



Scientist Ph.D. Medium Frequency Transformers (60-100%)

Take your next career step at ABB with a global team that is energizing the transformation of society and industry to achieve a more productive, sustainable future.

At ABB, we have the clear goal of driving diversity and inclusion across all dimensions: gender, LGBTQ+, abilities, ethnicity and generations. Together, we are embarking on a journey where each and every one of us, individually and collectively, welcomes and celebrates individual differences.

The mission of this team is to bring modern and disruptive power electronic solutions from research into product development. We improve our products by holistic optimization, pushing forward novel converter topologies as well as optimizing key components. By joining us, you will participate in the idea generation at the frontier of academic research and industrial applications, as well as in the development of advanced technologies for ABB's products.

Do you want to contribute to a greener future by utilizing advanced and highly efficient power electronic solutions for various applications? Get in touch with us! A young, multinational team is looking forward to welcoming you as their latest team member!

Your responsibilities

Develop medium frequency high-power transformers, incorporating medium voltage insulation, for emerging applications within power electronics.

Generate innovative concepts at the crossroads of power electronics and magnetics.

Plan, setup and execute experimental characterization and model validation.

Apply your expertise in magnetic components to contribute to relevant research projects.

Draft patent applications, craft scientific publications and write technical reports. based on your achieved results.

Cultivate a professional network within the company, actively sharing your knowledge and expertise.

Your background

Ph.D. in electrical engineering, power electronics, physics, or a related field.

Excellent scientific publication record in high impact journals and top power electronics conferences.

Possess expertise in designing medium frequency transformers with medium voltage insulation.

Demonstrate experience working with various magnetic core materials and windings (e.g., Litz, foil) within the medium to high frequency range.

Exhibit exceptional modeling skills for magnetic components, encompassing electromagnetic field simulations and thermal management.

Proven hands-on laboratory proficiency in characterizing and testing magnetic components.

Strong foundation in power electronics is considered a valuable asset.

Fluent in both spoken and written English.

More about us

We look forward to receiving your application. The recruitment process is led by Stephan Himmel, Talent Partner ABB Switzerland, Ltd. If you want to discover more about ABB, take another look at our website www.abb.com.

ABB Privacy Policy:

<https://new.abb.com/privacy-notice/candidate>

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