Ved Vakharia
IDEA Center’s Spotlight on UCSD’s GEAR Program

Quick Facts
Grade: 4th Year (PhD Student)
Major: Materials Science and Engineering
Outside interests: Photography, basketball, gym, and biking

Questions about your experiences:

What involvement as an undergraduate student led you to pursue your Ph.D?
Early in my 3rd year as an undergraduate, I sought a research opportunity in my material science professor’s lab group. The combination of my experience there and my exposure to internships helped me understand my interests and strengths lie in research.

What is your research about?
My research investigates the synthesis and effectiveness of ultra-high temperature resistant, high strength materials for the eventual use in nuclear fusion structures and hypersonic, supersonic, aerospace, and aeronautical vehicle systems. I am investigating a novel material system, high entropy metal carbides, whose complexity betters its material properties when compared to its individual parts.
What do you want to do after your Ph.D? Do you want to pursue academia or work in industry?

I will be pursuing a career in research outside of academia, for example being a research scientist at NASA. I'm currently a long-term intern with NASA Glenn and plan to continue my work after I obtain my Ph.D.

What’s your favorite part about being a UCSD Alum?

I recognize and appreciate the contribution of The Team Internship Program (TIP) at JSOE to my career trajectory. My first three internships (PG&E, Solar Turbines, and UTC Aerospace) were organized through JSOE’s recruitment efforts. Those internships led to my research opportunities with the Air Force Research Laboratory (Dayton, OH), NASA Langley (Hampton, VA), and the Navy (San Diego, CA). Now I’ve reached my goal of working with NASA Glenn (Cleveland, OH), and I owe some of that to the opportunities made available to me through JSOE at UCSD.

From your experiences, what advice would you offer current students?

I would advise students to try and diversify their professional (and research) opportunities. I think knowing what you aren’t interested in is as important as knowing what you are interested in. Your first internship may not be your favorite or related to your eventual career path. Also, never underestimate the importance of work/life balance.