δ\textsuperscript{11}B determination in low [B] biocarbonates by microsublimation and MC-ICPMS with direct injection: Application

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Session SSP1.5: (Bio)mineral archives of past environmental conditions: from the Precambrian to the present
**Material and methods:** a new protocol developed at IPGP to measure $\delta^{11}\text{B}$ in small samples at very low [B].

- Chemistry blank < 10 pgB
- Sample consumption down to 100 μL for a triplicate
- Measurement down to 0.8 ng with a precision of 0.5‰

**Improvement of the signal/noise ratio with $10^{13}\ \Omega$ amplifiers (Lloyd et al. 2018, *Rapid Commun. Mass Spectrom.*).**

**Development of the microsublimation technic to extract boron (Gaillardet et al. 2001, GGR).**
**Applications:** $\delta^{11}B$ in primary fluid inclusions of marine halites and in foraminifera

Development of the foraminifera cleaning protocol at IPGP and investigation on the $\delta^{11}B$ ontogenetic variability within *Globigerina bulloides* (core PS97-122, Chilean margin): comparison of three size fractions (250-315, 315-400 & $>400\ \mu m$)

Reference material ERM-AE121: reproducibility at different low $[B]$ during the foraminifera measurement sessions

$\delta^{11}B$ measurements in primary fluid inclusions of marine halites to reconstruct seawater $\delta^{11}B$ through the Phanerozoic

Paleo-oceanographic and paleoclimatic reconstructions across the Plio-Pleistocene

Paleo-$pH$ estimations from $\delta^{11}B$ of planktic foraminifera in the Pleistocene (Hönisch et al. 2018, Boron proxies in Paleoceanography and paleoclimatology)
I am looking for a postdoctoral position by early 2021
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