Sequential C–C Bond Formation via Allylic and Benzylic Boronic Acids

Significance: Allylic and benzylic boronic acids, prepared in situ from flow-generated diazo compounds and stable boronic acids, were used in sequential C–C bond formation reactions. For example, the sequential reaction of (4-methoxyphenyl)boronic acid with a flow-generated diazo compound and acetaldehyde gave a precursor of the natural product bakuchiol in 60% yield from a single operation.

Comment: The authors have recently reported the reaction of arylboronic acids with flow-generated diazo compounds (Chem. Sci. 2015, 6, 1120). The current paper describes the sequential formation of up to three C–C bonds.