



Chirality and the Origin of Life

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Message from the Guest Editor

Dear Colleagues,

Chirality is so important in the chemistry of life that it was unavoidable that the very first metabolism (or proto-metabolism) that was set up on primitive Earth would very quickly, perhaps immediately, become asymmetrical. What would have been strands of nucleic acids built on the basis of racemic sugars? Peptides made from mixtures of L and D amino acids? Could they have organized themselves enough to carry out the many stages of the incredible journey towards a living cell? What we know of current life leads us to answer no to these questions. This Special Issue is devoted to this fundamental questioning on the relationship between chirality and the origin of life. It will welcome regular research papers, reviews, and short communications in this field. Relevant topics include the chirality of small molecules (the so called “bricks of life”) and polymers; relationships between the symmetry of various types of molecules and/or polymers, “chiral assemblies”; the role of mineral surfaces in the development of non-racemic mixtures, chiral amplification.....

Prof. Yannick Vallée

Guest Editor





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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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