



ABB SCANDINAVIAN CORPORATE RESEARCH CENTER

Master theses and Industrial Internships

Electrical Machines, Drives and Motor Control Areas

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 117,000 people. ABB Corporate Research Center in Sweden is located in Västerås, about 100 kilometers west of Stockholm. Together with colleagues in other R&D centers around the world, our scientists develop technologies for future products and services for ABB's core businesses.

The Electrical Machines and Motion Control group within the Department of Power Technologies is continuously offering opportunities for thesis students and industrial internships who would like to work in the areas of:

- **electrical machine design and optimization** (electromagnetic and/or thermal and/or mechanical finite element simulations);
- **cooling aspects** (CFD analysis) **and rotor dynamics of electrical machines;**
- **electrical drives** (algorithms and strategies for advanced machine control);
- **diagnostics and prognosis in electrical machines and drives** (failure detection-forecast & action);
- **electrical drive train within renewable power generation** (wind, wave, solar etc.);
- **software design for drive applications** (automation of measurement procedures, interfaces for fast-prototyping test benches);
- **machine testing** (set-up preparation and extensive measurements on laboratory prototypes).

Applicants should apply via studentsEMMC@se.abb.com, with the following documents:

- **an up-to-date curriculum vitae;**
- **academic transcripts;**
- **a cover letter, stating the working areas of interest.**

ABB will provide an accommodation and a final monetary fee for the accepted candidates.

