



Internship: Onboard geophysical exploration of mass transport deposits and gas activity offshore North Carolina, USA

Supervisors: C.J Grall (LIENSs, CNRS, France, LDEO, USA), Anne Becel (LDEO, USA), Hugh Daigle (University of Texas, USA)

**Location of the internship, La Rochelle University:
LIENSs (UMR 7266 CNRS- La Rochelle University)**

Description:

A 44 days cruise will happen in May, 2023 along shore North Carolina, Cape Fear USA for studying landslides activity and processes that may trigger these sediment instabilities. This marine cruise is part of a 4 years (2022-2026) US-NSF project OCE- 2140398 (https://www.nsf.gov/awardsearch/showAward?AWD_ID=2140398&HistoricalAwards=false)

The cruise includes Multichannel Seismic acquisition (MCS) and Chirp Sub bottom profiling, water column echo-sounding for systematic gas detection, gravity survey and coring operation. This multi-disciplinary cruise will happen onboard of the Marcus Langseth (US-NSF facilities) and it is a collaborative program in between the LIENSs, UT Texas and LDEO of Columbia University. We are seeking for 2 undergraduate students for taking part of the project, including on-board operations.

The student may have a great interest on learning field experiments and geophysics data acquisition and will mainly work on the on-board processing of water-column data under the supervision of C.J. Grall. The student will be part of the scientific party and will also take part of on-board shift operation. Internship involves pre-cruise preparation with intense learning on data processing and GIS-Information system. Depending on the interest of the student, working on MCS analysis may also be meaningful to the project. Regarding the internationality of the project, the student should be a person curious and particularly interests by learning onboard field experiments. The ability of communicating in English may also be critical, as the project involves international collaborators. An undergraduate student that may be interest on continuing to work on the project over the next few years may be particularly valuable for joining this 4-years research project.

With the target on doing educational opportunities at University fully inclusive and fighting against all discriminations, a particular attention will be made to make the working space safe and comfortable for everybody.