

To Whom It May Concern,

It is with great confidence that I recommend Ms. Laura Pereira de Castro in support of her petition for the EB-2 National Interest Waiver. I had the opportunity to supervise Ms. Pereira de Castro during her research internship at the Illinois Institute of Technology, where she contributed to a U.S. Department of Energy–funded project aimed at reducing emissions in diesel engines.

From the beginning, Ms. Pereira de Castro impressed our team with her exceptional technical rigor, creativity, and capacity for independent work. She developed automated data-processing pipelines that integrated GT-Suite simulations with Python and Excel, allowing for seamless transfer, analysis, and visualization of engine-performance data. Her automation framework replaced manual workflows that had previously consumed hours of post-processing, significantly increasing the team’s efficiency and ensuring data consistency across multiple engine test campaigns.

Ms. Pereira de Castro’s contributions drew upon a solid foundation in thermodynamics, combustion, and numerical modeling, developed during her engineering formation at ISAE-ENSMA in France and the Federal University of Uberlândia in Brazil. Her curriculum included advanced courses in fluid mechanics, heat transfer, multi-phase flows, and data analysis, which provided her with the rare ability to bridge physical modeling and computational automation—a skillset highly valuable in energy and propulsion research.

In addition to her technical talent, Ms. Pereira de Castro demonstrated strong communication and project-management skills. She consistently delivered clear reports, documented her tools well, and collaborated effectively with both faculty and graduate researchers. Her work directly supported the DOE project’s goal of improving combustion efficiency and reducing environmental impact—objectives that align closely with the United States’ national priorities in clean energy and sustainable technology development.

For these reasons, I offer my unequivocal support for Ms. Pereira de Castro’s EB-2 NIW petition. She is a talented and dedicated engineer whose expertise and initiative will continue to contribute meaningfully to technological innovation and the public good.

Sincerely,



Carrie Hall, Ph.D.
Professor, Mechanical, Materials and Aerospace Engineering Department
Associate Dean for Undergraduate Affairs, Armour College of Engineering
Illinois Institute of Technology
10 West 32nd Street, Chicago, IL 60616

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