrofurans, Pyrrolidines and Cyclopentanes*; *Eur. J. Org. Chem.* **2010**, 1885–1894. [[link](#)]
- ▶ M. Barbasiewicz, A. Brud, M. Mąkosza,\* *Synthesis of Substituted Tetrahydropyrans via Intermolecular Reactions of  $\delta$ -Halocarbanions with Aldehydes*; *Synthesis* **2007**, 1209–1213. [[link](#)]
- ▶ M. Barbasiewicz, M. Mąkosza,\* *Intermolecular Reactions of Chlorohydrine Anions: Acetalization of Carbonyl Compounds under Basic Conditions*; *Org. Lett.* **2006**, 8, 3745–3748. [[link](#)]
- ▶ M. Barbasiewicz, M. Mąkosza,\* *Simple Synthesis of Tetrahydrofurans via Reaction of Enolates of  $\gamma$ -Chloroketones with Aldehydes*; *Synthesis* **2006**, 1190–1194. [[link](#)]
- ▶ M. Mąkosza,\* M. Barbasiewicz, D. Krajewski, *Diastereoselective Synthesis of Tetrahydrofurans via Reaction of  $\gamma,\delta$ -Epoxy-carbanions with Aldehydes*; *Org. Lett.* **2005**, 7, 2945–2948. [[link](#)]
- ▶ M. Barbasiewicz, M. Judka, M. Mąkosza,\* *New reactions of  $\gamma$ -halocarbanions – underestimated active intermediates in organic synthesis*; *Russ. Chem. Bull., Int. Ed.* **2004**, 53, 1846–1858 (a review). [[link](#)]