Ruthenium-Catalyzed Dehydrative Benzofuran Synthesis via C–H Activation

**Significance:** Reported is the ruthenium-catalyzed dehydrative ortho-functionalization of phenols with diols. When simple alcohols were employed, only ortho-functionalized phenols were obtained. When diols were employed, the cyclized benzofurans were the preferred products. Inclusion of an excess of a simple alkene (cyclopentene) promoted the coupling reaction. An impressive array of substrates were shown to undergo the transformation, including more complex diols and structurally elaborate phenols. A cursory investigation of the reaction mechanism is also reported.

**Comment:** The present report represents a highly convenient and robust method for the synthesis of substituted benzofurans, which are medicinally relevant heterocycles with a diverse range of biological activities (see Review below). The sheer scope and high yields of the reported process appear to make this method highly attractive for the synthesis of 2-substituted benzofurans. It would be interesting to know if the process performed as well on scale (10 g and above) as it does on more standard quantities (1 mmol).