

Product Development and Testing Engineer (I, II, III)

About Caporus

At Caporus, we develop the technologies that will connect our world's energy and communications. We enable products for our customers to achieve their electrification goals through sustainable materials and design innovation.

Caporus' patented capacitor technologies enable reliable capacitive energy storage and filtering at the higher voltages and temperatures required by the next generation of high-density power conversion systems. Caporus dielectrics employ advanced materials and processes to meet the increasingly demanding requirements for power conversion systems that are key to supporting the electrification of transportation and integration of distributed energy resources on the grid. We are at the beginning of a global shift in electrification, and Caporus is at the forefront of these developments.

Caporus is backed by venture capital and has received grant support from DOE and NSF. Following incubation at Argonne National Laboratory, Caporus is expanding internal operations in Chicagoland and collaborations globally. We are a small, growing, high-energy team with a passion for developing the most innovative materials and products to positively impact society.

Position Description

Caporus Technologies, Inc. is seeking candidates for a full-time engineering position to work closely with the engineering and management team on the design, development, and testing of capacitors and other electrical products. The successful candidate will have hands-on experience in the safe operation and maintenance of test equipment, including high voltage power supplies, LCR meters, oscilloscopes, etc. Candidates with CAD and electromagnetic simulation experience are preferred.

In addition to hands-on testing and evaluation, this position will involve the design, modeling, and simulation of new electrical components and systems. Collaboration with both contract manufacturers and the internal materials production team will be critical. The successful candidate will be able to work independently, roll up their sleeves to tackle challenges without fear of failure, work on the cutting edge of new electrical components, and be passionate about contributing to the success of a new startup. This position will report directly to the CEO and will have an opportunity to engage on all aspects of product development and Caporus' business.

Key Responsibilities

- Design, modeling, and simulation of electrical components
- Management of electrical test equipment and procedures
- Electrical testing of samples and full-scale components
- Failure and root cause analysis
- Maintenance of a detailed experiment log, including procedures and environmental conditions
- Development of component fabrication processes
- Verbal and written communication of experimental results, challenges, and proposed solutions
- Documentation of results and integration into new intellectual property filings



- Manage technology transfer with contract manufacturers, strategic partners, and pilot customers
- Maintenance of sample, product, and equipment inventory
- Development of fabrication and test procedures
- Preparation of work and safety plans
- Other duties as assigned

Qualification Requirements

- BS or higher degree in electrical engineering, physics, mechanical engineering, or a related discipline
- 2+ years post-graduation in an engineering position
- CAD proficiency (SolidWorks preferred)
- Electromagnetic simulation experience (EMWorks or CST Studio preferred; others accepted)
- Ability to be granted site access for work at Argonne National Laboratory preferred
- Computer proficiency including MS Office and cloud-based file and project management
- Articulate communication both verbally and written

Preferred Requirements:

- Experience with high voltage (> 500 V DC) or high power electrical systems preferred
- Experience in startup or small team environments a strong plus
- Knowledge of creating new Intellectual Property (patents, know-how, etc)
- Experience working with contract manufacturers, including validation and technology transfer into and out of the contract manufacturer
- Experience in a customer facing role, including customer discovery and collaboration
- Experience creating and contributing to marketing documents, such as white papers, test manuals, and demonstrations

Compensation

- Salary will be commensurate with experience and competitive
- Health, dental, and vision
- Compensation may include stock option grants