Dual-Catalyst Photoinduced Alkenylation of Alkanes and Aldehydes via C–H Activation

**Significance:** The authors report a site-selective photoinduced alkenylation of various alkanes and aldehydes with aryl alkenes. This dehydrogenative reaction utilizes two photoactive catalysts (tetrabutylammonium decatungstate (TBADT) as HAT agent and Co(dmgH)(dmgh2)Cl2), which eliminates the need for an external oxidant.

**Comment:** This mild alkenylation was used for the late-stage functionalization of diverse complex molecules, while still ensuring a high level of site-selectivity for the sterically most accessible and most electron-rich C–H bond. Wu and co-workers propose a mechanism that involves cooperation of the tungstate and the cobalt catalysts.