

**Updated on January 29, 2023**

### **Multiple Ph.D. student opportunities in Plasma Physics and Applied Mechanics**

The Particle Science and Technology Laboratory (PSTL) 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 (low-temperature plasmas containing aerosol particles) for high throughput materials processing applications. Research conducted in our lab has resulted in 12 publications and 1 US patent since 2016.

Our work has received funding from prestigious US federal agencies that include the National Science Foundation, Department of Energy Office of Science, Army Research Office, NASA-JPL to the tune of ~\$1.9 million. Principal Investigator Prof. Ranganathan Gopalakrishnan is a recipient of the highly competitive Early Career Award from the Department of Energy in 2020. Our lab works closely with aerosol and plasma researchers at several leading institutions such as The University of Iowa, Baylor University, Auburn University, German Aerospace Center, Indian Institute of Technology at Goa. 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.

We have multiple PhD student opportunities available in the interdisciplinary areas of plasma physics, aerosols, and chemical physics. Successful applicants will receive competitive stipend and tuition benefits. These positions are open immediately, and interviews are conducted on a rolling basis. Motivated students with a background in mechanical engineering, chemical engineering, physics, or chemistry are encouraged to apply:

- PhD aspirants with master's degrees in mechanical engineering, Chemical Engineering, Physics, Chemistry, or related disciplines are encouraged to apply.
- Direct PhD aspirants with bachelor's degrees in Mechanical Engineering, Chemical Engineering, or related disciplines are also encouraged to apply.

**Interested candidates may send the following as a single PDF to Prof. Ranganathan Gopalakrishnan ( [rgplkrsh@memphis.edu](mailto:rgplkrsh@memphis.edu) ):**

1. one page cover letter indicating areas of interest and professional goals,
2. Professional resume,
3. Master's and/or Bachelor's transcripts,
4. Master's/Bachelor's thesis (if applicable),
5. publications (if any), and
6. names of 2 references.

