A. M. WAGNER, A. J. HICKMAN, M. S. SANFORD* (UNIVERSITY OF MICHIGAN, ANN ARBOR, USA)
Platinum-Catalyzed C–H Arylation of Simple Arenes
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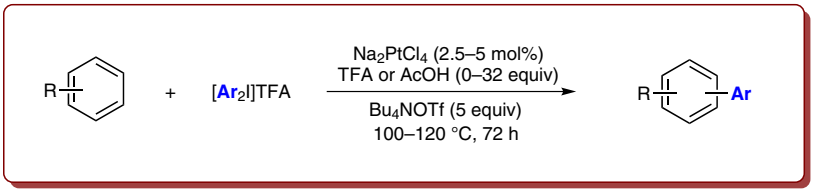
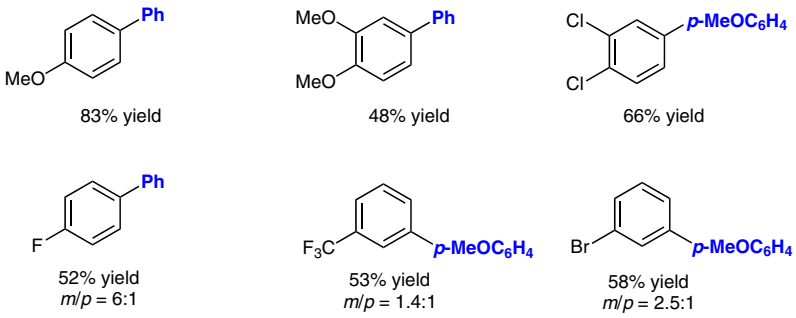
Category
Synthesis of Materials and Unnatural Products

Key words
C–H activation
platinum
arylation

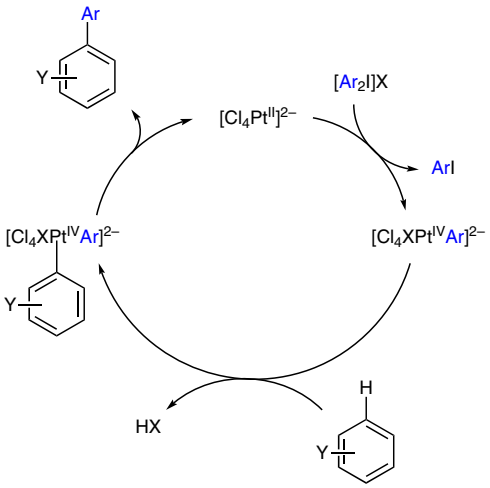
C–H Arylation with Platinum



Selected examples:



Proposed mechanism:



Significance: C–H activation in aryl systems finds broad applicability in the construction of conjugated organic materials. This paper reports the use of a platinum catalyst to couple aryl groups pendant on hypervalent iodine to simple arenes via a C–H activation pathway.

Comment: The authors have previously reported a similar process using a palladium catalyst (*ACS Catal*. **2011**, *1*, 170). However, with the exception of some examples in which the reaction resulted in mixed isomers, the use of a platinum catalyst produced materials with different selectivity than the palladium catalyst, providing two processes with complementary reactivity.

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