



Research Scientist – Chemical Process Development

Sublime Systems

444 Somerville Ave

Somerville, MA, 02143

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Background & Overview

Cement is one of the most massively consumed materials in the world. Each kg of cement results in a kg of CO₂ released to the atmosphere, amounting to 8% of annual global CO₂ emissions. Demand for cement is increasing as the world's population grows and urbanizes. Better, greener ways of making cement are needed if we are to curb CO₂ emissions and mitigate global warming.

Sublime Systems is developing new technology to make CO₂-neutral cement using renewable electricity instead of fossil fuels. Sublime was founded by Dr. Leah Ellis, one of MIT Technology Review's 35 Innovators under 35, and Prof. Yet-Ming Chiang, serial cleantech entrepreneur in MIT's Department of Materials Science and Engineering. Sublime is backed by leading cleantech investors including The Engine, Prime Impact Fund, and Lowercarbon Capital.

Position Overview

Sublime Systems seeks a research scientist to contribute to the development of our cement manufacturing process. This contributor will be responsible for conducting research including hands-on lab-scale testing, data analysis, and literature reviews, and will work with the rest of our engineering team to scale our technology. As a member of Sublime Systems' small but growing team, the research scientist will work closely with the company's leadership and will make a large impact on the development of our technology. This is an exciting opportunity to combat global climate change by transforming how the world makes cement.

Responsibilities include:

- Developing new experimental methods and tools to drive the improvement of Sublime's cement manufacturing process
- Performing lab experiments including synthesis and materials characterization, analyzing data, and presenting results
- Contributing to the development of Sublime's process through literature reviews and informational interviews with industry experts
- Contributing to the development of Sublime's complete, innovative solution
- Championing safety, especially in the development of experimental processes and in the construction of Sublime's pilot plant
- Helping to develop a supportive, innovative, and dynamic company culture



Knowledge and Skill Requirements

The role will focus on chemical reaction engineering, continuous reactor design, and material synthesis and characterization. This role is expected to be hands-on, with significant time spent in the laboratory. The ideal candidate will be independent, results-driven, ambitious, organized, and able to thrive in a fast-paced environment.

- B.S. or M.S. in chemical engineering or a related field plus three or more years of relevant experience in research and development on chemical processes or systems, OR Ph.D. in chemical engineering or a related field.
- Strong grasp of chemical engineering and chemistry fundamentals.
- Knowledge of chemical reaction engineering and continuous reactor designs, ideally including precipitation and dissolution processes.
- Ability to select and perform analytical techniques for physical and chemical characterization of solids and aqueous solutions.
- 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.

Sublime Systems is proud to be an Equal Opportunity Employer

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, protected veteran status, or any other characteristic protected by law.

Your Right to Work

In compliance with federal law, all persons hired will be required to verify identity and eligibility to work in the United States and to complete the required employment eligibility verification document form upon hire.

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