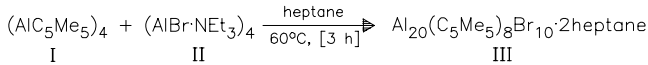
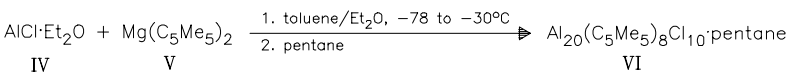
Aluminum
I 2100

02- 020

$Al_{20}Cp^*_8X_{10}$ (X: Cl, Br): Snapshots of the Formation of Metalloid Clusters from Polyhedral Al_nX_m Molecules? — Compounds (III) and (VI) (yields given in g) are characterized by single crystal XRD and ^{27}Al NMR spectroscopy. (III) crystallizes in the triclinic space group $P\bar{1}$ with Z = 2 and (VI) in the monoclinic space group $P2_1/c$ with Z = 4. Both compounds have an almost regular Al_{12} icosahedron in the center consisting of four Al atoms, which are coordinated terminally by a halogen atom, and eight Al atoms, which are coordinated exclusively to an exohedral Al atom. Each of the eight exohedral Al atoms bears a $CpMe_5$ ligand. — (VOLLET, J.; BURGERT, R.; SCHNOECKEL*, H.; Angew. Chem., Int. Ed. 44 (2005) 42, 6956-6960; Inst. Anorg. Chem., Univ. Karlsruhe, D-76128 Karlsruhe, Germany; Eng.) — W. Pewestorf



I II III



IV V VI