256, 241, 167, 58, 481 (molecular ion), 184, and 296; the ion peaks at *m*/*e* 481 and 241 are assigned to the molecular ion and monomer ion, respectively. The 10 highest intensity fragmental ion peaks of compound **2** appear at *m*/*e* 281, 124, 86, 142, 102, 57, 209, 223, 263, and 196, and the monomer ion peak appears at 296. The peaks are cut off at *m*/*e* 578, which is assigned to the ions eliminated from the dimer molecules. The NMR spectral data are accorded with the X-ray data (Figure 2). For compound **1**, the chemical shifts in the ^{1}H NMR spectra (in C_6D_6) of two multiplet sets at $\delta = 2.849$ (8 H) and 2.709 (8 H) ppm are due to the methylene protons of the ethyl groups under two different environments (16 H in total). The chemical shifts at $\delta = 0.897$ (t, 24 H), -0.425 (s, 12 H), and -0.935 (s, 6 H) are assigned to the methyl protons of the ethyl groups, the methyl protons attached to the aluminums, and the methyl bridged-protons between the two magnesium atoms, respectively. The chemical shifts in the ^{13}C NMR spectra (in C_6D_6) at $\delta = 39.931$, 13.276, -9.890 (broad), and -15.527 are assigned to the methylene carbons, the methyl carbons in ethyl groups, the methyl carbons attached to the aluminum atoms, and the methyl carbons attached to the magnesium atoms, respectively. For compound **2**, the chemical shifts in the ^{1}H NMR spectra (in C_6D_6) at $\delta = 3.155$ (sep, 16 H), 1.123 (d, 96 H), -0.322 (s, 24 H), and -0.736 (s, 12 H) are assigned to the methine protons, the methyl protons in the isopropyl groups, the methyl protons attached to the aluminum atoms, and the methyl protons attached to the magnesium atoms, respectively. The chemical shifts in the ^{13}C NMR spectra (C_6D_6) at $\delta = 46.591$, 25.470, 25.427, -3.435 (broad), and -11.090 are reasonably assigned to the methine carbons ($\delta = 46.591$), the two different environments of the methyl carbons in the isopropyl groups ($\delta = 25.470$, 25.427), the methyl carbons attached to the aluminum atoms ($\delta = -3.435$), and the methyl carbons attached to the magnesium atoms ($\delta = -11.090$). Infrared spectra show the following absorptions: (for compound **1**) 2980–2820 (vs), 1460 (s), 1380 (s), 1350 (m), 1318 (w), 1290 (m), 1258 (w), 1208 (s), 1190 (s), 1125 (s), 1078 (w), 1045 (m), 1005 (m), 920 (sh), 900 (m), 855 (m), 795 (m), 705–660 (w), 600–480 (w), 440 (w), 400 (w); (for compound **2**) 3010–2800 (vs), 1460 (s), 1380 (s), 1200 (s), 1170 (s), 1140 (s), 1120 (s), 1075 (w), 972 (m), 915 (m), 800 (m), 765 (w), 710–650 (m), 610 (w), 495 (w), 440 (w), 400 (w).

Both compounds are not thermally stable. They decompose to $\{(CH_3)_2Al(\mu\text{-}NR_2)\}_2$ ($R = C_2H_5$, $i\text{-}C_3H_7$) on sublimation. The products have been characterized and reported. All the spectral data are accorded with the published data.[12,13]

Acknowledgment. We thank the National Science Council for financial support.

Supplementary Material Available: Tables of crystal data, distances and angles, final fractional coordinates, torsional angles, and thermal parameters for both compounds, bonding parameters around Al and Mg for the dimer, and distances to the least-squares planes for the tetramer (20 pages); listings of observed and calculated structure factors (23 pages). Ordering information is given on any current masthead page.

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(12) Cocco, L.; Eyman, D. P. *J. Organomet. Chem.* **1979**, *179*, 1.

(13) Her, T. Y.; Chang, C. C.; Liu, L. K.; Chang, H. C.; Chen, J. H.; Tsai, J. O.; Lai, Y. Y. *Polyhedron*, submitted for publication.

Additions and Corrections

1991, Volume 30

Michael J. Chetcuti,* Phillip E. Fanwick, and John C. Gordon: Reactions of a Cobalt–Molybdenum and Related Cobalt–Tungsten Tetrahedral Clusters with Phenylacetylene: Formation of Tetrametallic Alkyne Clusters or Cluster Fragmentation?

Pages 4712 and 4713. In section 4, the species $(OC)_2Co\{\mu\text{-}\eta^3,\eta^3\text{-}C(H)C(Ph)C(H)C(Ph)C(H)C(Ph)\}W(CO)(\eta^5\text{-}C_5H_4Me)$ (Co–W) (**8**) is wrongly described as a purple complex. This species and the chromatographic band from which it is obtained are both *yellow*. Its color, yield, and spectroscopic data are correctly described in the Experimental Section.—Michael J. Chetcuti

1992, Volume 31

R. F. Gallup, C. Y. Fong,* and Susan M. Kauzlarich*: Bonding Properties of $Ca_{14}GaAs_{11}$: A Compound Containing Discrete $GaAs_4$ Tetrahedra and a Hypervalent As_3 Polyatomic Unit.

Page 118. Figure 5 shows a schematic of the MO's for a hypervalent three-center, four-electron bond. Although the figure caption is correct, the +/− symmetry of the orbitals involved is incorrectly shown in parts a and b. Figure 5a should show an antibonding a_{2u} MO, and Figure 5c should show a bonding a_{2u} MO.—Susan M. Kauzlarich