Photoredox Cobaloxime/Iridium Complex-Catalyzed Peptide-Bond Formation

**Significance:** Peptide bond formation is important in drug discovery and medicinal chemistry. The authors have developed a photoredox cobaloxime/iridium complex-catalyzed reaction to form peptide bonds under mild conditions with triphenylphosphine as a gentle reductant.

**Comment:** Various examples of peptides, including dipeptides, tripeptides, and tetrapeptides were prepared in moderate to good yields under blue LED irradiation.

**Key words**

peptide bond formation, photoredox catalysis, cobaloxime catalysis, iridium catalysis, phosphines, flow reaction