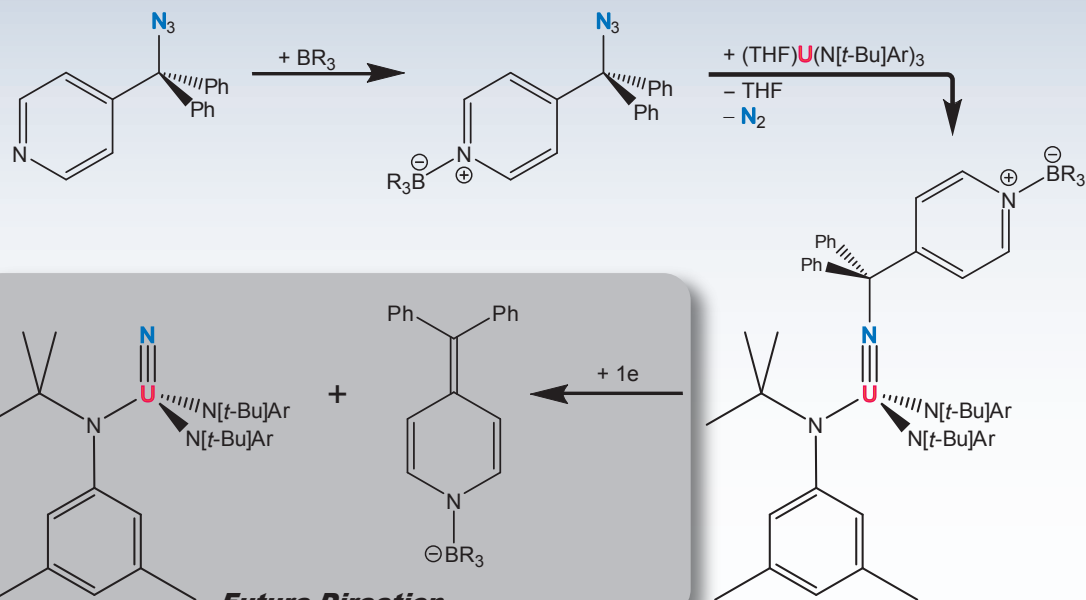


Atom- and Group-Transfer Strategies Applied to Molecular Uranium Complexes

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Ligand Delivery by Design: Strategic use of the diphenyl(4-pyridyl)methyl platform for the synthesis of novel coordination complexes.

We are developing methods for the use of diphenyl(4-pyridyl)methyl azide as a reagent for **nitrogen atom-delivery** (shown at left). The nitrogen atom is first installed at a uranium center in the form of an imido ligand. Chemical removal of the diphenyl(4-pyridyl)methyl protecting group to reveal a **terminal uranium nitrido complex** is now being pursued.

In the course our investigations, we have discovered that diphenyl(4-pyridyl)methyl azide may react through the pyridyl nitrogen as well. This has led to the synthesis and characterization of nitrogen-rich **uranium azide complexes (A & B)** and a **uranium pyridyl complex (C)**.

