



Corporate Internship Program on Plasma Technology Applications



Project Title:

Multi-dimensional and multi-species laser plasma simulations with AMR codes

Project Reference Code:

CFDRC-Arslanbekov

Host Facility:

CFD Research Corporation

Host Facility Location:

6820 Moquin Dr NW, Huntsville, AL

<https://www.cfd-research.com/>

Project Description:

CFDRC is seeking one intern with good knowledge of or willing to learn C, C++, Octave/Matlab programming languages or with skills to apply commercial software packages to multi-physics modeling. Some background knowledge of plasma, chemistry and laser physics and computational physics is a plus. The intern will learn how to program commercial quality, as well as research, software or to apply it to a variety of problems related to gas discharge and laser plasma physics in multi-dimensional and multi-species settings and run software on Linux platforms in HPC environment. The intern will work closely with researchers from the EPSCoR institutions to apply the computational tools to various problems of interest. Some levels of qualifications are required in visualization & data exploitation on Linux and Windows platforms. Work experience with MS Office applications for reporting and presentation preparation is required.

Disciplines:

Gas Discharge Physics, Laser Physics, 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

The internship location is at CFD Research Corp. in Huntsville, AL. We are planning for an in-person internship. However, due to the continuing COVID-19 pandemic, we are preparing additional options to ensure that the internship will take place, such as a hybrid or fully virtual option.

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

Dr. Robert Arslanbekov (rra@cfdrc.com) phone: 256-726-4808

Dr. Vladimir Kolobov (vik@cfdrc.com) phone: 256-726-4847

Internship Coordinator/ HR manager:

Rick Wilbourn, HR manager (rick.wilbourn@cfdrc.com) phone:256-726-4901

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.



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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.