

1522  
ED

**C<sub>4</sub>H<sub>3</sub>CoGeO<sub>4</sub>**

**Tetracarbonylgermylcobalt**

essentially C<sub>3v</sub>  
H<sub>3</sub>Ge–Co(CO)<sub>4</sub>

| $r_a$                               | Å <sup>a)</sup>     | $\theta_a$           | deg <sup>a)</sup>   |
|-------------------------------------|---------------------|----------------------|---------------------|
| Co–C (mean)                         | 1.800(6)            | Co–Ge–H              | 109.1 <sup>b)</sup> |
| $\Delta(\text{Co–C})$ <sup>c)</sup> | –0.010(16)          | C(eq)–Co–Ge          | 83.8(3)             |
| C=O                                 | 1.128(4)            | Co–C(eq)=O(eq)       | 178.3 <sup>b)</sup> |
| Ge–Co                               | 2.416(4)            | $\tau$ <sup>d)</sup> | 10.0 <sup>e)</sup>  |
| Ge–H                                | 1.525 <sup>b)</sup> |                      |                     |

The nozzle temperature was 55 °C.

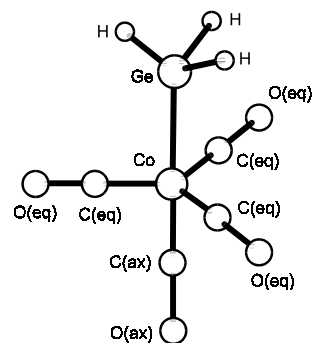
<sup>a)</sup> Estimated standard errors including a systematic error.

<sup>b)</sup> Assumed.

<sup>c)</sup>  $\Delta(\text{Co–C}) = [(\text{Co–C}(\text{eq})) - (\text{Co–C}(\text{ax}))]$ .

<sup>d)</sup> Twist angle of the GeH<sub>3</sub> group defined as zero when it is eclipsed with respect to the Co(CO)<sub>3</sub> group.

<sup>e)</sup> Determined by *R*-factor optimization.



Rankin, D.W.H., Robertson, A.: J. Organomet. Chem. **104** (1976) 179.