SkyNano
Chemical Engineering Intern
Knoxville

About
SkyNano is a science-based startup company backed by the National Science Foundation and the Department of Energy focused on commercializing a technology that captures atmospheric carbon dioxide and electrochemically converts it into functional carbon materials. Using patent-pending technology first developed at Vanderbilt, our technique overcomes cost and scalability limitations associated with traditional nanocarbon manufacturing techniques, while also giving commercial viability to carbon conversion technologies through the introduction of a high-value secondary material produced from greenhouse gas inputs.

SkyNano is currently seeking highly motivated and qualified scientists and engineers who have backgrounds in chemistry, chemical engineering, materials science, and all related fields to further develop this technology. This position enables a meaningful research experience in a unique startup environment at the intersection of a prominent national laboratory (Oak Ridge National Laboratory), a highly productive academic research laboratory (Prof. Cary Pint’s lab), and large companies with applications of the materials we’re producing. We are a dynamic interdisciplinary team with background expertise in Chemistry, Mechanical Engineering, Physics, Materials Science, and Nanotechnology, with past experiences that all fit together to produce a highly productive fast-paced team.

Intern roles and responsibilities
Our 2020 summer intern position's scope of work will include nanomaterial synthesis, electrochemical experiments, materials characterization, and engineering design work. Tasks include participating and presenting in weekly team meetings, prioritizing weekly goals, and executing experiments to test underlying hypotheses to achieve goals.

Required qualifications
• Working towards a bachelor’s degree in physical science or engineering field (Chemical Engineering and Materials Science preferred)
• Passion for energy and climate-related technologies
• Aptitude to convey technical concepts and facilitate scientific discussions through excellent verbal, written, and visual communication skills
• Demonstrated ability to learn new skills and technologies quickly
• Practical and rational approach to problem-solving
• Positive, open-minded, and flexible attitude
• Excellent time-management skills, with the ability to set priorities, multi-task, and adapt to ever-changing needs in a fast-paced environment to meet deadlines

Preferred skills
• Experience working in research laboratory (outside of lab coursework)
• Experience working with nanomaterials and related characterization techniques