



Research position in Paleoceanography at LSCE

Missions:

The LSCE seeks to hire a young researcher in the context of its studies on paleoceanography and past variability of the carbon cycle during the Quaternary. Applicants should have a dual expertise in (i) **geochemistry of biological carbonates**, and in (ii) identification of **planktonic and benthic foraminifers (modern and fossil) and their ecology**. They should have proved their autonomy in developing new research ideas and their capacity in handling research projects. They will participate in the projects of the Paleocean group.

Activities :

The researcher's main tasks will be

- To set up and submit research projects aiming at understanding past variability of the carbon cycle during the Quaternary
- To get involved in international programs relevant to paleoceanography
- To participate in and/or organize oceanographic cruises
- To make the most of his/her projects and disseminate results through scientific publications
- To supervise and/or train Master and PhD students and post-docs on geochemistry, foraminifer ecology and their identification
- Based on a solid understanding of foraminifera ecology, to insure the development and improvement of geochemical paleo-proxies obtained on those organisms
- To improve measurement of key trace elements on foraminifers in close collaboration with the ICP-MS technician.
- To become the team expert for benthic and planktonic foraminifer identification and supervise the quality control of samples analyzed in the Paleocean team in close association with technician in charge of sedimentology/micropaleontology.

Profile and skills :

The applicants should hold a PhD in a field linked to paleoceanography, geochemical analyses on foraminifers and/or foraminifer ecology. They should have a good expertise in geochemical proxies used in paleoceanography (trace elements, stable isotopes), and thorough knowledge in micropaleontology of planktonic and benthic foraminifers (identification, cryptic species, ecology, ...).

The applicants should have shown an enthusiastic and developed sense for teamwork, in particular during oceanographic cruises. He/she must be willing to develop his/her scientific projects in close cooperation with the group, and take the lead in project submissions at national/international scientific calls.

The candidate must be fluent in scientific English, spoken and written. He/she must have written scientific papers in international peer reviewed journals.

Context :

The Laboratory for Sciences of Climate and Environment (LSCE) is a large laboratory that pulls together personnel from CEA, CNRS and the Versailles-St-Quentin University. It is located on the CEA campus of l'Orme des Merisiers, in Gif-sur-Yvette. There are about 300 people working in this internationally renowned laboratory, 155 of which hold permanent positions.

The Paleocean group is one of the largest teams of LSCE. It is equipped with mass spectrometers for ^{18}O , ^{13}C and Δ_{47} analyses on carbonates and collaborate with ^{14}C dating teams. The Paleocean group has chosen to develop trace element ICP-MS measurements in foraminifer shells (B, Ba, U, Cd, Va, ...) as proxies of the primary production, bottom water oxygenation and chemistry of the dissolved carbon/carbonate system. The shortage of quantitative paleoceanographic data remains an important limiting factor as far as understanding past changes in the ocean carbon cycle is concerned. The trace element data will bring solid constraints concerning the interplay, at different time scales, between atmospheric CO_2 changes and the ocean circulation and chemistry,

The remuneration will be based on the CEA salary grid and will depend upon the academic background and professional expertise of the applicant.



Application procedure :

Questions about the position should be sent to Franck Bassinot, head of the Paleocean group (franck.bassinot@lsce.ipsl.fr).

Applications should be sent to Elsa Cortijo (LSCE director) and should contain the following :

- an extended CV including the list of scientific publications ;
- a covering letter including the main aspects of the research project that the applicant would like to develop at LSCE.

Applications will be examined by a committee in charge of conducting a pre-selection and interviewing the candidates. Audition will take place between June 11 and July 11, 2018. The effective entry into office will take place from November 1st, 2018.

The application should be sent to Elsa.Cortijo@lsce.ipsl.fr by Friday, May 25 2018.