



Complexation of Metals in Natural Fluids: Simulations, Experiments and Applications

Guest Editors:

Dr. Giuseppe Cassone

Prof. Dr. Claudia Foti

Prof. Dr. Ottavia Giuffrè

Dr. Franz Saija

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Message from the Guest Editors

Dear Colleagues,

Natural waters and biological fluids are multielectrolyte aqueous solutions in which a wide number of components is dissolved or dispersed, namely essential or toxic metal cations, and inorganic and organic anions at low and high molecular weight, having very different characteristics and concentrations. Metal complexation in such fluids is a key process for understanding environmental (such as mobility, bioavailability, and toxicity of species) and biological phenomena (such as transport through membranes, antibiotic activity, enzyme catalysis, etc.). The study of formation of complexes is of significant importance from both a theoretical point of view, to understand the chemical physics behind the interactions leading to complexation and the mechanisms of action of the species in natural aqueous systems, and an applicative one, to exploit the formation of complex species in processes such as removal of contaminants from natural waters, chelating therapies for detoxification from metals, transport of drugs in biological fluids, sensors, and so on.





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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
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