Tin(II) and Tin(IV) Derivatives of Chiral Ethanolamines

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The heavier carbene analogues of group 14 elements represent promising ligands for transition metal complexes.[1-3] Here we report the synthesis of stanna(II)tricycloundecanes of types **A** and **C** (L = lone pair) that are based on chiral diethanolamine derivatives. The reaction of these compounds with bromine, Br_2, and tungsten or chromium pentacarbonyl provided the derivatives of types **A** and **C** (L = $W(CO_5)$, $Cr(CO_5)$) or **B** and **D**, respectively.

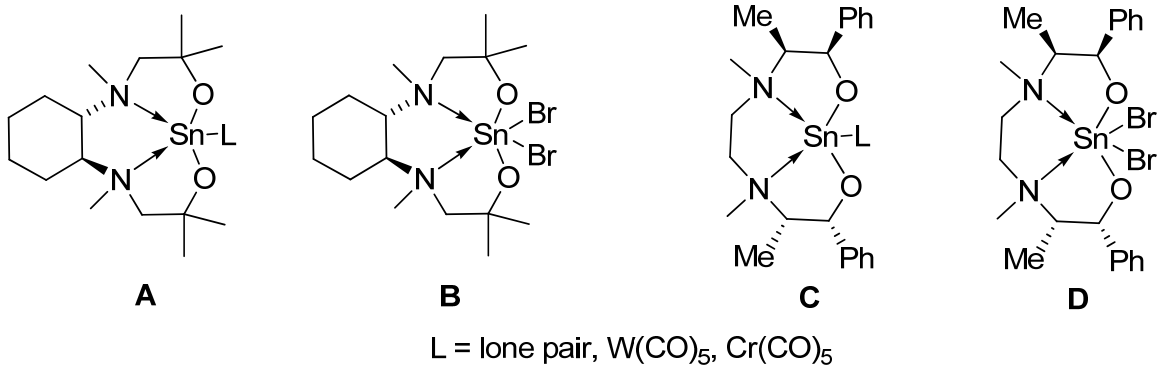

Figure 1. Bimetallic transition metal complexes and dibromo-Sn(IV)-compounds based on chiral diethanolamine ligands.

All compounds are characterized by *state of the art* analytical methods.

Literature:

[1] J. J. Schneider, N. Czap, *J. Chem. Soc., Dalton Trans.* **1999**, *4*, 595. [2] Z. T. Cygan, J. W. Kampf, M. M. Banaszak Holl, *Inorg. Chem.* **2003**, *42*, 7219. [3] T. Berends, L. Iovkova, G. Bradtmöller, I. Oppel, M. Schürmann, K. Jurkschat, *Z. Anorg. Allg. Chem.* **2009**, *635*, 369.