



Become part of our mission to create a sustainable world and write your master thesis or complete an internship at our location in Sierre, Switzerland.

## Internship or Master Thesis (m/f/d)

### Simulation of Melt Treatment Systems

R&D Department

#### Your responsibilities:

The aim of this internship or master thesis is the development and application of suitable CFD simulation models for the prediction and visualization of multiphase fluid flow scenarios in various melt treatment systems in Novelis. These simulation models are to be validated in reality and consequently instrumentalized in order to optimize existing processes.

This includes the following responsibilities:

- Elaboration of a short literature review on simulation techniques suitable for multiphase fluid flow systems.
- Set up of suitable numerical models using available solvers (OpenFOAM, Comsol).
- Optimization of processes and process parameters depending on the type and properties of the fluid system (phase and size distribution, shape parameters, densities, etc.)
- Construction of a water model and validation of numerical predictions with this physical model.
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#### How to convince us:

- Bachelor's or Master's degree in mechanical engineering, computational engineering, material science or metallurgy.
- Knowledge about computational fluid dynamics (CFD) and experience with OpenFOAM, Comsol or comparable CFD simulation software
- Team spirit and excellent skills in a multicultural teamwork.
- Fast learning, innovative spirit and the ability to deal with ambiguity.
- Fluent English, French and German is an advantage.

# Novelis

#### Who we are:

Novelis is driven by its purpose to shape a sustainable world together.

As a global leader in innovative products and services and the world's largest recycler of aluminum, we partner with customers in the automotive, beverage can and specialties industries to deliver solutions that improve the benefits of balanced lightweight aluminum.

We have a coordinated network of technically sophisticated rolling and recycling operations across 33 facilities in 9 countries throughout North America, South America, Europe, and Asia with just under 15,000 employees worldwide.

The Sierre site has 520 employees for our various production lines and our global Research and Development center.

Our customers include some of the largest and best-known brands in the world, including Coca-Cola, Ford, BMW, Jaguar Land Rover, Nespresso, Samsung, and others. In addition, Novelis is leading the industry with its sustainability and recycling efforts. Currently, Novelis recycles about 40 billion used beverage cans annually – enough to circle the earth more than 100 times.

#### What Novelis offers you:

- An internship position within the global pioneer for technology and sustainability in the future market of aluminum processing and recycling.
- The opportunity to obtain a position at Novelis after completing the internship and thesis.
- An attractive remuneration package.
- Flexible working time models and the possibility for mobile working
- An open corporate culture with the opportunity to drive things forward and contribute ideas
- The opportunity to shape a sustainable world together

#### Have we caught your interest?

Then write your thesis or complete your internship at Novelis! We are looking forward to your application!

You can apply easily with your resume via:  
Email: [rh.sierre@novelis.com](mailto:rh.sierre@novelis.com)

We live diversity and therefore welcome all applications - regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, sexual orientation, and identity.

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