

## **MODERN ELECTRON is looking for SEMICONDUCTOR PROCESS ENGINEER**

We are a start up in Seattle dedicated to generating cheap, distributed, and reliable electricity for all. Expensive mechanical engines and turbines based on 19th-century technology are still used to generate >80% of today's electricity worldwide. Modern Electron seeks to revolutionize the industry with direct heat-to-electricity generators. >\$10 MM venture capital is committed to our vision. We do novel work at the intersection of nanofabrication, material science, thermal engineering, and vacuum science.

Visit us at <http://modernelectron.com/join-us/> to find out more.

A highly qualified engineer is needed to work on the product R&D team, and will be responsible for innovation and production of micro-/nanoscale vacuum electronic devices using the company's groundbreaking technology and processes. Particular focus will be on developing fabrication processes compatible with low workfunction materials and developing devices with nanoscale features and high dielectric breakdown strength.

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Our company is a startup, with tremendous learning opportunities and growth potential. We value our ability to move fast in achieving what larger corporations cannot. We're looking for well-rounded standout colleagues who are self-motivated and will contribute new, inventive technical solutions. We also want employees who can assume leadership roles when called upon, but also understand the importance of contributions one can make by simply completing the necessary tasks assigned.

### **ESSENTIAL SKILLS, KNOWLEDGE, AND ABILITIES:**

- Expertise in micro-/nanofabrication techniques
- Expertise in multistep process design, mask/reticle and design and production, and projection lithography (e.g. stepper lithography)
- Experience with wafer-scale packaging techniques for MEMS/NEMS (e.g. wafer bonding, wire bonding, etc.)
- Expertise in thin film deposition (evaporation, sputtering, PECVD, ALD, LPCVD, etc.)
- Expertise in wet and especially dry etching (e.g. RIE, ICP-RIE, DRIE, etc.)
- Experience with metrology techniques such as SEM, AFM, profilometry and ellipsometry
- Prefer you have deep knowledge in device characterization (e.g. AC, RLC circuit, I-V, function generator, automated semiconductor testing equipment)

### **QUALIFICATIONS:**

- At least 8 years of post-bachelor (Ph.D. + work) experience in advanced lithography and analysis techniques.

We are an equal opportunity employer.