

I CONVEGNO ISTITUTO DI SCIENZE POLARI

Composti organici in tracce come proxies nelle carote di ghiaccio

Roberta Zangrando, Elena Barbaro, Matteo Feltracco, Andrea Spolaor, Giuliano Dreossi, Andrea Gambaro, Barbara Stenni, Dario Battistel, Carlo Barbante.

Roma, 22 – 24 settembre 2021



Le carote di ghiaccio sono archivi ambientali che coprono periodi di tempo di centinaia di migliaia di anni.

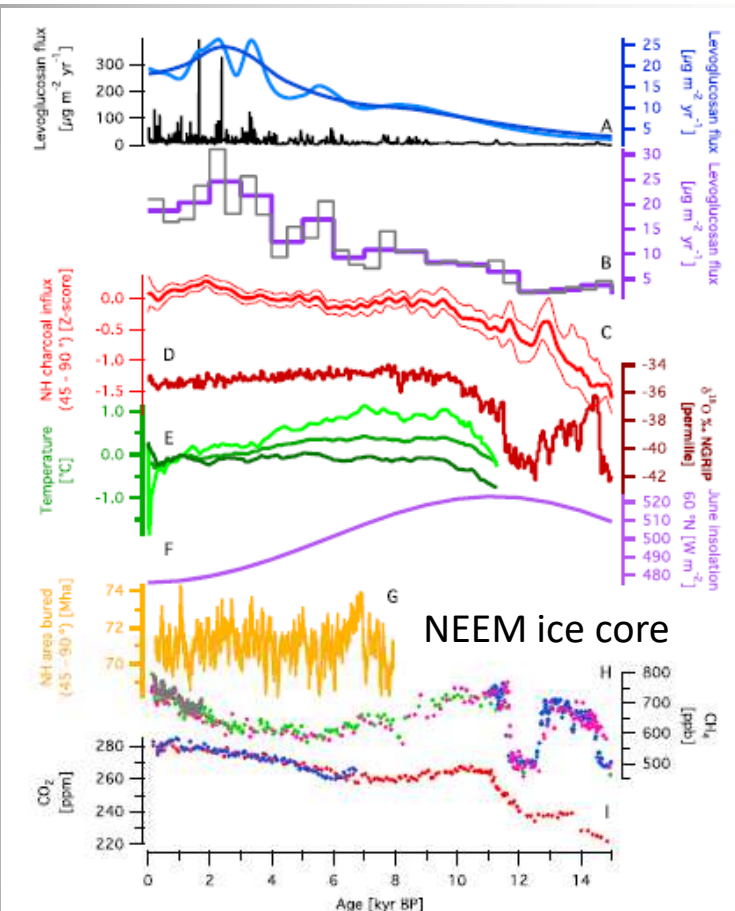
Le concentrazioni di tracce di gas, elementi e composti organici sono proxies che consentono l'interpretazione delle condizioni climatiche passate come: temperatura, umidità.... combustione di biomassa.



La combustione della biomassa è una delle principali sorgenti di gas serra e aerosol atmosferici che influenzano il clima sia regionale che globale.

Il nostro laboratorio ha sviluppato metodi analitici per analizzare levoglucosano e composti fenolici, traccianti organici dell'attività pirica.



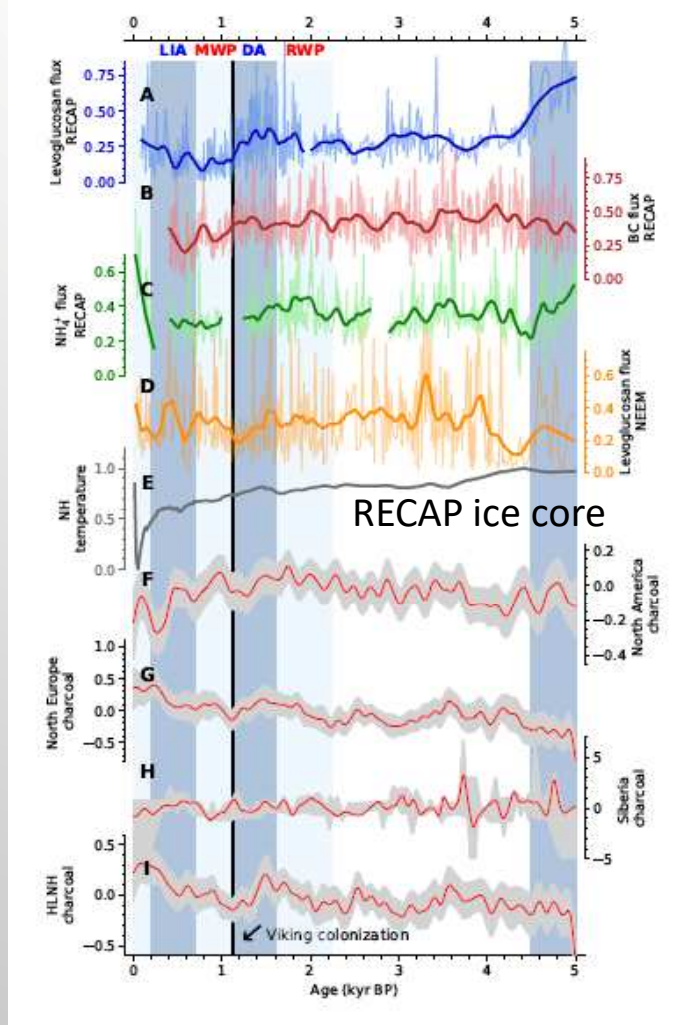


Zennaro et al., Europe on fire three thousand of years ago: arson or climate? Geophysical Research Letters, 2015



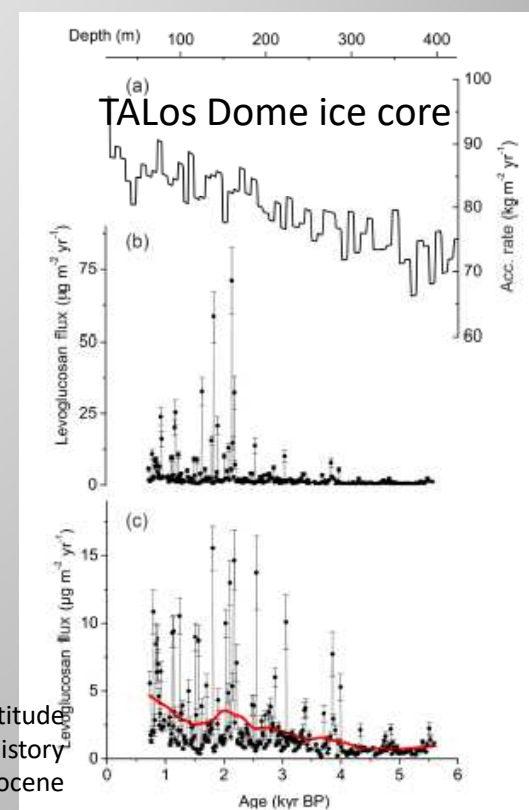
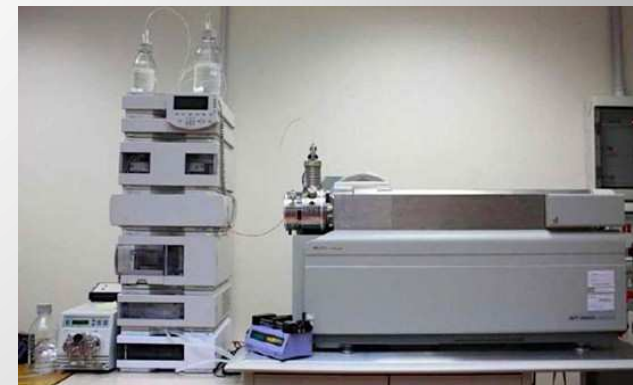
I CONVEGNO ISP
22/24 settembre 2021

Roberta Zangrando
roberta.zangrando@cnr.it



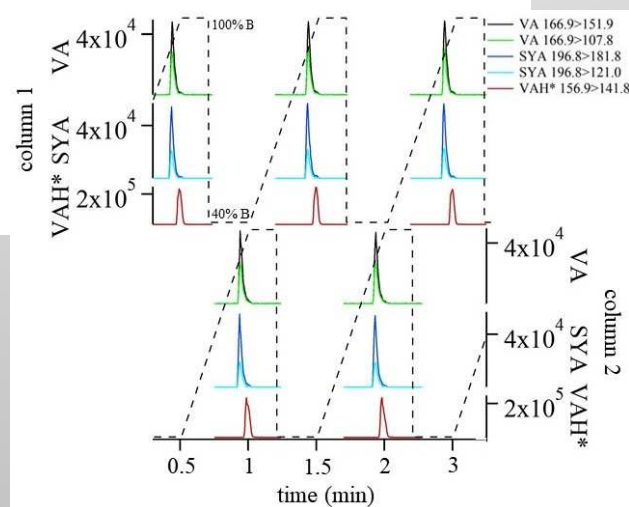
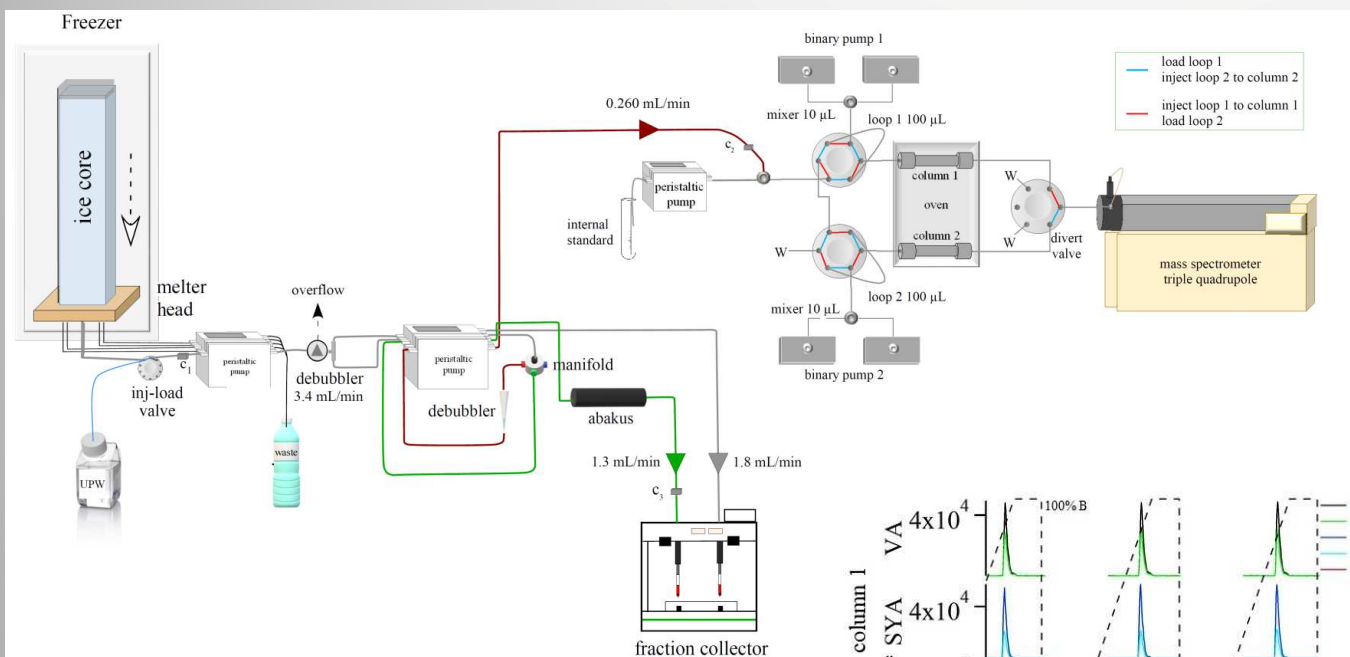
Segato et al., 5kyr fire history in High North Atlantic Region: natural variability and ancient human forcing, Climate of the Past, 2021

Battistel et al., High-latitude Southern Hemisphere fire history during the mid-to late Holocene (6000-750 BP), 2021

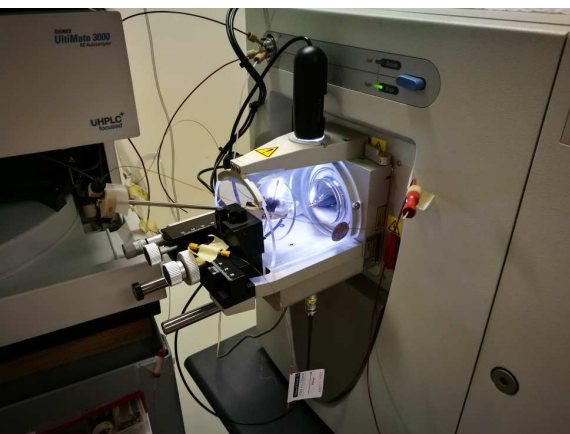


Fast liquid chromatography coupled with tandem mass spectrometer

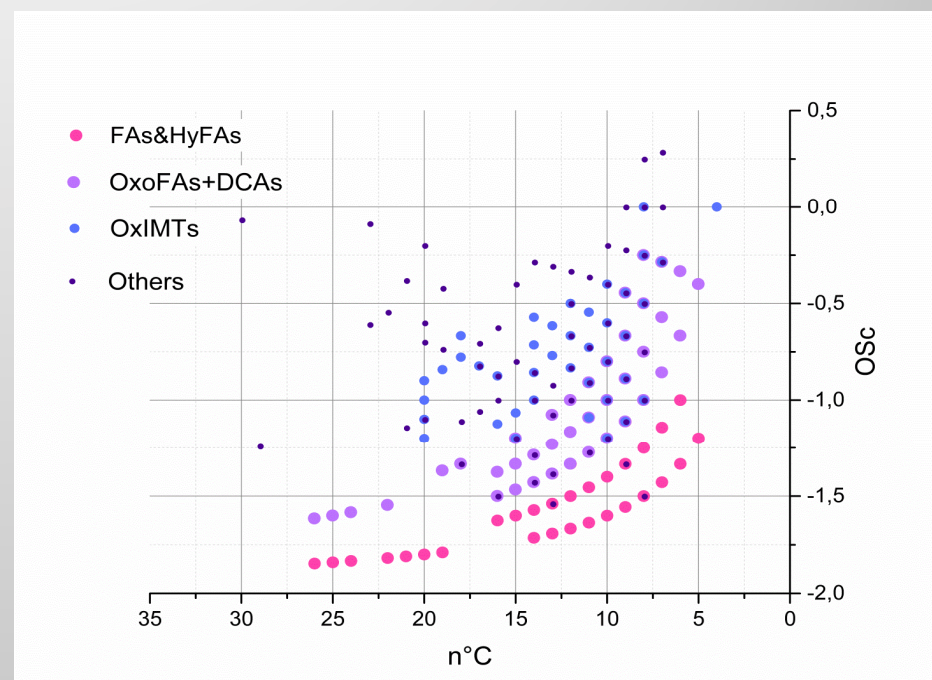
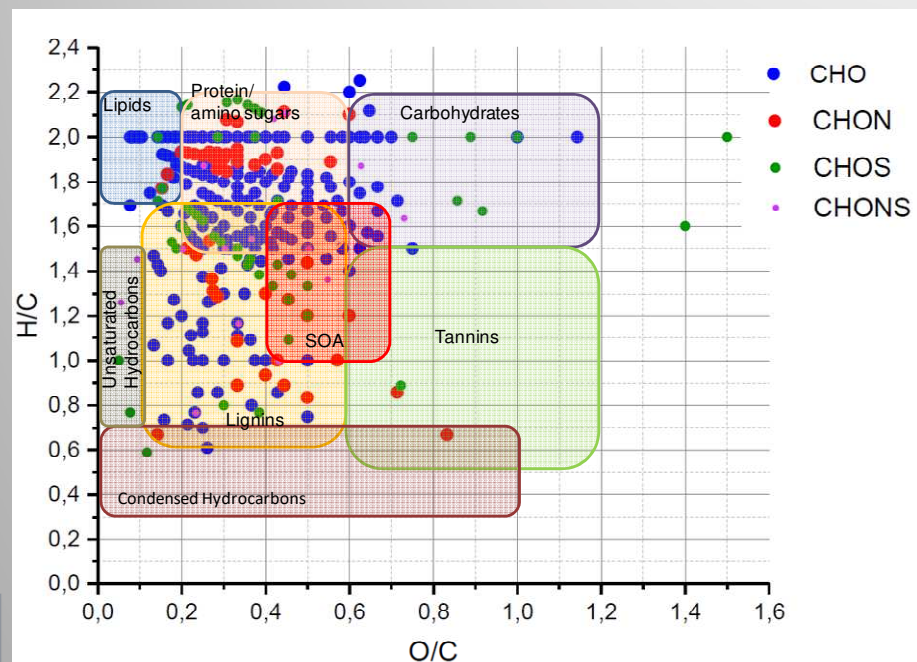
CFA

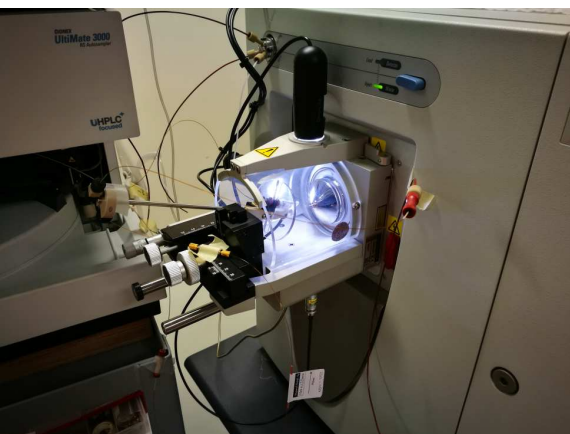


Barbaro et al. "Fast liquid chromatography coupled with tandem mass spectrometry for vanillic and syringic acids analysis in ice cores" submitted in Analytical Chemistry



Untargeted analysis nano-UPLC-nano-ESI-HRMS





Untargeted analysis nano-UPLC-nano-ESI-HRMS

