

RSC Sustainability

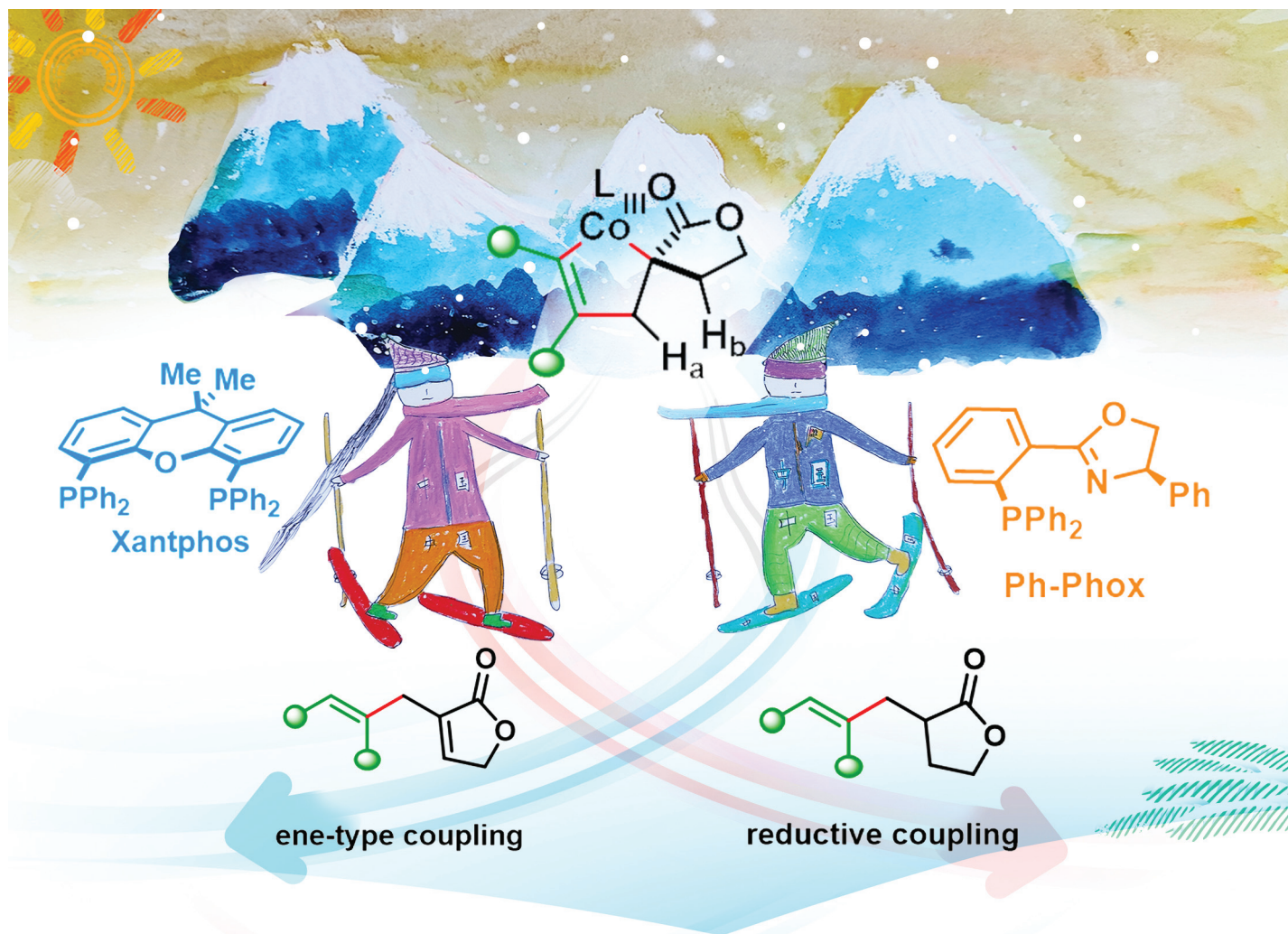
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Fundamental questions
Elemental answers



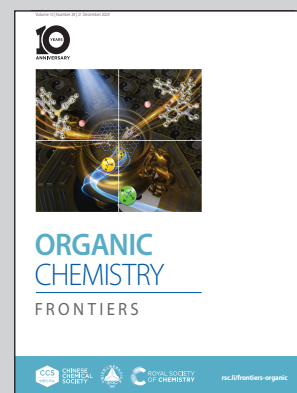
Showcasing research from Professor Ji-Bao Xia's laboratory, State Key Laboratory for Oxo Synthesis and Selective Oxidation, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, China.

Regio- and stereoselective divergent cross-coupling of alkynes and disubstituted alkenes *via* photoredox cobalt dual catalysis

Ligand-controlled ene-type or reductive coupling of alkynes and *gem*-disubstituted alkenes has been developed by photoredox cobalt dual catalysis. Stereodefined 1,4-dienes or trisubstituted alkenes are obtained by choosing different ligands from the same intermediate.

Image credit: Zihan Xia & Lingchang Kong

As featured in:



See Hu He, Ji-Bao Xia *et al.*,
Org. Chem. Front., 2023, **10**, 6070.

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