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Metal-Containing Halogen-Bonded Materials: A New Frontier of Halogen-Bonded Crystal Engineering

Guest Editor:

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Deadline for manuscript submissions:
closed (15 April 2020)

Message from the Guest Editor

Dear Colleagues,

Over the past few decades, research into halogen bonding has mostly focused on organic systems, and the use of halogen bonding to direct the assembly of metal–organic or organometallic building blocks remains unexplored. However, controlling the solid-state assembly of metal–organic units by halogen bonding, as well as other related sigma-hole interactions, is rapidly emerging as an attractive target for crystal engineering, with new potential in creating supramolecular porous materials capable of selective molecular transport or separation, sensing, or sorption. The presence of metal-based building blocks can impart halogen-bonded materials with new magnetic, optical, and electrical properties that are not readily accessible in purely organic materials.

This Special Issue will investigate this new frontier of crystal engineering and explore the recent advances in fundamental understanding, design, and applications of halogen-bonded metal–organic materials. We would be delighted to receive your original research articles, as well as reviews on the design of halogen-bonded materials involving metal-containing building blocks.

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Message from the Editor-in-Chief

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