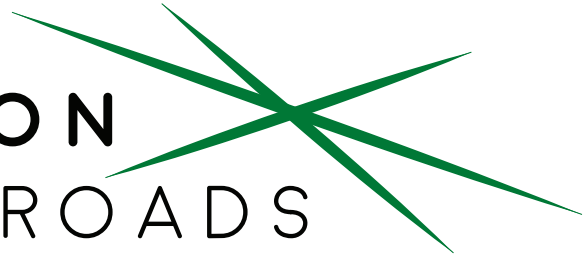


Empowering Aspiring Hard-Tech Entrepreneurs

INNOVATION CROSSROADS



University of Tennessee

Zeanah Engineering Complex
863 Neyland Drive, Knoxville, TN 37996
First Floor Classroom

Local Startup CAREER SHOWCASE

Thursday, February 9, 2023
5:00 – 6:30 p.m.

INNOVATION CROSSROADS



What is **INNOVATION CROSSROADS?**

Innovation Crossroads is a program supported by the US Department of Energy (DOE) Advanced Materials and Manufacturing Technologies Office, DOE Building Technologies Office, and the Tennessee Valley Authority (TVA) that leverages Oak Ridge National Laboratory's (ORNL) unique scientific resources and capabilities and connects the nation's top innovators with experts, mentors, and networks in technology-related fields to take world-changing ideas from research and development (R&D) to the marketplace.

The 2-year fellowship program focuses on accelerating energy and advanced manufacturing technologies. Through an annual national call and competitive stage-gate process, top entrepreneurial-minded fellows are selected to join the program. Selected innovators receive a fellowship that includes a personal living stipend, along with health insurance and a travel allowance, a substantial grant to use on collaborative R&D at ORNL, and comprehensive mentoring assistance to build a sustainable business model.

By embedding the next generation of top technical talent within ORNL, Innovation Crossroads positions entrepreneurial researcher fellows to address fundamental energy and manufacturing challenges identified by industry.





What is the **SPARK INNOVATION CENTER?**

The Spark Innovation Center is the UT Research Park's focus on entrepreneurship development and commercialization of regional technology-based startup companies. Knoxville was recently rated among the nation's top clean tech hubs, according to Saordah Enterprise Partners, and Spark is a significant contributor to that effort. Spark offers what selected tech startups typically need: available and reasonably priced laboratory space, prototyping shops, and top-level mentorship in business model development, financial planning, and investor readiness. Spark has demonstrated its ability to support successful startups through securing outside funding and key strategic partnerships and has grown two prominent programs: a 2-year incubator program and a 12-week clean tech accelerator.

Opportunity

Looking for an exciting opportunity to work at a growing hard-tech startup in Knoxville? Startups within Innovation Crossroads, the Spark Incubator Program, and the Spark Cleantech Accelerator are actively expanding their teams. Startup founders are currently seeking talent to fill internship, part-time, and full-time opportunities in a variety of technological fields.



Addiguru

Addiguru is a high-growth startup for real-time monitoring of additive manufacturing — also known as 3D printing — using sensor data and artificial intelligence (AI). Additive manufacturing is a quickly growing industry, held back only by high costs. Addiguru reduces cost by reducing waste and designing 3D printing to be self-healing. Addiguru's software spans the most exciting topics in computer science from AI and computer vision to user interface design. Addiguru is paving the way to revolutionize manufacturing.

Opportunities:

- Applications engineer or R&D engineer (full-time)
- Software engineer intern — AI/machine learning and computer vision (part-time/internship)
- Software engineer intern — Application development (part-time/internship)

Contact: sk@addiguru.com

DayLyte Batteries

DayLyte Batteries is developing a next-generation metal-air battery that stores two to three times the energy of a lithium-ion battery. DayLyte's battery is made with abundant materials to make electric aircraft take off; make electric vehicles affordable, safe, long-range, and fast-charging; and to have it all powered by clean, renewable energy on demand.

Opportunities:

- Senior engineer — Chemical, materials sciences, or mechanical (full-time)
- Engineering intern — Chemical, materials sciences, or mechanical (part-time/internship)

Contact: calebta107@protonmail.com

Electro-Active Technologies

Electro-Active Technologies was spun out of ORNL and has developed a holistic, circular solution to help companies and communities decarbonize. Their proprietary bio-electrolyzer technology converts organic waste, including food waste, into hydrogen fuel and a soil fertilizer. The modular system can be deployed in a distributed fashion to reduce transportation costs and enables diversion of organic waste from landfills, preventing methane emissions, and producing products that can replace fossil fuel-derived alternatives, creating a negative carbon pathway. Electro-Active is seeking passionate, motivated, and talented people to join its team. Electro-Active works to create a diverse, equitable, and inclusive environment to advance solutions for the betterment of the world.

Opportunities:

- Electrical engineer (full-time/part-time/internship)
- Biochemical engineer (full-time/part-time/internship)

Contact: alewis@electroactive.tech

Eonix

Eonix develops next-generation materials for lithium-ion batteries to solve application-specific energy storage problems in electric vehicles, grid storage, consumer electronics, and aerospace and defense. The faster, more comprehensive, and lower-cost approach to battery materials research has resulted in market-ready innovations in months — not years.

Opportunities:

- Engineer (full-time/part-time/internship)

Contact: dderosa@eonixenergy.com

FC Renew

FC Renew, LLC is developing processes to increase the lifetime of zero-emission, hydrogen fuel cell electric vehicles (FCEVs). Transport solutions are a vital part of modern life as we know it. Sustainable transport solutions with zero emissions will have increasing importance in the future. The increased environmental and legislative demands are great drivers for new technology for heavy-duty vehicles to meet these demands of the future.

Opportunities:

- Fuel cell renewal test engineer (full-time)
- Fuel cell renewal process development intern (internship)

Contact: philipstuckey@gmail.com

Holocene Climate Corporation

Holocene is a carbon removal startup building technology to remove carbon dioxide from the atmosphere. They got started at Stanford University, and they are supported by Bill Gates's Breakthrough Energy Fellowship program, the Innovation Crossroads program at ORNL, and the Spark Incubator at the University of Tennessee Research Park at Cherokee Farm.

Opportunities:

- Organic chemist — Carbon removal (full-time)
- Process engineer — Carbon removal (full-time)
- Prototype engineer (full-time)

Contact: anca@theholocene.co

Safire Technology Group

Safire Technology Group is a venture-backed company developing batteries that help prevent fire and explosion upon kinetic impacts, such as electric vehicle or e-bike crashes. The company's core technology, SAFe Impact Resistant Electrolyte (SAFIRE), is the world's first patented and proprietary drop-in additive for lithium-ion batteries that prevents fire and explosion through an instantaneous liquid-to-solid transformation upon kinetic impact. The additive provides a safe, easily integrated solution for EVs and other lithium-ion-powered equipment, resulting in increased safety and stability, higher performance, and projectile and ballistic protection. Safire has been awarded an exclusive license to five patents to date through its partnership with ORNL, the technology's inventor.

Opportunities:

- Technical professional — Energy storage, materials processing, chemistry, or materials sciences (full-time/part-time)

Contact: hayley@safire.co

SkyNano

SkyNano is a science-based technology company focused on commercializing a free-market solution to carbon pollution. It specifically develops a novel electrochemical manufacturing technology for the capture and conversion of carbon dioxide from various sources (e.g. atmospheric, concentrated, flue gas) into valuable carbon-based materials such as carbon nanotubes. SkyNano's technology has been featured in many peer-review scientific papers; received recognition from a 2020 R&D 100 Award, a 2021 TechConnect Defense Innovation Award, and a 2022 Tennessee Governor's Environmental Stewardship Award; and was recognized with a 2019 Forbes 30 Under 30 award to co-founder and chief executive officer Anna Douglas. In fact, both SkyNano founders are Forbes 30 Under 30 innovators, as professor Cary Pint was awarded the recognition in the inaugural year of the awards. SkyNano was founded in 2017 as a spin-out of Vanderbilt University and incubated at the DOE-funded Innovation Crossroads program at ORNL. The company has now raised over \$10 million to bring their technology to market and currently employs eight full-time employees and three part-time employees. SkyNano has office and laboratory space off Papermill Road in Knoxville.

Opportunities:

- Summer intern — Engineering or physical sciences (internship)
- Technician — Engineering or physical sciences (part-time)

Contact: anna.douglas@skynanotechnologies.com

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