

Master Thesis project in Microtechnology and Nanoscience

The School of Microtechnology and Nanoscience at Chalmers University of Technology announces one master thesis project on

Dielectrics for high voltage capacitors

As mobile devices continue to have higher performance requirements, there is an increasing demand for novel and integrated energy storage applications to accommodate increasing power consumption. One possible solution to fulfil future energy storage requirements is through the use of micro-supercapacitors. However, currently there is difficulty in developing industrial scale fabrication techniques for mass production of high performance micro-supercapacitors.

The objective of this thesis is to investigate candidate dielectric materials that can fulfill requirements of realizing small (on-chip) capacitors with sufficient capacitance per volume at voltages beyond 100 V.

Qualifications

A suitable background for this project would be a Master's program in Physics, Electrical Engineering, Chemistry, Materials, Nanotechnology, Microelectronics, or related subject. Probe station experience or similar electrical characterization is a plus.

Application

The application must include:

1. Curriculum Vitae;
2. Transcript of academic results;
3. Short letter highlighting your relevant practical experience and future career plan;
4. Other materials the applicant wishes to enclose.

Contact

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