CHALMERS

University of Technology

Eight perspectives in five minutes

Tomas Grönstedt, Applied Mechanics
Sao Paolo, 2014-11-11

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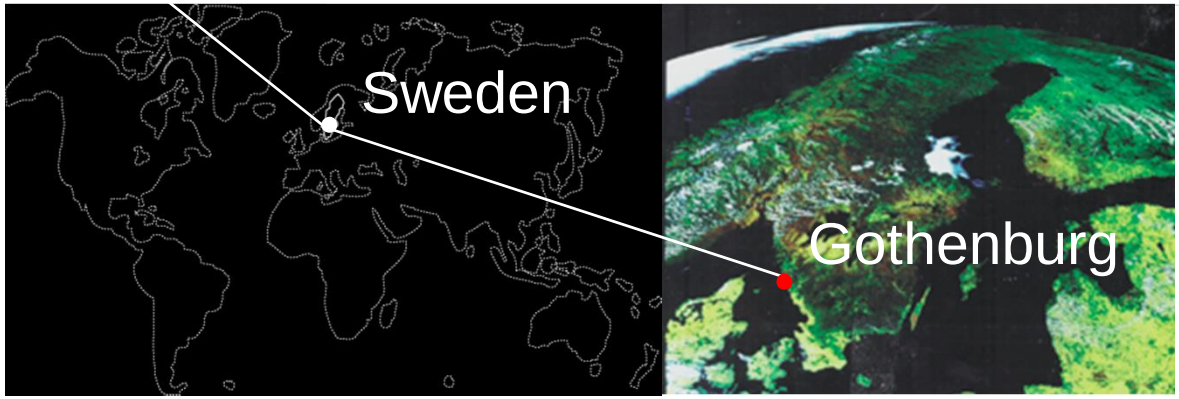

Gothenburg, Swedenâs second largest city

... situated on the beautiful
west coast of Sweden
... with two pleasant campuses
in the centre of Gothenburg

Founded in 1829 by the will of William Chalmers

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Areas of advance

Chalmers has eight areas of advance where the aim is to bring together research, education and innovation across departmental boundaries and to co-operate with bodies and organisations outside Chalmers.

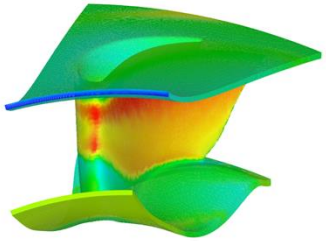
- Energy
- Information and Communication Technology (Ivica Crnkovic)
- Life Science
- Materials Science (Krister Holmberg)
- Nanoscience and Nanotechnology
- Production (Rikard Söderberg)
- Built Environment
- Transportation (Anna Dubois)

The eight key areas also have a firm foundation in the basic sciences. Sustainability, innovation and entrepreneurship are strong driving forces.

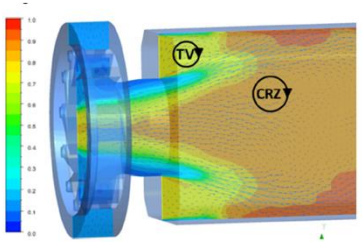
www.nriaflyg.se

Departments

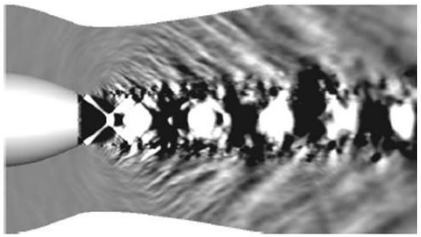
- Applied Information Technology
- Applied Mechanics
  - Ragnar Larsson: Professor, Computational Material Mechanics
  - Tomas Grönstedt: Professor, Turbomachinery
  - Per Lövsund: Head of department
- Architecture
- Chemical and Biological Engineering
- Civil and Environmental Engineering
- Computer Science and Engineering
  - Johan Karlsson: Professor of Dependable and Robust Real-Time Systems (Head of department, from April 1, 2015)
- Earth and Space Science
- Energy and Environment
- Fundamental Physics
- Materials and Manufacturing Technology
  - Gert Persson: Associate Professor
  - Lars Nyborg: Head of department
- Mathematical Sciences
- Microtechnology and Nanoscience
- Product and Production Development
  - Rikard Söderberg: Head of department
- Shipping and Marine Technology
- Signals and Systems
  - Arne Svensson: Head of department
- Technology Management and Economics



Prediction of thermo-mechanical fatigue life of superalloy components

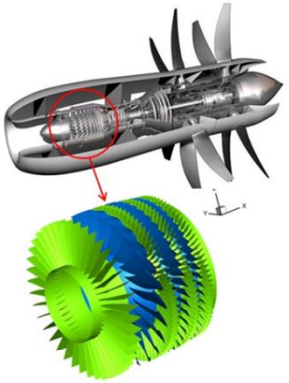


CFD modeling of flexi-fuel gas turbine combustors

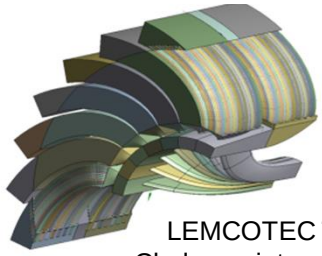


Advanced Noise Control Technologies for Supersonic Nozzles

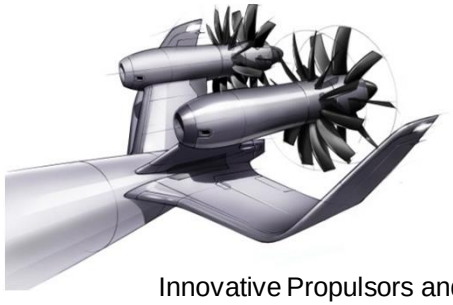
Modal analysis of separated flow in high area ratio nozzles



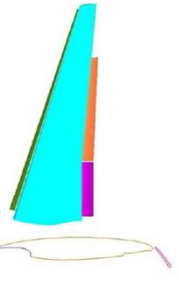
Compressor design methods for open rotor engines



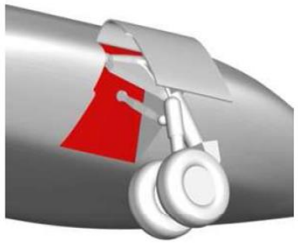
LEMCOTEC ï EU
Chalmers intercooler



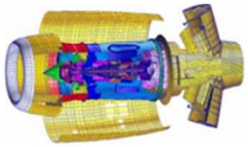
Innovative Propulsors and Engine Integration



ALONCO: High lift low noise wings



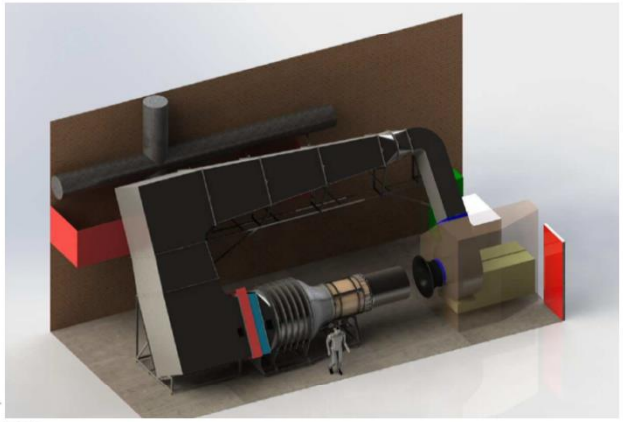
CALAS: Low-noise facilities for main landing gear



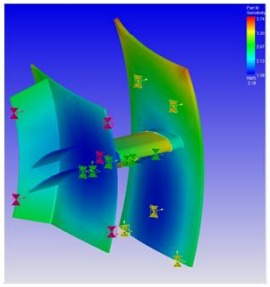
Mechanical whole engine

Develop methods

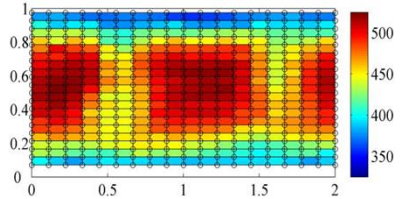
Conceptual design



Aerodynamics and Heat Transfer of LPT-OGVs

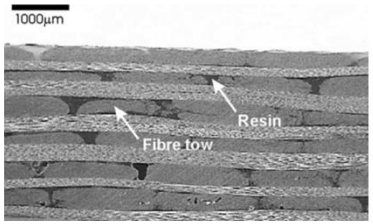


wingquist LABORATORY
VINN EXCELLENCE CENTRE

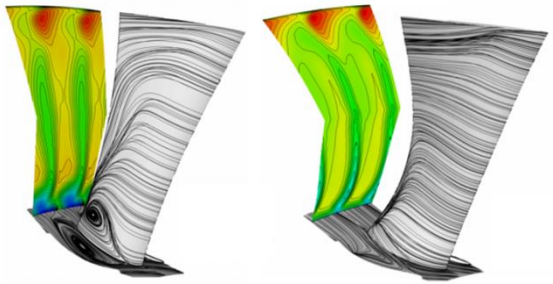


Intermediate turbine duct aerodynamics and heat transfer measurements

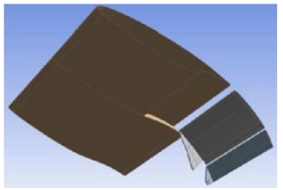
Experimental fluid dynamics



Compressive Failure of Composite Structures



Robust blade shape optimization



CALAS: Flap Side Edge Fences for Wings

Students

First degree and undergraduate part of Masterôs programmes

- **6,660 students in BScEng, BSc Programmes and MScEng Programmes**
- **3,000 students in 2-years Master's Programmes**

- **1,147 doctoral students**

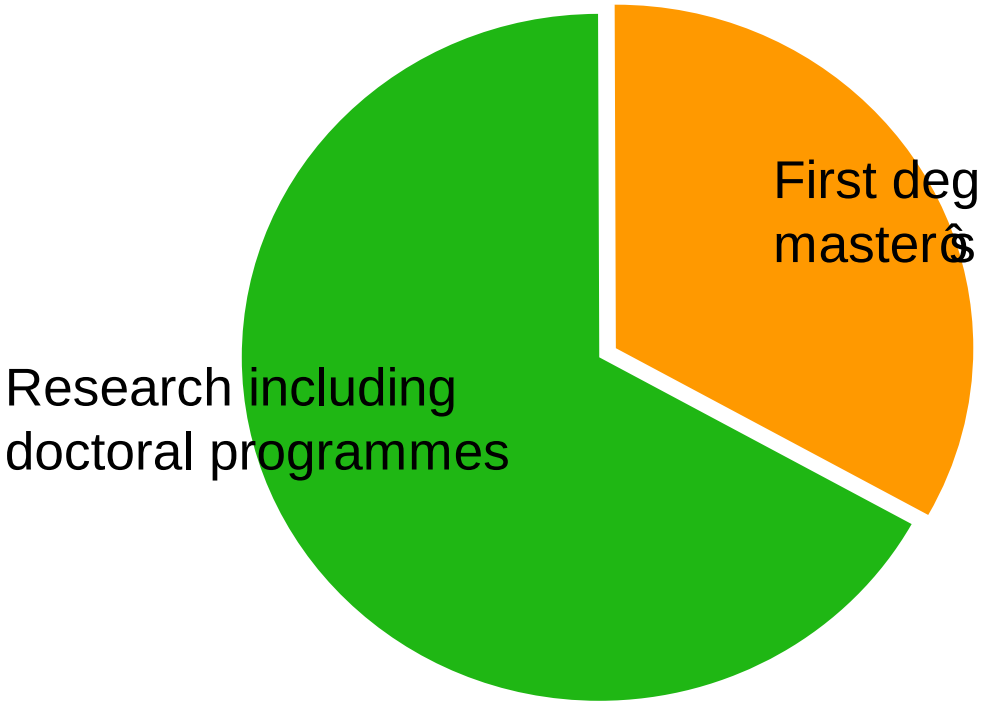
2,650 employees (full-time equivalents)

- **1,866 teaching and research staff**

- **784 technical support and administrative staff**

Income

SEK 3.028 billion



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for a sustainable future