

Metalloaromaticity, Triple Bonds, and Other Musings on the Organometallic Chemistry of Gallium

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This laboratory has had an interest in the organometallic chemistry of the main group metals for some time. A few years ago we synthesized some noteworthy organometallic compounds containing gallium. One class of compounds, "cyclogallenes", involved gallium ring-systems that exhibited a new type of aromatic behavior, "metalloaromaticity". Another group of compounds prepared in our laboratory were significant as the first reports of gallium centers engaging in triple bond formation. These discoveries, with some added perspective, will be brought into sharper focus relative to structure and bonding in contemporary organometallic chemistry.