

Supporting Information

Electrophilic Triflyl-arylation and Triflyl-pyridylation by Unsymmetrical Aryl/Pyridyl- λ^3 -iodonium Salts: Synthesis of Aryl and Pyridyl Triflones

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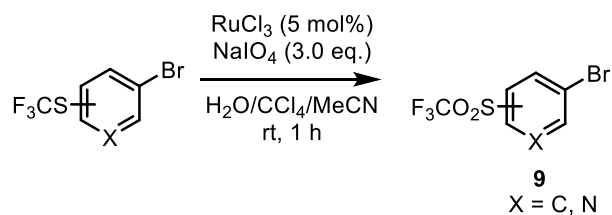
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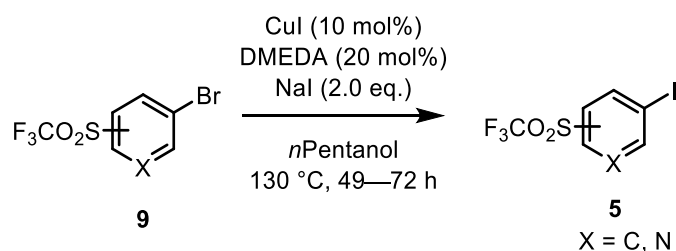
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General Procedure A:

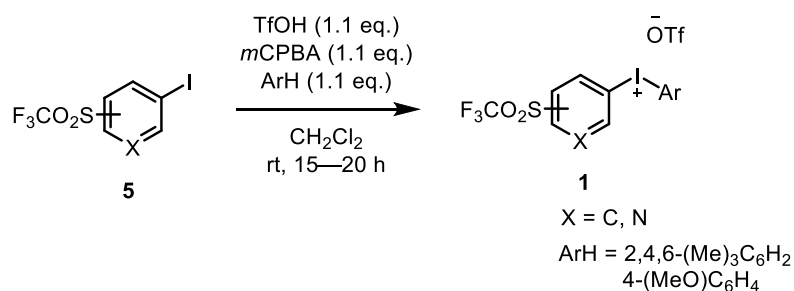


General Procedure B:



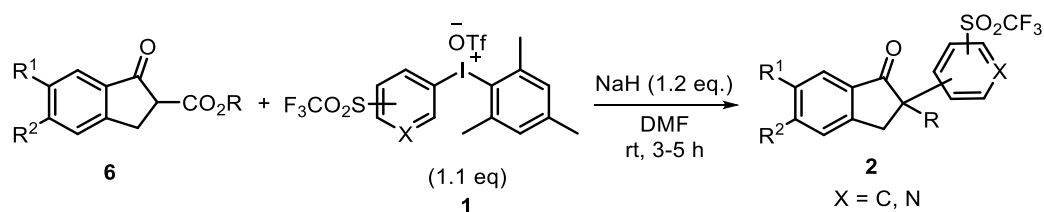
1-iodo-4-((trifluoromethyl)sulfonyl)benzene **5a**, 1-iodo-3-((trifluoromethyl)sulfonyl)benzene **5b**, 1-iodo-2-((trifluoromethyl)sulfonyl)benzene **5c**, 5-iodo-2-((trifluoromethyl)sulfonyl)pyridine **5d** were prepared from corresponding aryl bromide **9** by aromatic Finkelstein reaction. The resulting aryl iodides **5a** and **5d** were obtained after full conversion of the starting material aryl bromide. However, the reactions to obtain **5b** and **5c** didn't undergo complete conversion of the aryl bromide starting material **9**, because of which the end products contained parts of the starting material due to separation difficulties. **5b–c** were characterised by only HRMS and used in the next step without further purification.

General Procedure C:

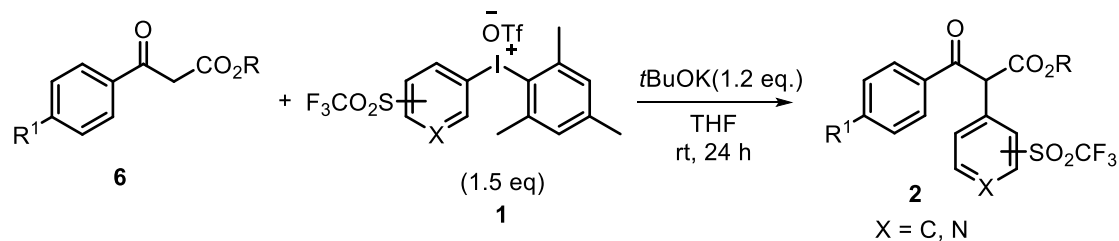


Yield for reagent **1b** and **1e** is with respect to **9b** and for **1c** and **1f** is with respect to **9c**.

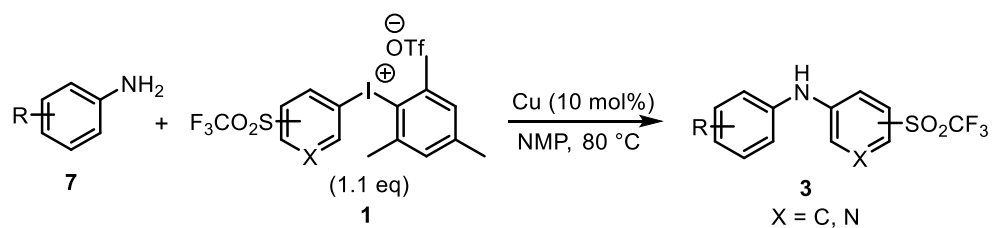
General Procedure D (Method 1):



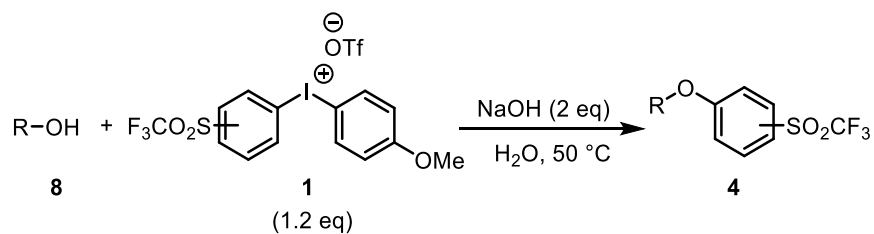
General Procedure D (Method 2):



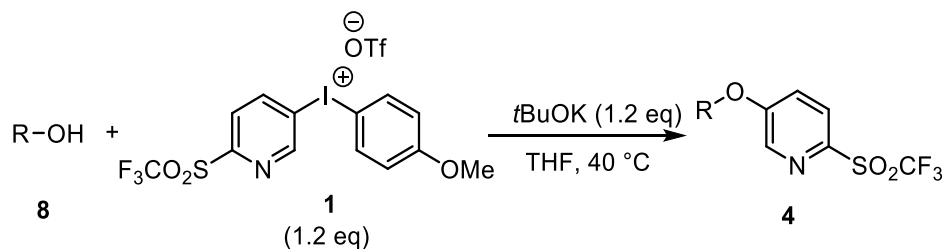
General Procedure E:



General Procedure F (Method 1):



General Procedure F (Method 2):



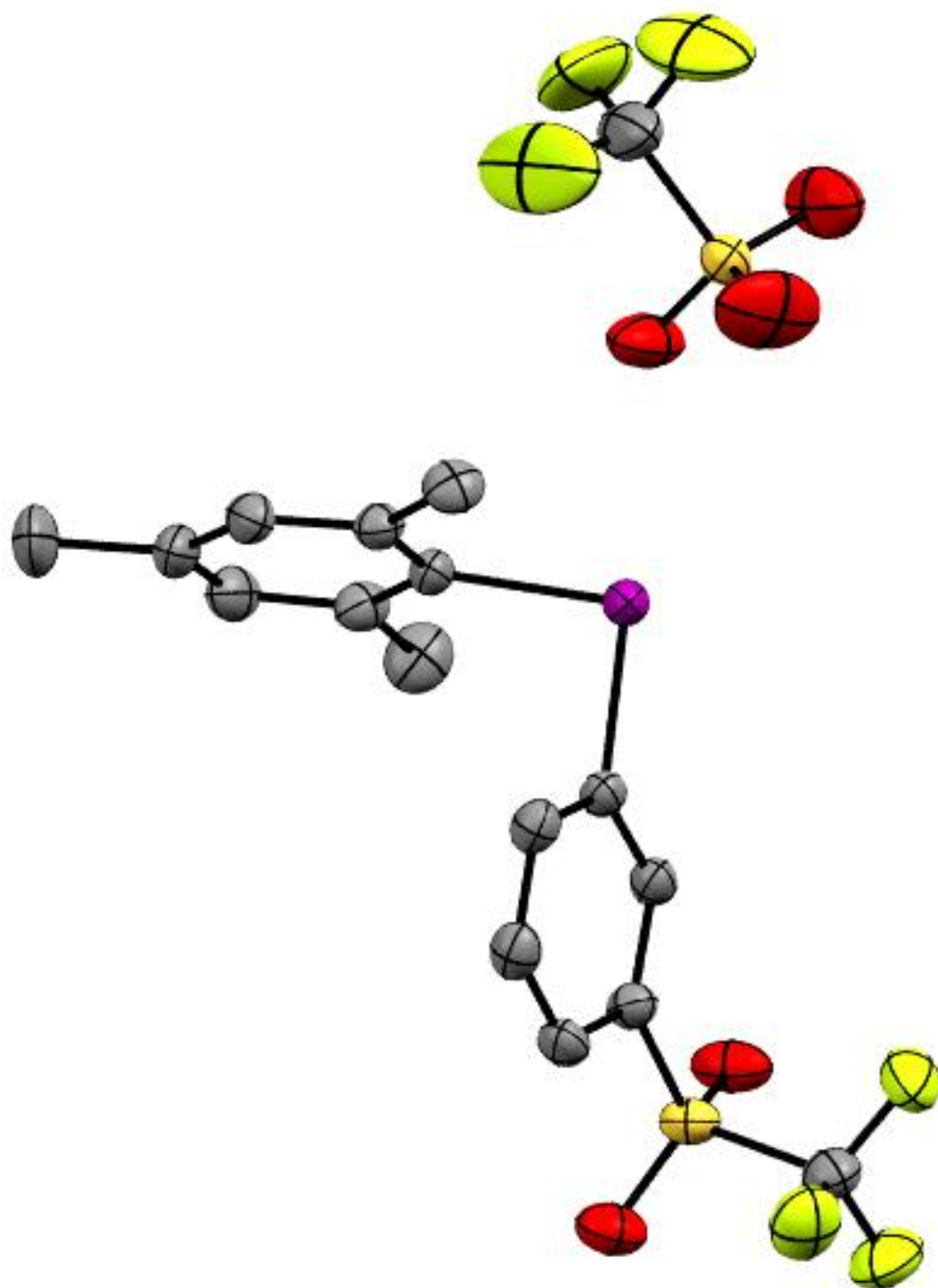


Figure 1: Ortep diagram of **1b** drawn at 50% probability. The hydrogen atoms have been omitted for clarity.

