



Research Scientist Sublime Systems

November 2020

Background & Overview

Cement is the most massively consumed man-material on the planet. Demand for cement continues to skyrocket as the world's population grows and becomes more urban. For example, China used more cement between 2011-2013 than the USA used in the whole 20th century.

Cement production accounts for 8% of total global CO₂ emission. Each kg of cement results in 1 kg of CO₂ emissions. The average cement plant produces a million tons of cement per year. These emissions must be checked if we are to mitigate climate change.

Sublime Systems revolutionizes cement-making with a patented electrochemical process using renewable electricity that eliminates and captures CO₂ from existing cement operations. The company spun out of MIT's Department of Materials Science and Engineering in 2020, founded by Dr. Leah Ellis and Prof. Yet-Ming Chiang, the scientist, inventor and serial entrepreneur behind A123, Form Energy, American Superconductor, and 24M.

Position Overview

This is an excellent opportunity to revolutionize how the world makes and uses cement. Sublime Systems seeks a creative and dynamic Research Scientist to speed the organization through its initial period of growth. The Research Scientist will be responsible for conducting research including hands-on lab-scale testing and literature searches. As one of Sublime's first employees, the Research Scientist will make a large impact on the development of our R&D lab infrastructure and experimental methods and will have the opportunity to grow as Sublime Systems expands.

- Develop experimental protocols, perform lab experiments including synthesis and materials characterization, analyze data, and present results
- Champion safety, especially in the development of experimental processes
- Contribute to the development of Sublime's process through literature reviews and informational interviews with industry experts
- Foster Sublime Systems's reputation by delivering innovative solutions
- Help to develop a supportive, innovative, and dynamic company culture



Knowledge and Skill Requirements

The role will focus on materials science and electrochemistry. Activities include materials synthesis and characterization, electrochemical system modeling, design, and optimization. This role is expected to be hands-on, with a significant amount of time spent engaging in lab testing. The ideal candidate will have experience designing and testing electrochemical devices and/or processes. The ideal candidate is results-driven, ambitious, organized, and able to thrive in a fast-paced environment.

- Bachelor's degree in chemical engineering, materials science, or related field
- Experience with materials synthesis and characterization
- Experience working in an environment geared towards electrochemical product development or pilot electrochemical system deployment
- Superior presentation and communication skills, both written and verbal
- Strong interpersonal skills including the ability to listen, distill information, consult, and suggest new approaches
- Ability to pay close attention to detail, focusing on accuracy and quality, without losing sight of the bigger picture
- Balance, perspective, and a good sense of humor

**Apply by emailing your CV and cover letter to careers@sublime-systems.com .
Referral of successful candidates will be rewarded!**