Welcome to Chalmers!

Anders Palmqvist
Vice President of Research and Research Education
Professor of Materials Chemistry
Chalmers University of Technology
FOR A SUSTAINABLE FUTURE

• Our vision is allowed to permeate all activities within the fields of research, education and innovation

• The goal is to contribute to technical solutions that are needed to create a sustainable future
1829
Chalmerska Slöjdeskolan is founded by the will of William Chalmers

1937
Chalmers becomes a governmental university with the authority to award doctoral degrees

1994
Chalmers becomes a private university, owned by the Chalmers foundation
CHALMERS
One Faculty University in Engineering, Science and Architecture
Two campus in the centre of Göteborg, and one in Onsala
Facts and figures

MSEK: 3,695 turnover
Chalmers

Research incl. Doctoral programmes; 72%
First degree and master programmes; 28%
Chalmers foundation; 2%
Public foundations; 3%
Companies etc.; 13%
Misc; 5%
Financial; 2%
Other state funding; 22%
Ministry of Education and Science; 47%
Research and Research Education

Ministry of Education and Science
External funding
Employees

2136 teaching and research staff - including PhD students - of which 650+100 in faculty and 73 Assistant Professors

930 technical support & administrative staff

3066 total
Education
3 years programmes leading to a BScEng or BSc
3-4 years nautical programmes
5 year (3+2) programmes leading to a MScEng or MArch
2 year programmes leading to a MSc
Licentiate and doctoral programmes
Continuing development programmes for professionals

~9000
Doctoral Programmes

1111 doctoral students of which 884 are employees and 167 from industry
271 degrees awarded 2017: 139 PhDs, 132 licentiates
2959 referee examined scientific articles and conference reports (2017)
New departments from May 1, 2017

• Architecture and Civil Engineering
• Biology and Biological Engineering
• Computer Science and Engineering
• Physics
• Chemistry and Chemical Engineering
• Mathematical Sciences
• Industrial and Materials Science
• Microtechnology and Nanoscience
• Space, Earth and Environment
• Electrical Engineering
• Mechanics and Maritime Sciences
• Technology Management and Economics
• Communication and Learning in Science (preliminary)
Areas of Advance / Excellence Initiative

- Nanoscience & Nanotechnology
- Built Environment
- Information & Communication Technology
- Materials Science
- Production
- Transport
- Energy
- Life Science
Chalmers Areas of Advance

Areas of Advance / Excellence Initiative

Departments

- Architecture and Civil Engineering
- Biology and Biological Engineering
- Chemistry and Chemical Engineering
- Communication and Learning in Science
- Computer Science and Engineering
- Electrical Engineering
- Industrial and Materials Science
- Mathematical Sciences
- Mechanics and Maritime Sciences
- Microtechnology and Nanoscience
- Physics
- Space, Earth and Environment
- Technology Management and Economics
- Transport
- Production
- Materials Science
- Nanoscience and Nanotechnology
- Life Science Engineering
- Information and Communication Technology
- Energy
- Building Futures
Areas of Advance / Excellence Initiative

- Brings together excellence in disciplines
- Thematic windows of Chalmers
- Integration of research, education and utilization
- Co-operation with society and industry
- Complex societal challenges
- Dedicated funding (25 M€/year)
Areas of Advance – strategic development

Offer a broad platform to all researchers
- Stimulate multidisciplinary collaboration
- Access to the best infrastructure
- Internationalization
- Strategic industrial collaborations
- Involvement of students & connect to education
- Outreach
Areas of Advance – strategic development

Targeted development of key areas

- Support to recruitment of faculty
- Strategic research projects
- Competence centres (academia/industry/institutes)
What’s in it for you?
International exchange....

Stanford
UCSB
ETH
Shanghai
(UniSA)
Outreach activities....

Materials for Tomorrow - November 8-9, 2018
GET INVOLVED and SIGN UP for NEWS!

www.chalmers.se/en/areas-of-advance/materials/materials@chalmers.se
Chalmers Materials Analysis Laboratory

An open infrastructure for materials science that provides state of the art characterization techniques

- One physical laboratory centrally located at Chalmers campus providing a meeting place and enabling efficient use
- Skilled engineers maintaining, developing instruments and training users
- Continuous upgrade & development - keeping the facility state of the art
- Involvement of user groups to define instrument suite and future developments – strong link to strategic research programs
INFRASTRUCTURES SEK 230 million/year
INNOVATION THAT IMPACTS SOCIETY

• Historic investment in entrepreneurship
• Chalmers Ventures
• SEK 450 million over a ten-year period
• Incubator processes ranked among the top in the world
• A culture of entrepreneurship
Organization of Ph.D. Education

- Vice president for research and research education
  - Vice Head for (research and) research education at each department – responsible for quality
  - VP and 13 VHs discussions across depts. in FUN
- Each Ph.D. student is registered to a research school
- Each research school is registered to one or more departments, and headed by a Director of study
- Each Ph.D. student has an examiner, a main supervisor and often one or more co-supervisors
- Ph.D. students can also follow “informal” research schools, typically associated with a research center, or a national program.
Follow-up meetings
Minimum once per year, preferably twice: student, supervisor, director of studies

Individual study plan
Updated at least annually. Bring to follow-up meetings

Five-year plan

Yearly plan
Results, deviations from plan, causes, actions, revised plan
Introductory talk with director of studies

“Social issues”
Project plan?
Planned courses?
Planned teaching?
Supervisor?
Co-supervisor?
Supervision?
Form of theses
Collection of publications preferred – monography possible

Licentiate examination procedure

PhD examination procedure
For more info, see Chalmers Doctoral Portal:
https://student.portal.chalmers.se/doctoralportal/Pages/Doctoralportal.aspx

Information about e.g.:
- Handbook for doctoral studies
- Doctoral student services
- Doctoral courses
- Generic and Transferable skills
  - Leadership
  - Communication
  - Utilisation
  - Networking
- Internationalisation, e.g. via
  - Nordic Five Tech (NTNU, DTU, Aalto, KTH, Chalmers)
  - IDEA League (TU Delft, RWTH Aachen, ETH Zurich, Politecnico di Milano, Chalmers)