

Consiglio Nazionale delle Ricerche ISTITUTO DI SCIENZE POLARI

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## ORGANIC COMPOUNDS IN ICE CORES

In recent years there has been an increasing interest in studying the importance of organic compounds in ice cores. Organic compounds can serve as unique tracers of biomass burning, marine organisms, and volcanic eruptions. However, there are analytical challenges associated with their analysis, the two main ones being contamination and low concentrations. Several new methods are being developed to improve the analysis of organic compounds which will allow us to better understand past events in Earth's history.



PTR-MS is an instrument used for the analysis of organic trace gases in the atmosphere. The aim of my PhD is to develop a method to use PTR-MS for a continuous flow analysis of the organic compounds in ice cores. In this webinar, I will be presenting my project, the DEEPICE project and its connection to the Beyond EPICA drilling project in Antarctica. I will also present the work I did during my one-month secondment at the CNR in Venice in June.