

## Formal Intro

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Dr. Anamika Prasad is a faculty in Mechanical Engineering at South Dakota State University. She received her PhD from MIT in Materials Science and Mechanics and a postdoc from Stanford Bioengineering. Her undergraduate is in Civil engineering from IIT Varanasi, India. Dr. Prasad joined SDSU in the Fall of 2016 and leads the Biomaterials and Biomechanics lab in the Mechanical Engineering department. Her research includes (a) a fundamental understanding of the structure-function-composition relationship in biological and engineering materials, (2) develop bio-based and bio-inspired materials for engineering applications, and (3) integrate research into undergraduate education and STEM outreach as a vehicle to serve the underrepresented population. She holds a patent on a blood pressure measurement device and has also published several peer-reviewed articles. Her lab is currently involved in multiple projects, which includes a NASA-funded project on additively manufactured metal alloys, development of 3D bioprinter for tissue printing, and plant tissue biomechanics. She is a recent recipient of the 2019 and 2010 AFRL Summer Faculty Fellowship with Air Force Lab.

## Informal Intro

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Hi there! I am Anamika an Assistant Professor in Mechanical Engineering at South Dakota State University. I work with materials: engineered ones like metal and metal alloys as well as biological ones like bones and arteries. My dad was an Electrical Engineering, and my mom was a Psychology Professor, so I guess I became a combination of them: Engineering Professor! Growing up, I loved math and science, and I always knew I would be working in that area but was not sure exactly how. So, my path has been a series of gradual reckoning of my passion for engineering. I finished my undergrad as a Civil Engineer and worked for three years designing bridges and structures. It was a little scary to see my signatures on design blueprints and when the structure was under construction, but all become worthwhile when I would see the finished product. After three years in the industry, I wanted to go back to learning and teaching. So, I moved on for my graduate studies at MIT USA, where I first did a Masters in Civil Engineering and then a Ph.D. in Materials Science. The materials used in engineering fascinated me more than only the structure itself, and so the move to materials science seemed natural for me. Now, I study the structure, processing, and mechanical behavior of materials for applications varying from rocket engines, to medical implants, to biological tissue in our body. I have worked and in India and the US, and unfortunately, the one thing that did not get old across the globe is me "being the first" or only female in the room. Now, wherever I go for STEM education, I am so glad to see the next generation of boys and girls working together and doing their part in changing that. I have found engineering fun and ever-evolving field with room for many different interests. New ideas have given rise to new areas to explore and understand, such

as Nanotechnology, 3D printing, and Bioengineering. Having a diverse room and brain will make it only a more exciting ride for all!