



TEXAS TECH
UNIVERSITY



The Srivastava Lab

Bioinspired Nanotechnology for Improving Healthcare

Fully Funded PhD Positions in Nanotechnologies for Disease Diagnostics and Image-Guided Interventions

Position Description: The Srivastava Lab in the Department of Mechanical Engineering at Texas Tech University is seeking **two** highly motivated students interested in pursuing a Ph.D. in Nanotechnology for Disease Diagnostics and Image-Guided Interventions. At The Srivastava Lab, we combine the unique characteristics of natural biomaterials with nanoengineering design principles to make biomimetic nanoparticles for early diagnosis and image-guided surgical/therapeutic interventions of diseases including cancer, cardiovascular diseases, and bacterial pathogenesis. The intended starting date is **Fall 2023** or **Spring 2024**. The candidate will assist in setting up the lab and developing novel nanotechnologies for the delivery of nanotherapeutics and early diagnosis of diseases. They must be self-motivated, capable of working on individual projects and as part of a team. The Srivastava Lab is committed to hiring diversely and inclusively.

Required Qualifications and Skills:

- We encourage applicants to have an MS degree in Mechanical Engineering, Bioengineering, Chemical Engineering, or a related field. Outstanding students with a BS degree will be considered.
- We expect candidates to have previous research experience in at least one of the following areas: **nanoparticle synthesis, nanoparticle characterization, and mammalian cell culture.**
- We seek individuals that are self-motivated with the ability to work independently on individual projects and as a part of the team.
- Strong writing and verbal communication skills will be needed for this position.
- The Srivastava Lab expects the hired students to be respectful and committed to building an inclusive and welcoming laboratory environment.

Application Instructions: If you are interested in this position, please contact Prof. Indrajit Srivastava at [indrajit.srivastava at ttu dot edu](mailto:indrajit.srivastava@ttu.edu). The subject heading of your email should be "The Srivastava Lab Doctoral Position in Nanotechnology: [Your Name]". Please include (i) a cover letter (no more than one page), (ii) your CV, (iii) TOEFL and GRE scores (for international students), and (iv) your unofficial/official transcripts. Two letters of recommendations could be requested for shortlisted candidates. We encourage you to tell us using your cover letter why you are a good fit for the position. Please use it to tell us which research direction you are interested in, why you are interested in it, and how your prior research experiences have prepared you for it. *Applications that do not adhere to these instructions will be considered incomplete and not receive any response.*

About Prof. Indrajit Srivastava: Prof. Srivastava is an Assistant Professor of Mechanical Engineering at Texas Tech University. He obtained his B.E. degree in Metallurgical Engineering and Materials Science from the Indian Institute of Engineering Science & Technology, Shibpur, India, and his M.S. and Ph.D. degrees in Bioengineering from University of Illinois at Urbana-Champaign (UIUC). He subsequently worked as a postdoctoral research associate at the departments of Bioengineering & Electrical & Computer Engineering at UIUC. He has published over 25+ research articles in peer-reviewed, high-impact scientific journals including *Advanced Functional Materials*, *ACS Nano*, *PNAS*, and *Nature Communications*. His scientific and outreach works have been recognized with several awards and honors, including multiple Baxter Young Investigator Awards, American Chemical Society Future Faculty Scholar, and BMES Career Development Award. Through his mentoring and outreach activities at UIUC, he has shown his commitment to enhancing diversity, equity, and inclusion in STEM.