

Synthesis and reactivity of chiral enols coordinated with Ni²⁺ ions and a case of a Michael adduct intermediate stabilized by the Ni-C bond

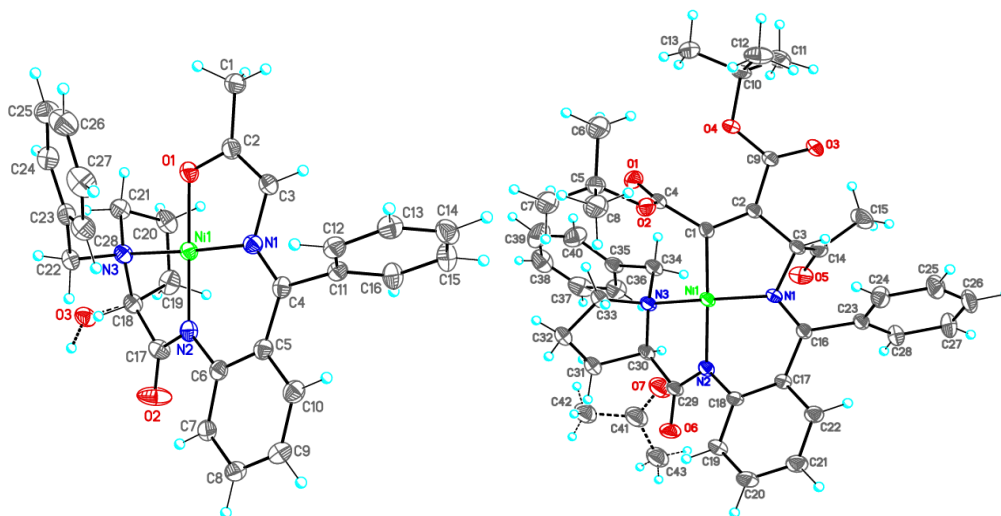
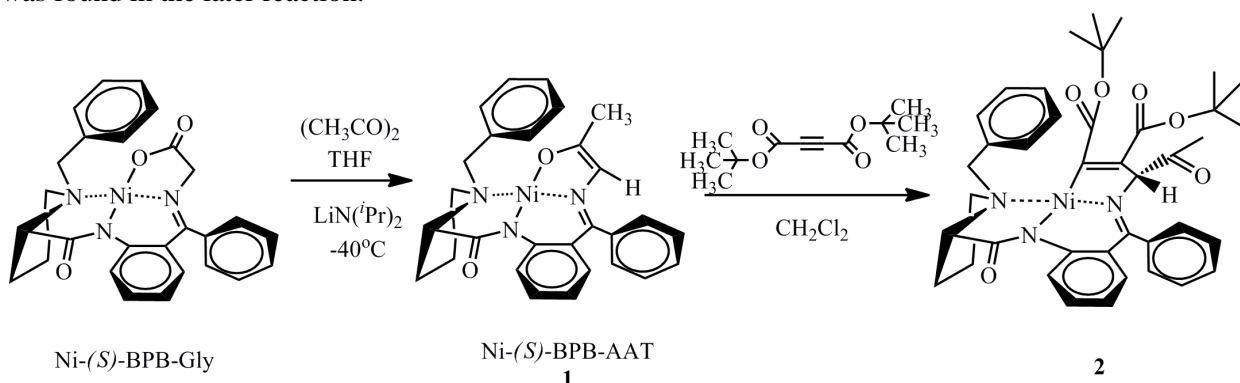
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A representative within a new class of chiral enol Ni^{II} complexes derived from a Schiff base of aminoacetone (AAT) and [(*S*)-2-*N*-(*N'*-benzylpropylamino) benzophenone] (BPB) (Ni^{II}-(*S*)-BPB-AAT) (**1**) was prepared, and its performance in a set of nucleophilic addition reactions was studied.[1,2] The complex was inert in the reactions with aldehydes and activated C=C bonds but entered the reactions with *t*-butyl acetylene dicarboxylate. An unusual Michael addition intermediate stabilized (**2**) by the Ni-C bond was found in the later reaction.



Molecular structure of complexes **1** and **2**.

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1. Collman JP, *Angew. Chem. Int. Edit.* 1965, **4**, pp. 132–138.
2. Buckingham DA, Dekkers J, Sargeson AM, Wein M *Inorg. Chem.*, 1973, **12**, pp. 2019–2023.