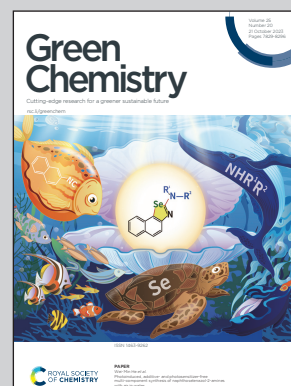


Showcasing research by Associate Professor Xinmin Li and Professor Zeli Yuan from Zunyi Medical University, China and Professor Jagadeesh Rajenahally from Leibniz Institute for Catalysis, Germany.

Borylation of phenols using sulfuryl fluoride activation

An efficient and one-pot method for the synthesis of aryl/heteroaryl boronic esters from phenols was reported. Phenols are first activated by SO_2F_2 to form aryl fluorosulfonates, followed by a palladium-catalyzed deoxygenative borylation reaction with B_2pin_2 to provide a series of boronic esters. This methodology is applicable for the synthesis of natural products, current drug molecules and bioactive compounds. Notably, a novel boronate-based NIR fluorescent probe HTCPB was synthesized by this procedure and employed in fluorescence bioimaging of H_2O_2 in the mouse mammary cancer cell.

As featured in:



See Xinmin Li *et al.*, *Green Chem.*, 2023, **25**, 7998.