**Synthesis** 

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Palladium-Catalyzed ortho-Arylation of o-Phenylcarbamates with Simple Arenes and Sodium Persulfate J. Am. Chem. Soc. 2010, 132, 5837-5844.

## Palladium-Catalyzed Oxidative Arylation of ortho-Phenylcarbamates with Arenes

Mechanistic proposal:

Significance: A highly useful method for the oxidative palladium-catalyzed coupling of simple arenes and ortho-phenylcarbamates was developed. The reaction proceeds via double C-H bond functionalization with high regioselectivities including electron-rich, -neutral, and -deficient arenes as substrates.

**Comment:** This novel coupling method enables a most straightforward access to biaryls form simple arenes solely via C-H functionalization. Inexpensive and environmentally benign sodium persulfate (Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>) is used as oxidant. The mechanism proposed for this reaction is supported by the X-ray structure of the palladacycle P.

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Key words

ortho-arylation

**Metal-Mediated** 

C-H activation

functionalization

palladium

