



PAUL WURTH

SMS group

We are looking for a

Internship – Chemical process Engineer for green ironmaking (m/f/d)

Paul Wurth, a global leader in ironmaking technology is actively working on CO₂ reduction approaches for the blast furnace-based iron production route. Therefore, a dedicated R&D group focusing on different technologies of green energy production and usage in iron making has been setup. One of the most promising solutions for the global future is the combined and flexible usage of multiple green energy sources, to maximize integration efficiencies, economics, and reliability in the process. This process combines the benefits of circular carbon using novel in-house developed dry reforming reactors with the power of direct electrification through plasma, allowing for flexible usage of renewable biomass, ammonia, hydrogen, and electricity. The novel energy sources will need dedicated production and integration technologies to guarantee CO₂ reduction not only on a local level at the iron making itself, but also holistically on plant level until the finished steel product, and globally when considering the full product carbon footprint over its life cycle.

Your main tasks:

- Academic literature research of applied sciences to model & understand physical mechanisms
- Plant engineering & process calculations (Mass & energy balance, Heat transfer, Chemical kinetics, etc.)
- Business development & economic analysis of various technical solutions in terms of costs, value and risk
- Market studies, technology surveys of available equipment and ongoing developments
- Communication support with external entities such as suppliers, partners, customers, conferences, etc.

What do we expect?

- BSc or MSc in process engineering, chemical engineering, or related discipline
- Start preferable mid-September
- Be available for 4 - 6 months
- Strong analytical mindset and independent research capability
- Deep understanding of thermodynamics and energy balances
- Good knowledge of MS Excel. Basic knowledge of any process simulation software is a plus (Aspen, Aveva, etc.)
- Any knowledge of detailed process design is a plus (P&ID, valves, HAZOP, etc.)
- Any experience in UI/UX design, data/file organization, sales, public speaking or teaching activities is a plus.
- Proficiency in English. French, German, Luxembourgish or other languages are additional assets
- Strong interpersonal and communication skills.

What do we offer?

- Internship in an international team in one of Luxembourg's leading industrial players
- Exciting and diverse topics and work streams
- An open-minded and diverse Process & Technology department that will integrate you within their team



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- Flexible internship scheduling for good synergy with university curriculum
- Office near the bustling and well-connected Luxembourg train station and a parking lot for easy commuting
- Flexible working hours for even easier commuting
- Attractive remuneration package.

If you are an open-minded, communicative, and dynamic person who loves to work in a team or if you are an organisational talent and keep the overview of your projects, then you are in the right place.

Join us in conquering new challenges and be part of our Paul Wurth team #turningmetalsgreen!

Please apply online:

<https://careers.paulwurth.com>