The Organogallium Subhalide $R_2Ga_2I_2$ as Starting Compound for the Generation of a Transition Metal Gallium Complex – Synthesis of $Fe_2(CO)_6(\mu$-$GaR)_3$ [$R = C(SiMe_3)_3$]

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Treatment of the monomeric organogallium subiodide $R(I)Ga-Ga(I)R_1$ [$R = C(SiMe_3)_3$] with the diironcarbonylate anion $[Fe_2(CO)_8]^{2-}$ yielded the red iron gallium compound $Fe_2(CO)_6(\mu$-$GaR)_3$ in moderate yield. This compound, 2, may be described as an analogue of enneacarbonyldiiron $Fe_2(CO)_9$, the three bridging carbonyl groups of which are replaced by GaR ligands.

Key words: Gallium, Iron, Coordination Compound