

Exploration of Europa: Search of Ingredients for Life

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The satellite of Jupiter, Europa is one of the most intriguing objects in our solar system as it offers a key for understanding the habitability of icy worlds. This stems from the possibility that Europa has a global-scale ocean buried beneath the icy surface, but its physical properties (location, thickness, conductivity) remain uncertain. Interest in Europa has intensified after Galileo spacecraft revealed remarkable indications of geologically recent activity in Europa's atmosphere, on its surface, and within its interior. Determination of global surface compositions and chemistry is especially important to address habitability. I will discuss about a future exploration which will address the above issues in search for a potential habitability on Europa.