Thematic Session 33

Clays and viruses

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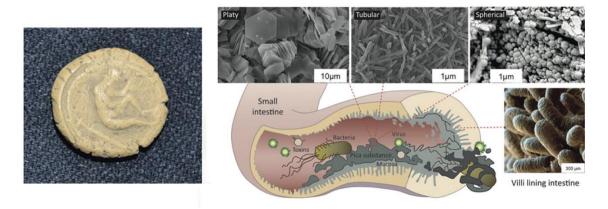
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Viral infections are a fundamental and universal fact of life. All living organisms, even those livingin the most extreme environments, are believed to be the host for at least one virus, with some infections resultingin no visible affects and others causing severe illness and death.

As the world continues to be impacted by SARS-CoV-2 infection, the demand for rapid therapeutic and treatments as well as prevention of virus infection has been at the forefront of all members of society. Clays and clay minerals may have roles as potential therapeutics and/or treatments as they have been shown to bind viruses removing them from environment. In this session we inviteabstracts that focus on the role and interaction of viruses with clays and clay minerals and their associated potential in both human and environmental health.

Keywords: Virus, Infection, Therapeutics, Biomolecules, Astrobiology, Environmental phage therapy, Geohealth, Antiviral.

Potential Journals: GeoHealth.



Left: Troche of terra Lamnia (diameter 15 mm) composited of kaolin used by ancient Greeks to cure gastrointestinal issues. Right: top images of various kaolin forms that bind to small intestin endotheilial cells, which can bind to pathogens. Bottom images is schematic of small intestine and comparitive scale of villi. Figure modified from Williams and Hillier (2014) DOI: 10.2113-gselements.10.3.207