

Clays and the molecules of life

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This session focuses on the interactions of clay minerals with the constituent molecules of life. A role of clays in the emergence of terrestrial life has been advocated for many years by scientists such as Bernal, Ponnamperuma, and Cairns-Smith and supported experimentally by others. Clay minerals could have aided in biomolecules synthesis, biopolymers formation, confinement of prebiotic systems, the onset of metabolism, and possibly information storage. In order to better assess the potential of clays in these various scenarios, precise physico-chemical information is needed. This session intends to be a platform for discussion between origins of life (OoL) researchers, exobiologists and planetary scientists, and scientists who study clays/biomolecules interactions (adsorption mechanisms, catalysis...) in other contexts such as soil science or geochemistry.

Keywords: Clays, Origins of Life, Prebiotic Chemistry, Biomolecules, Peptides, RNA.

Potential Journals: Applied Clay Science, Astrobiology, Origins of Life and Evolution of Biospheres.

