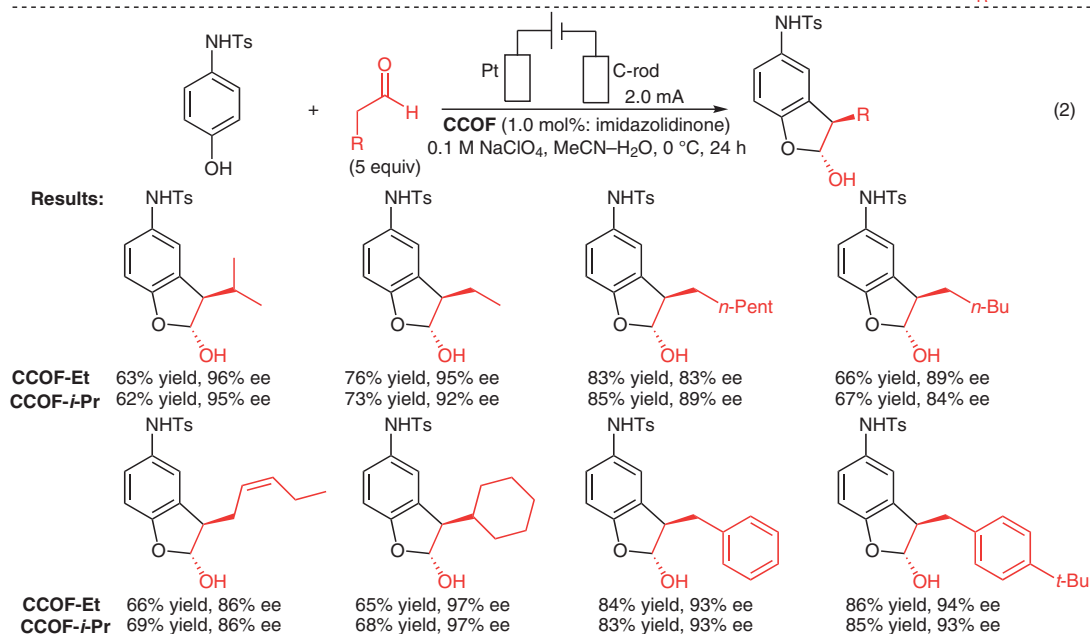
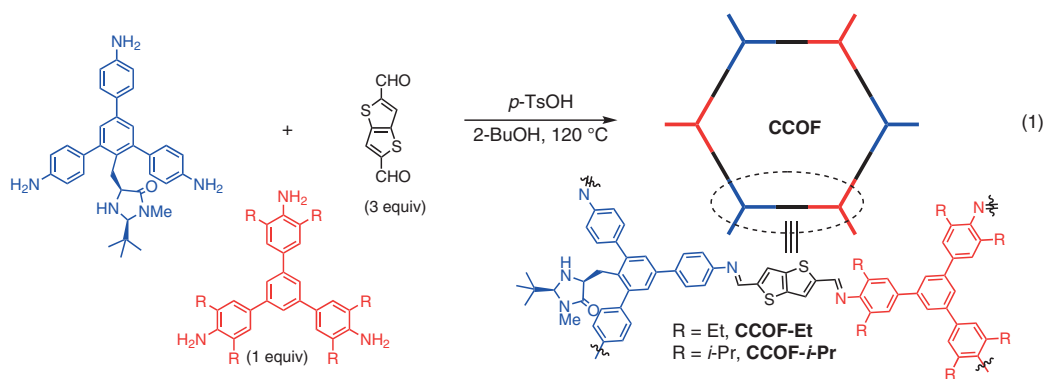


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Mixed-Linker Chiral 2D Covalent Organic Frameworks with Controlled Layer Stacking for Electrochemical Asymmetric Catalysis

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## Asymmetric $\alpha$ -Arylation of Aldehydes with Aminophenol by 2D Chiral COF



**Significance:** Two-dimensional covalent organic frameworks **CCOF-Et** and **CCOF-*i*-Pr** containing a chiral imidazolidinone unit promoted the asymmetric  $\alpha$ -arylation of aldehydes with *N*-tosyl-4-amino-phenol under electrochemical conditions to give the corresponding arylated and cyclized products in up to 86% yield and 97% ee (eq. 2).

**Comment:** **CCOF-Et** and **CCOF-*i*-Pr** were prepared according to equation 1. In the arylation of butanal, **CCOF-Et** was recovered and reused four times without significant loss of its catalytic activity.

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