

**Project Title:**

Studies of Molecular Plasma Kinetics with CFD-ACE+

Project Reference Code:

ESI

Host Facility:

ESI US R&D Inc.

Host Facility Location:

620 Discovery Dr.

STE 120, BLDG 2

Huntsville, AL 35806

<http://www.esi-group.com>

Project Description:

ESI US R&D Inc., is seeking a summer intern with basic knowledge of plasma science and gas discharge physics to explore CFD-ACE+ software for simulations of low temperature plasma in molecular gases. The intern will learn how to use and apply CFD-ACE+ software to solve specific problems of molecular gas plasma using electron kinetics and plasma modules. Background knowledge of engineering software and plasma physics is a plus. The intern will work closely with researchers from ESI and other EPSCoR institutions to develop and apply CFD-ACE+ tools for solving plasma problems of interest. Some levels of qualifications are required in programming, visualization & data exploitation on Linux and Windows platforms. Work experience with MS Office applications for reporting and presentation of results is required.

Disciplines:

Physics of Gas Discharges, Computational Plasma Physics, Electrical and Computer Engineering

Is U.S. citizenship required to participate in this project?

No

Internship Location and COVID-19 related Backup Plan

Due to the COVID-19 pandemic, we are preparing multiple options to ensure that the internship will take place. We are looking at least at an in-person, hybrid, and fully virtual option. For any in-person component we will ensure that there is adequate physical spacing between workspaces, following all relevant cleaning protocols.

Name(s) of Mentor(s) and contact information:

Ananth Bhoj (Ananth.Bhoj@esi-group.com)

Internship Coordinator/ HR manager:

Jeanie Cotton (Jeanie.Cotton@esi-group.com)

The name and contact information of personnel at the host facility is provided for further assistance with questions regarding the host facility or the project.

Interns will not enter into an employee/employer relationship with the host facility. No commitment with regard to later employment is implied or should be inferred.