Unprecedented coordination mode variation of group 13 metal–alkyl compounds derived from methyl thiosalicylate.

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The X-ray structure analysis of the alkylaluminum and-indium compounds derived from methyl thiosalicylate,$Me_2Al(SC_6H_4\text{-}2\text{-}CO_2Me)$ and $[Me_2In(\mu\text{-}SC_6H_4\text{-}2\text{-}CO_2Me)]_2$, revealed that the intermolecular S···C(π) interaction between the Al–S thiolate units and the ester π-surface can effectively compete with the hypercoordinate sulfur–metal dative bond. The former compound exists as the noncovalently bonded dimer involving the thiolate sulfur atom and the electrophilic carbon atom of the ester functionality, whereas the indium complex is a five-coordinate dimer with the $In_2(\mu\text{-}S)_2$ central core.)

Słowa kluczowe

aluminum, Indium, noncovalent interactions, thiolates

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