

## Postdoctoral Researcher in Geochemistry

### Los Angeles, CA

#### Employer Description

The Institute for Carbon Management (ICM) is a cross-campus technology-translation entity at the University of California, Los Angeles (UCLA). ICM translates pioneering carbon management solutions from the (laboratory) bench-scale to pre-commercial/commercial-scale devices, prototypes, and (software) solutions. ICM's activities span two major focus areas:

- (1) Technologies for carbon dioxide removal (from the atmosphere), utilization, and avoidance, and
- (2) Technologies for creating new supply chains, and processing approaches for critical materials and elements (e.g., Li, Ni, Co, Mn, Mo) that are foundational to accelerating the clean energy transition, as well as reducing the carbon footprint of extractive processes.

ICM is organized into action teams that are convergent, agile, and world-class. Prominently, these action teams have enabled ICM-born technologies to be awarded the NRG COSIA Carbon XPRIZE, and the 2021 Liveability Challenge, among others. ICM's technologies are now being commercialized via spin-out companies including CarbonBuilt Inc., Concrete-AI Inc., and SeaChange Inc.

#### Role Description

ICM is seeking a post-doctoral fellow to work on mineral dissolution and precipitation with a focus on silicates and carbonates. The candidate will work on assessing the kinetics of the dissolution/precipitation process involved in different environments. The objective is, at terms, to translate the results obtained into a large-scale pilot plant aiming at mitigating atmospheric CO<sub>2</sub> emissions through different processes developed in the group. The candidate must be able to work in a fast-paced environment with different people involved in each project. Questions about the position and application should be sent to Emma Liao ([emmaliao@g.ucla.edu](mailto:emmaliao@g.ucla.edu))

#### Responsibilities

- Conduct mineral dissolution/precipitation experiments in a variety of setups and conditions.
- Analyzing experimental data using the analytical technics present in the laboratory.
- Work in collaboration with grad students, engineers, and researchers on several projects.
- Write research articles and attend conferences.

#### Required Qualifications

- Ph.D. in Geology, (geo)chemistry or any related field
- Strong laboratory experience with rock reactivity (dissolution and precipitation)
- Strong knowledge on silicates and carbonates mineralogy and chemistry
- Strong publication record

- Ability to write research articles, technical reports and give oral presentations.

#### **Beneficial Assets**

- Knowledge in reactive transport modeling
- Knowledge in Vertical scanning interferometry

#### **EEO disclosure**

The University of California undertakes affirmative action to assure equal employment opportunity for minorities and women, for persons with disabilities, and for covered veterans. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's equal employment opportunity policies may be directed to the UCLA Staff Diversity and AA/EEO Compliance Office [\(310\) 794-0691](tel:3107940691) or email at [mailsaa@saa.ucla.edu](mailto:mailsaa@saa.ucla.edu).