

POSITION: Environmental Engineer

JOB DESCRIPTION:

- 1) Bench-scale experiments design and conduction:
 - a. *Design and perform isotherm study, adsorption kinetics study, evaluation of media performance on pollutant removal via batch experiments.*
 - b. *Design and perform rapid small-scale column test (RSSCT) to evaluate target pollutant breakthrough behavior.*
- 2) Water treatment system design and testing:
 - a. *Employ environmental and engineering principles and practices to design pilot and full-scale systems based on different application scenarios, including pressurized and gravity packed-bed filtration system, fluidized bed system, and continuous stirred-tank reactor (CSTR) system.*
 - b. *Employ computational fluid dynamics to design and perform bench-scale tests to model hydraulic conditions under each application scenarios, including hydraulic loading rate, backpressure, and terminal velocity.*
 - c. *Employ engineering principles to configure treatment system in terms of piping and instrumentation.*
- 3) Environmental monitoring:
 - a. *Develop environmental monitoring strategy based on geological and environmental information, including watershed delineation, source of contamination and hydrologic conditions.*
 - b. *Conduct field work including grab sampling, passive sampling, and sample preservation.*
- 4) Sample analytics, contaminant identification and measurement:
 - a. *Develop suspect screening and non-target screening workflow with liquid chromatography and mass spectrometry for the identification and semi-quantification of emerging contaminants.*
 - b. *Interpret the output from related instruments and software by big data analysis and advanced data visualization. Convert large datasets into insightful observations.*
- 5) Conduct independent research on different topics, such as water chemistry and lead leaching issue; summary and comparison of current commercially available PFAS treatment technologies.
- 6) Prepare reports and presentations.

Job is located at Cook County, IL 60077.

Require Master in Environmental Engineering with 6 months related experience.

Apply to: Cyclopure Inc., 171 Saxony Road #208, Encinitas, CA 92024. Attn: HR. Please submit your **resume** and **cover letter** to careers@cyclopure.com with Subject: **Environmental Engineer at Cyclopure**.