

Postdoctoral Research Associate in Agonafer Lab for the Development of Novel Two-phase Coldplate Technology

Department of Mechanical Engineering and Materials Science enme.umd.edu

The Department of Mechanical Engineering at University of Maryland, College Park announces an open postdoctoral position in Agonafer's research group. In this project, we will build a novel two-phase cold plate for CPU/GPUs in servers for hyperscale cooling.

Anticipated responsibilities include leading the research effort to develop the novel two-phase evaporative cold plate and coordinate with other teams and participants in the project, guiding the graduate students working on the project, and preparing reports and presentations for the quarterly update meettings.

Candidates are expected to be self-motivated, with the ability to work independently and as an integral member of a team. The Postdoctoral appointment would entail performing research, mentoring of students, and helping with project management and fundraising activities including presentations to sponsors and preparation of proposals. Strong oral and written communication skills, as evidenced by refereed journal publications and conference presentations, are essential.

Required qualifications:

- Ph.D. in Mechanical Engineering, Materials Science and Engineering, Chemical Engineering, Chemistry, Applied Physics, or a closely related field.
- Extensive background in heat and mass transfer and fluid dynamics is required.
- Prior experience in in designing and conducting two-phase experiments, electrochemistry, microfluidic visualization methods, and single-/multiphase CFD simulations is required.
- Experience in using Ansys and/or COMSOL, SolidWorks, and LabVIEW is required.
- Experience in designing and implementing two-phase cold plates in servers and racks is plus.
- A strong publication record in relevant journals, and excellent verbal and written English communication skills are required.
- The ability to work well in a self-paced, independent manner, while working well in cooperation with team members and partners is required.

More Information:

- Please visit University of Maryland College Park Postdoctoral affairs page to learn more about life of postdocs at UMD www.gradschool.umd.edu/postdocs
- Employee benefits: <u>www.gradschool.umd.edu/faculty-and-staff/postdoctoral-scholars/postdoctoral-appointments/postdoctoral-associates</u>

To Apply:

Three to five letters of reference in PDF format, CV and a research statement should be sent to:

Dr. Damena Agonafer: agonafer@umd.edu