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σ and π Holes: A New Class of Non-Covalent Interactions

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

For many years, the research field of the non-covalent interactions has been largely dominated by electrostatic interactions and especially hydrogen bonding interactions. Recently, the study of new non-covalent interactions, based on the existence of the denominated sigma or pi hole, has grown enormously from a theoretical and experimental point of view. Without any doubt, halogen bonding interactions have become in the most promising interactions and numerous examples have been reported. Motivated by the relevance of the results obtained for halogen atoms, many researchers have focused their research on the study of other groups: aerogen, chalcogen, pnicogen, tetrel and icosagen atoms.

This Special Issue aims to highlight the role of this brand new form of noncovalent interaction that has recently appeared in several research fields, including catalysis, crystal engineering, molecular recognition, materials science, as well as theoretical aspects.

Dr. Antonio Caballero Guest Editor













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Message from the Editor-in-Chief

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