

# High Temperature Ceramic Sensor Research

## What did you learn?

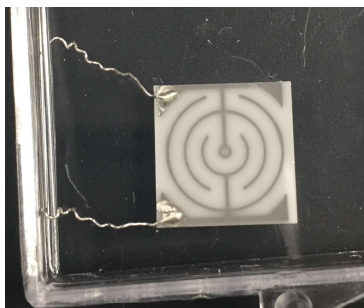
While completing my STEP Signature Project I learned many things about myself. Before the project, I hadn't had any experience with putting my education to technical use. I learned that I enjoy being a source of information during a technical talk and that I liked being able to add to a conversation between people who have many more degrees than I do. I also learned that when I don't have official activities, I don't use my time wisely. I learned that I really enjoy cooking food and having the responsibility of choosing my own meals from the grocery store.

**Project description:** This STEP project was for undergraduate research that focused on developing a ceramic sensor for the Air Force that would be able to measure pressure, temperature, and oxygen content at 2200°C. The STEP funding would go towards paying my housing rent, utilities, and food while I am living in Columbus over the summer to participate in this research.

## What was transformational about your project?

These changes will have a very direct impact on the next three years of my life. Because of this experience, I am now a more viable candidate for co-ops and internships, I am more confident and comfortable talking to my professor, I am able to accumulate and present data in an organized fashion and know that I don't want to go to graduate school directly after getting my bachelors degree. After this summer research, I have become a more well-rounded individual and discovered a lot about myself as a person.

**Name:** Nicole Sturgeon  
**STEP Project Category:** Undergraduate Research  
**STEP Faculty Member:** Dr: Sheik Akbar  
**Major:** Material Science and Engineering



## What was your favorite part of the experience?

I really enjoyed connecting with my professor on a different level and seeing another side to academia and the university.

## What motivated you to select this project?

I knew this summer I was going to be in Columbus because I was taking classes. When I was able to secure a research position, it seemed like a perfect opportunity to use STEP make some of the expenses more manageable on a part time budget.

