

Mechanical Engineer - Geothermal

Date: 12/10/2021

Reports To: Project Team Leader

Location: Parsippany, NJ

Starting Salary: Starting salary at \$80,000, negotiable based on experience.

Number of positions: 1

Short Description of the Hiring Company:

CHA Consulting, Inc. is an innovative, full-service engineering consulting and construction management firm delivering sustainable, integrated solutions to the world's most challenging infrastructure projects. We are nationally known for our expertise in the identification and delivery of energy efficiency and generation solutions for the commercial, institutional, and industrial sectors. Our team is comprised of industry experts with hands-on experience as facility managers and engineers.

Objective of the Job Title:

CHA Consulting, Inc. is currently seeking a Mechanical Engineer - Geothermal to join our Power – Generation & Energy group. Working closely with professional engineers, the Mechanical Engineer - Geothermal assists in the design development, implementation, and technical analysis of various systems to implement new products, or changes to an existing scheme, to suit individual client needs.

Job Responsibilities:

- Leading the development of relationships, opportunities, and proposals.
- Managing geothermal design-build initiatives, providing full project management and delivery of these projects.
- Coordinating with clients and key project contacts, external design teams, general contractors, and sub-consultants.
- Drafting sub-consultant scopes of work, receiving proposals, approving proposals, subconsultant agreements, and tracking/approving project costs.
- Analyzing Horizontal and vertical geothermal Bore Field Systems
- Analyzing the potential of installing geothermal heat pumps. This requires conceptual geothermal design, computerized heating and cooling loads, and energy analysis to determine the proposed systems economic feasibility over conventional HVAC system.
- Integration of geothermal heat pumps with renewable distributive energy resources for municipal, university, school and hospital facilities.
- Geothermal Heat Exchanger Modeling
- Building Heating and Cooling Load Modeling & Life Cycle Cost Analysis to support the design development, implementation, and technical analysis of various systems to implement new products, or changes to an existing scheme, to suit individual client needs. Develops and maintains a familiarity with the federal, state, and local regulations, as well as the firm's and client's practices, procedures, and standards.

Education & Licensure:

- Bachelor's Degree in Engineering is required
- Engineer-in-Training (EIT) certification required
- Professional Engineer (PE) license is preferred

Professional Skills/Experience:

- Minimum of 3 years of related engineering experience is required
- Excellent understanding of commercial building sciences, mechanical system design, conventional HVAC, heat pump technologies, building automation and energy modelling applications.

- An understanding of energy-related issues in the commercial, industrial, institutional and multi residential building sectors, and who the key players are in those sectors
- Excellent knowledge of HVAC system sizing for commercial projects above 30T, configuration and selection of appropriate equipment and systems as well as compliance with appropriate building and operating standards.
- Knowledge of governmental and utility incentive programs for sustainable heating and cooling (e.g., NYSERDA - New York State Energy and Research Development Authority)
- Strong knowledge of engineering, computational, and modeling software (Revit, AutoCAD, MicroStation, etc.)
- Familiarity with ground heat exchanger design software (ex. GLD, GHLEPro)
- Familiar with QA/QC procedures
- Effective verbal and written communication skills with the ability to adapt communication style to suit various audiences
- Desire to work in a collaborative team environment with the willingness to assist more senior staff
- Proficiency with Microsoft Office software required

CHA takes pride in recruiting, developing and retaining highly talented individuals. In addition to competitive salaries, we offer a comprehensive benefits package and a variety of opportunities for our employees' professional growth and development.

We as an organization celebrate the values of inclusion and equality, and advocate for the full participation of all people in an environment free of discrimination. To support these values, we invite all qualified applicants to be considered for employment regardless of race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship, age, disability, protected veteran status, or any other characteristic protected by law.

Interested? Please click the below link:

[Green Energy Job Postings Interest Form](#) or copy/paste the following link into your browser:

<https://form.jotform.com/203245466535052>