

Composition of Dust Particles Collected in the Coma of Comet 67P/Churyumov-Gerasimenko

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The COmetary Secondary Ion Mass Analyser (COSIMA) is a dust particle composition analyzing instrument on-board the ROSETTA spacecraft orbiting comet 67P/Churyumov-Gerasimenko since August 2014. COSIMA is collecting cometary particles on metal targets in the inner coma, identifies the collected particle on microscopic images and analyses their composition by secondary ion mass spectrometry. We will report on the high resolution mass spectra containing positive or negative ions of elements, organic molecules and molecular fragments originating from the cometary particle surfaces.