

Multiple Ph.D. Candidate positions available in Plasma Physics research

The Aerosol Manufacturing Lab at The University of Memphis is looking for highly motivated Ph.D. candidates to join our dynamic team. **Our aerosol and plasma research focuses on developing modeling and experimental approaches to harness dusty plasmas (plasmas containing aerosol particles) for high throughput materials processing applications. Recent research efforts have led to innovative analysis of grain trajectories in plasmas to develop models of thermodynamic and transport behavior in such systems.** Our work has received funding from both prestigious US federal agencies (National Science Foundation, Department of Energy Office of Science, Army Research Office, NASA-JPL to the tune of ~\$1.9 million, including the Principal Investigator Prof. Ranganathan Gopalakrishnan receiving the Early Career Award from the Department of Energy in 2020. Our lab works closely with active researchers at several leading institutions such as The University of Iowa, Baylor University, Auburn University, German Aerospace Center, Indian Institute of Technology at Goa. Research conducted in our lab has resulted in 12 publications and 1 US patent since 2016. Interested candidates can find more information on Prof. Gopalakrishnan's research:

<http://www.memphis.edu/me/faculty/gopalakrishnan.php>

<https://scholar.google.com/citations?user=tQrZ9j4AAAAJ&hl=en&oi=ao>

We have several open positions available in the interdisciplinary areas of plasma physics, aerosols, and chemical physics. We have multiple Ph.D. candidate positions for students with a background in mechanical engineering, chemical engineering, physics, or chemistry. with high self-motivation. Students will be rigorously trained to perform and publish scientific research in the interdisciplinary area and will have the opportunity for joint training at The University of Memphis and our collaborator institutions. These projects are supported by grant funding from Department of Energy and Army Research Office. **Interested candidates should send a 1) cover letter indicating their interest, 2) CV, 3) Master's transcripts, 4) Master's thesis (if applicable), 5) publications (if any), Master's thesis, and 6) names of 2 references, as a single PDF to Prof. Ranganathan Gopalakrishnan (rgplkrsh@memphis.edu).** Successful applicants will receive competitive salaries and benefits. These positions are open immediately, and we are interviewing candidates on a rolling basis.

