Saturn’s icy moon Enceladus harbours a global ocean, which lies under an ice crust of just a few kilometres thickness. Through warm cracks in the crust a cryovolcanic plume ejects ice grains and vapour into space providing access to materials originating from the ocean. The ocean is 30 – 55 km deep and hydrothermal activity is suspected to be occurring at the bottom. The presentation focuses on results from the two mass spectrometers aboard the Cassini spacecraft, which frequently carried out compositional in situ measurements of plume material emerging from the subsurface of Enceladus.

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