

# InfiniteCooling

Infinite Cooling's mission is simple: to mitigate water scarcity around the world. We help power plants and other industrial processes reduce their water consumption and water treatment costs by recovering water from their cooling tower exhaust. We have a patented technology developed at MIT that uses electric fields to capture water from the plumes leaving cooling towers. We are a vibrant startup based in Somerville, Massachusetts, and we are on a mission to be a global leader in the water services industry for industrial applications and save hundreds of billions of gallons a year. Infinite Cooling has won the MIT \$100K, MassChallenge, the DOE national Cleantech competition and numerous other awards. We are backed by leading investment funds and have received multiple government grants.

We are looking for a sharp, tenacious and creative R&D Engineer to join our team and lead research and development efforts to inform design changes and optimizations for Infinite Cooling's products. The role will require both modeling and experimental lab work. Designing experiments to quickly inform design decisions and gaining a fundamental understanding in core technology concepts will be central to the role. Strong communication, flexibility, and the desire to "wear many hats" will all be essential skills.

## What you will do:

- Design and experimentally test various evaporative cooling and condensation systems
- Numerically and experimentally model fluid flows and heat transfer in various configurations
- Generate ideas and produce proof-of-concept designs for new product features
- Experimentally test various high voltage ionization systems
- Apply analytical solutions to physical problems starting with first principles
- Come up with new designs and test their efficiency numerically and experimentally
- Become a subject matter expert in our technology and provide technical support to the rest of the team
- Participate in requirements definition and system-level validation testing
- Lead team discussions on design alternatives to solve complex electrostatic, thermal-fluids problems, develop new features, and optimize systems
- Design and build electromechanical parts and experimental setups to test that prototypes meet requirements
- Perform failure analysis on components and sub-assemblies
- Be a lab safety Czar

## About you:

- You are passionate and optimistic
- You are genuinely curious, innovative, and you challenge assumptions
- You have unwavering personal integrity and work ethic
- You are proactive and productive
- You graciously give and receive feedback

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- You are adaptable and excel working in a fast-paced dynamic environment

Preferred skills and experience:

- PhD or equivalent in Engineering or Physics.
- Professional experience in addition to academic background preferred
- Strong track-record of successfully applying research to inform industrial product design
- Extensive experience with high voltage and plasmas or ionization processes
- Proficiency with CFD, electrodynamics and thermal modeling, and FEA including vibrations
- Basic knowledge of mechanical design and how to integrate electrical sub-assemblies effectively
- Experience with data acquisition and complex data analysis using standard tools such as Python, Matlab, Arduino, labView, and relational databases
- Ability to pare down complex problems into achievable steps and complete difficult assignments in a timely manner
- Strong organizational skills; solid written and oral communication required

Location:

444 Somerville Ave., Somerville MA

Contact:

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