

Internship: Study hydrogen gas heat transfer in low pressure environments experimentally

Introduction

Are you a Master student in Mechanical Engineering or Applied physics, with experience in thermo-fluids? Then we are looking for you!

Job Mission

Background Information:

Low pressure gasses are commonly used in ASML's latest machines. Thermal stability of the modules depends on heat transfer through low pressure H₂ gas. This is compounded by rapid acceleration / deceleration induced temperature swings. Currently, not all temperature swings in combination with the hydrogen gasses are known, and more experiments are needed to explore this area.

Job Description

Your assignment:

You will conduct an experimental study about heat transfer through low pressure gasses. During your internship, you will:

- Define the steps of the experiment
- Adapt the test setup for the experimental study, if needed
- Carry out experiments
- Analyze the data and modeling
- Present the findings and report them

Education

Your profile:

You are a Master student in Applied Physics, Aerospace or Mechanical Engineering, with an affinity for thermo-fluids including heat transfer mechanisms.

This is a fulltime internship with duration of 4 to 6 months. The start date of the assignment would be September 2015 preferably, but can be discussed upon.

Please keep in mind that we can only consider students who are enrolled at a school during the whole internship period for our internships and graduation assignments.

Other Information

What ASML offers

You will receive an internship monthly allowance of 500 euro maximum. Plus a possible housing allowance or travel allowance. Terms and conditions can be found on the website. In addition, you'll get expert, practical guidance and the chance to work in and experience a dynamic, innovative team environment.

Join ASML

ASML is leading in the worldwide development, production and sales of high-end lithography systems for the semiconductor industry. Almost 14,000 people worldwide work at ASML at offices in the United States, Asia and at the corporate headquarters in Veldhoven. ASML employees share a passion for technology with a customer focus. At ASML, we work collectively to further develop and implement complex and high-quality technological systems. Working at ASML is therefore challenging and dynamic, with ambitious objectives and high standards key to our continuing success. But hard work here pays off: ASML invests in the development of its people and successes are shared. ASML promises mutual commitment to our growth and yours.

More information: Arjan Frijns and/or Silvia Gaastra-Nedea