



Internship: Dielectric withstand of gas insulated switchgear (f/m/d)

At Hitachi Energy our purpose is advancing a sustainable energy future for all. We bring power to our homes, schools, hospitals and factories. Join us and work with fantastic people, while learning and developing yourself on projects that have a real impact to our communities and society. Bring your passion, bring your energy, and be part of a global team that appreciates a simple truth: Diversity + Collaboration = Great Innovation

The design of high voltage (HV) devices, such as gas insulated switchgear and gas circuit breakers (CB), requires – among other things – the accurate determination of their dielectric withstand. The aim of this internship will be two fold. Firstly, to maintain the existing organized collection of available data (a breakdown database) with the analysis and addition of recent tests and new data from literature. and secondly, to provide support for new project development (in SF6 and alternative gases), by means of electric field simulations, maintenance of dielectric evaluation tools and basic tests. Would you like to obtain practical experience in an international and future-oriented company? Then join us as an intern for 6 months to 1 year. You will be involved in projects and will take on specific tasks independently. Use your time, expand your network and get to know us through an internship.

Our flexible work practices help you optimize personal and business performance while creating an environment where all employees can develop their skills and grow.

Your responsibilities

Familiarize with the internally developed dielectric evaluation tools and contribute to their maintenance
Data post-processing, analysis and evaluation of internally performed breakdown measurements, and test results; update of breakdown data base
Collaborate in high voltage circuit breaker (SF6 and alternatives) development project teams related to dielectric design; support the design process with breaker E-field simulations, basic tests, or optimizations
Internally developed dielectric tools maintenance
Literature search on recent work regarding breakdown/flashover in technically relevant conditions, also including gases alternative to SF6, data extraction (includes field simulations, e.g. Comsol)

Your background

Student (preferably Master-level) in Physics, Mechanical, Electrical Engineering, or a related field
Above average proficiency and interest in programming (e.g. Python and/or Matlab, Excel, utilization of Python libraries)
Knowledge in High-Voltage Engineering is advantageous
Fluency in written and spoken English
Ability to work in a team, as well as willingness to handle responsibilities independently

More about us

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We serve customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. We are advancing the world’s energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 38,000 people in 90 countries and generate business volumes of approximately \$10 billion USD. www.hitachienergy.com

Interested in joining our team? If so, we look forward to receiving your full application (motivation letter, CV, references) only via our online careers tool.

Hitachi Energy Switzerland Ltd.
Sonia Canelada Granizo
Talent Acquisition

Location	Zürich, Oerlikon,Zurich,Switzerland
Business Unit	High Voltage Products
Publication Start Date	09.05.2022
Job Function	Research and Development
Publication ID	CH53177171_E1