

Job title: R&D Engineer

Location: Lancaster, PA

Description:

Advanced Cooling Technologies, Inc. (ACT, www.1-act.com) is actively seeking qualified Research & Development (R&D) Engineers at B.S., M.S. and Ph.D. levels to support the growth of our vibrant research and development programs. ACT's R&D group develops state-of-the-art technologies and works to transition them to products for space, defense, and energy related applications. Some of our technologies and their applications include:

- Dropwise Condensation and Phase Change Materials for Power Plant Dry Cooling
- Variable View Factor Radiators and Vapor Venting Devices for Spacecraft Thermal Control
- High Temperature Alkali Metal Heat Pipes for Chemical Reaction, Calibration, and Aerospace Applications
- Nanofluid Solar Receivers and Nucleating Agents for Desalination Applications
- Plasma Chemical Reactors and Swiss Roll Heat Exchangers for Fuel Reforming Applications
- Novel Wettability Engineered Fabrics and Cooling Devices for Personal Thermal Control
- Multi-scale and Advanced Modeling Techniques for Predicting Corrosion, Crack Fatigue, and Material Performance Under Harsh Conditions
- High Heat Flux Electronic Cooling Using Heat Pipes, Vapor Chambers, and Pumped Two-Phase Systems
- Vortex Phase Separators and Heat Exchangers for Zero-g and Variable Orientation Fluid Management
- Thermo-radiative Cells for Thermal to Electric Power Conversion in Deep Space
- Thermo-electric Cooler Heat Pipe Heat Exchanger for Sonobuoy and Aerospace Cooling Applications
- Low SWaP Thermal Storage and Management Systems, some including PCM Heat Exchangers, for High Energy Lasers

R&D engineers at ACT also have flexibility to define new programs that strengthen our company's core competency in thermal management and/or expand our company's technology portfolio in diversified areas. Candidates with strong communication skills, high ambition, and a tendency to create and innovate are encouraged to apply. ACT also offers an attractive and competitive compensation/benefits package, along with a highly stimulating work environment.

Job Responsibilities Include:

We assign our R&D to ongoing projects and expect them to work on all aspects of their projects from start to finish. The project responsibilities typically include:

- Developing new technical concepts to address research problems.
- Writing research proposals in response to competitive government funding opportunities.
- Developing analytical and numerical models to support prototype design and test data analysis.
- Drafting CAD models and drawings to support prototype and experiment fabrication.

- Working with technicians to fabricate and test hardware.
- Communicating with customers through presentations, written reports, tele-conferences, etc.
- Authoring research papers and presenting newly developed technologies and techniques at technical conferences.
- Managing projects: responsible for schedule and project financial performance.
- Interacting with product development and marketing teams to transition new technologies to production.

Minimum requirements include:

(1) U.S. citizenship or permanent residency is preferred. However, the sponsorship of visas will be considered. (2) B.S., M.S., or PhD degree in Engineering or Science. (3) Strong track record indicating the candidate possesses R&D level of talent.

ACT is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, sexual orientation, gender identity, age, status as a protected veteran, status as a qualified individual with a disability, or any other trait protected by law.

Application instructions:

<https://www.1-act.com/about-act/careers-were-hiring/>