

Insights: Publications

Organometallic Elaboration as a Strategy for Tuning the Supramolecular Characteristics of Aza-Crown Ethers

Organometallics, 38, 22, 4392

November 1, 2019

Written by **Alexandra H. Farquhar, Ph.D.**

Outfitting an aza-crown ether with an organotransition-metal pendant provides a mechanism for tuning its supramolecular properties. The binding affinity can be tuned by more than 2 orders of magnitude by changing the identity of the transition metal-center, altering the overall charge of the complex, or engaging in organometallic ligand substitution reactions. High Li⁺ selectivity (up to 29-fold higher affinity in comparison to Na⁺), proton-responsive behavior, and ion pair (ditopic) binding capabilities are observed in the metalla-crown ethers.

Related People



Alexandra H. Farquhar, Ph.D.

t 404.815.6442

afarquhar@ktslaw.com