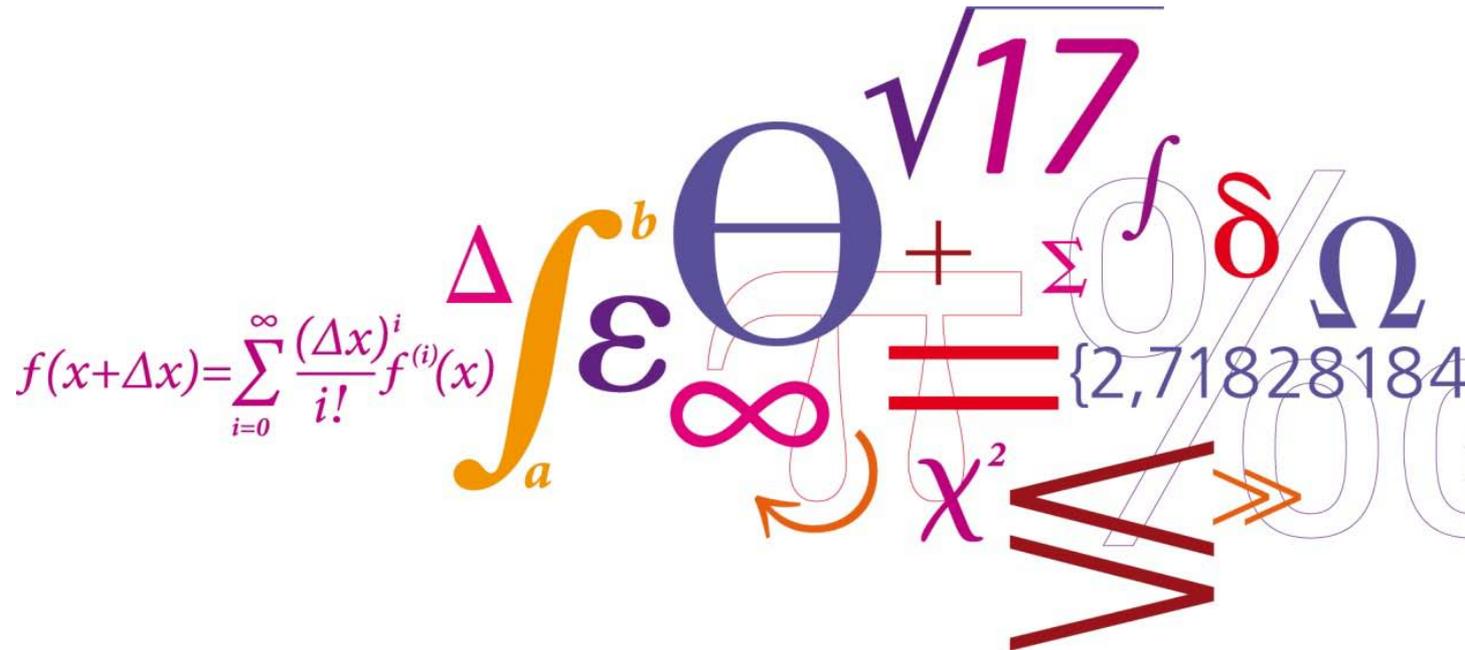


Danmarks Tekniske Universitet

# Technical University of Denmark



Lars Martiny, Deputy Director  
Risø DTU



# History of DTU – in a glimpse

## Established

Den Polytekniske Læreanstalt

Chemistry

Mech. Eng.

HC Ørsted

## Present Campus

### Relocation initiated



### Inaugurated



## Mergers & Autonomy

### Merger with

RISØ  
Risø National Laboratory

DANMARKS RUMCENTER  
Danish National Space Center

The Danish Institute for Food and Veterinary Research

Danish Institute for Fisheries Research

Danish Transport Research Institute

### Renamed

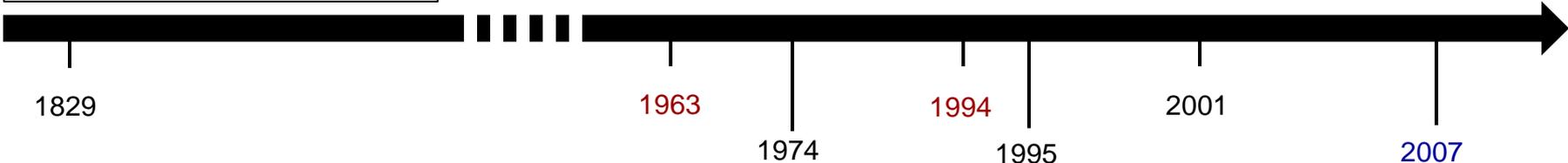
DTU



### Merger with

DIA

DTU-Act & autonomy



## Key Strategic Objectives

- DTU will be recognized and respected globally as a leading technical university because of the quality of its research, its alumni, its values and its university culture
- DTU will be among the 10 leading technical universities in Europe
- DTU will safeguard academic freedom and scientific independence

# Facts and Figures

## Education

---

Total students	~ 7,400
Int. MSc	650

## Public Sector Consultancy

---

Annual revenue million € ~150

-----  
*Largest market share of University Public Sector Consultancy in DK.*

## Research

---

	<u>Nb</u>
ISI publications	1.978
ISI citation impact	7.9
Admitted PhD's	431
Leiden Crown Indicator NOR	Nº 1
Leiden Crown Indicator EUR	Nº 7

## Innovation

---

	<u>Nb</u>
Patents notified/filed	87/46
New companies	5
Industry agreements	852
Leiden UIC Scoreboard EUR	Nº 3
Leiden UIC Scoreboard World	Nº 10

# Facts and Figures

## Employees

	Full Time Eq
VIP (faculty and researchers)	1,500
PhD	1,100
TAP total	2,000
DTU total	4,500

## International Scientific Employees

	Full Time Eq.
PhD.	42%
Post.Doc	56%
VIP total	34%

## EU

FP7 Projects	~200
Income 2010	~27 million €

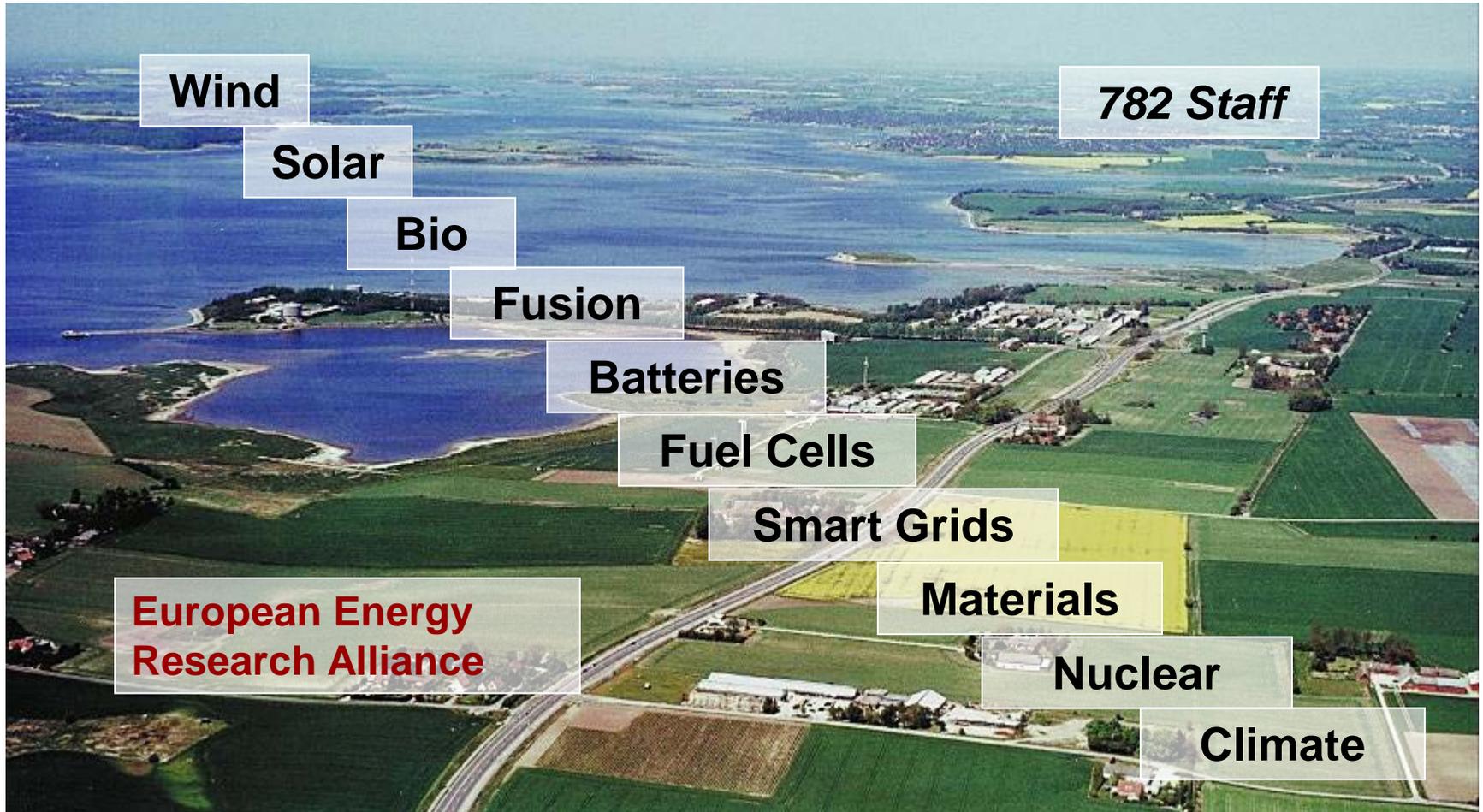


# Institutes

- DTU Aqua
- DTU Chemical Engineering
- DTU Chemistry
- DTU Civil Engineering
- DTU Electrical Engineering
- DTU Environment
- DTU Food
- DTU Fotonik
- DTU Informatics
- DTU Management
- DTU Mathematics
- DTU Mechanical Engineering
- DTU Nanotech
- DTU Physics
- DTU Space
- DTU Systems Biology
- DTU Transport
- DTU Vet
- Risø DTU

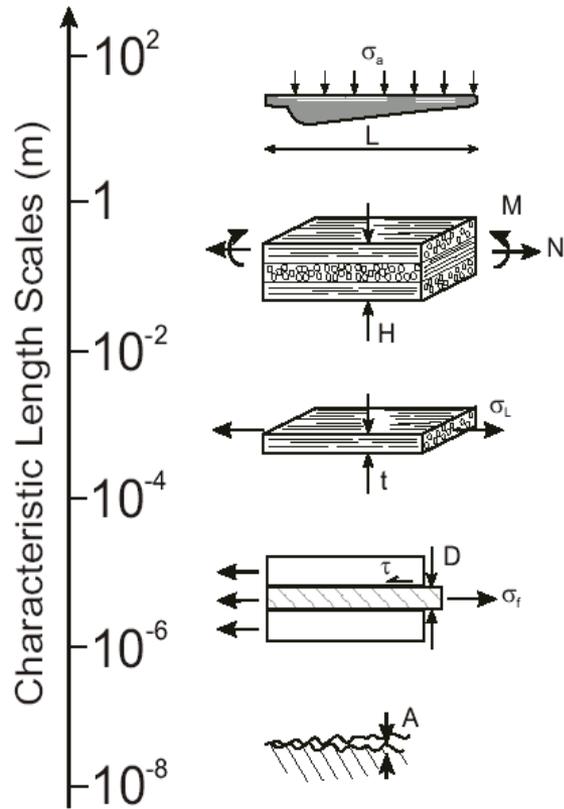
[www.dtu.dk](http://www.dtu.dk)

# Risø DTU



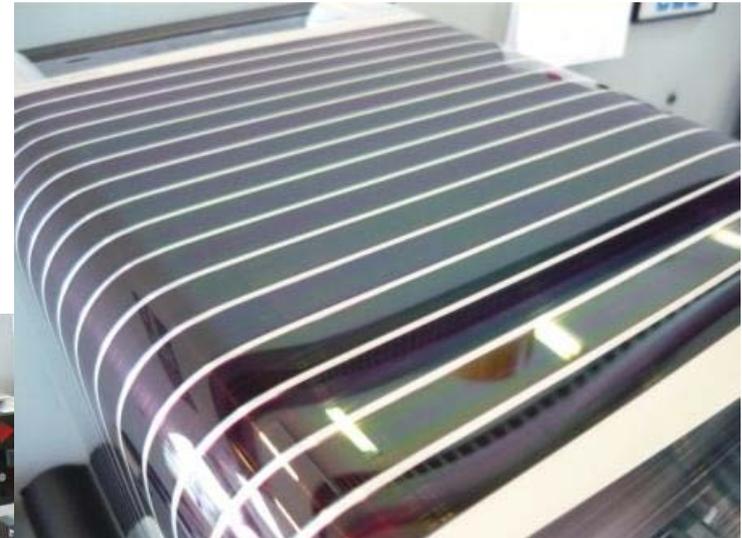
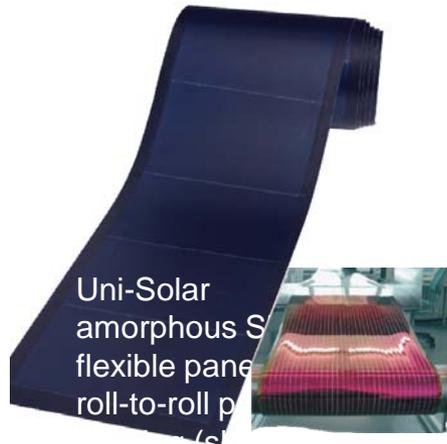
# Wind Energy Research

Over 10 powers of scale in length  
From mills to "wind power plants"



# Organic Photovoltaics

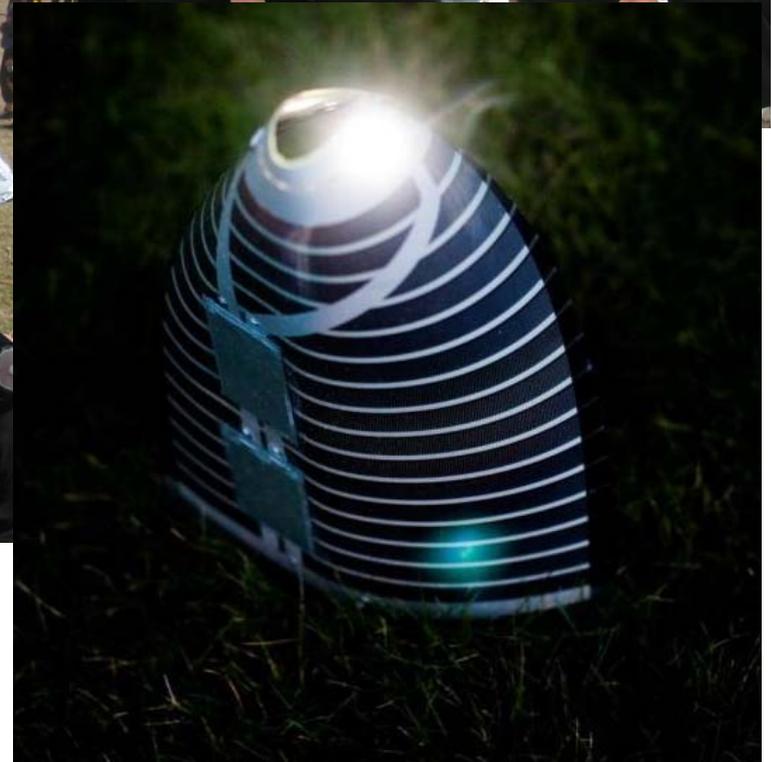
## New technology for mass production of cheap PV



2,3 % efficiency  
2+ year durability  
Cheap production

# Organic Photovoltaics

With a focus on demonstration and implementation



# SYSLAB

A facility for studying tomorrow's energy systems and Smart Grids.



1 e-car  
= 40 kW, 25 kWh

10.000 e-cars  
= 400 MW  
= Power station  
= DK regulating power

But ! Do we have the distribution network ?

# CASE

Catalysis for Sustainable Energy

Director Søren Dahl  
soren.dahl@fysik.dtu.dk  
www.case.dtu.dk



- 'Center of Excellence' financed by €16 million grant from Danish Ministry of Science, Technology and Innovation
- 2009-2014
- > 70 researchers, PhD students and post docs
- The purpose of CASE is to improve the understanding of catalytic reactions involved in conversion and storage of energy
- The approach is to unite the unique theoretical and experimental competences at DTU in heterogeneous catalysis research
- The goal is to *develop rules of catalyst design* and use these rules to *design cheap, efficient and stable catalysts*

# CASE RESEARCH FACILITIES

## DANCHIP

*National center for micro- and nanofabrication*

*1350 sqm Clean Room facility*



## Center for Electron Nanoscopy

*7 State-of-the-art electron microscopes*



## Center for Individual Nanoparticle Functionality

*Surface Science Laboratory*

## Nanophotonics

Laboratory

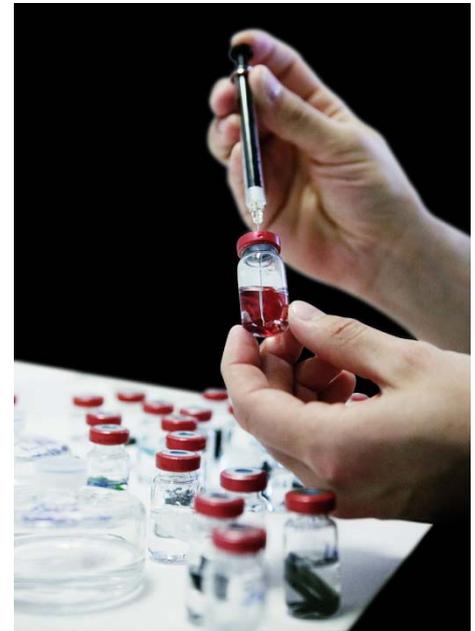


Fastest Danish supercomputer

*45 Tflop Linux cluster*

# Center for Biosustainability

- Donation from Novo Nordisk Foundation of € 95 million
- Focus on:
  - how to use bacteria and fungi to produce a wide variety of chemical compounds
  - how to use surplus biomass and other waste effectively in the production of high value products (Biorefinery)
- Leading and internationally renowned researchers affiliated with new center
- Satellites with focal points in technology platforms:
  - Chalmers University of Technology, Gothenburg
  - Royal Institute of Technology in Stockholm
  - Faculty of Life Sciences, University of Copenhagen

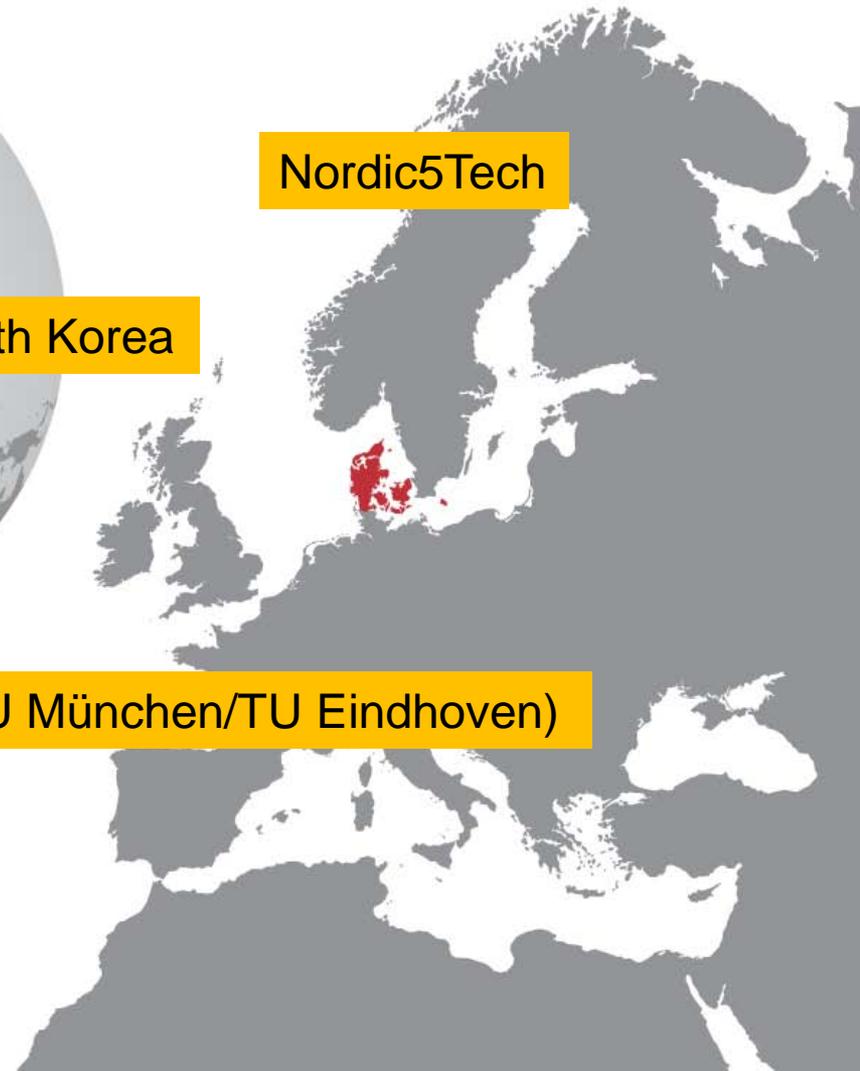


# For DTU international relations are necessary



Rensselaer Polytechnic Institute, US

KAIST, South Korea

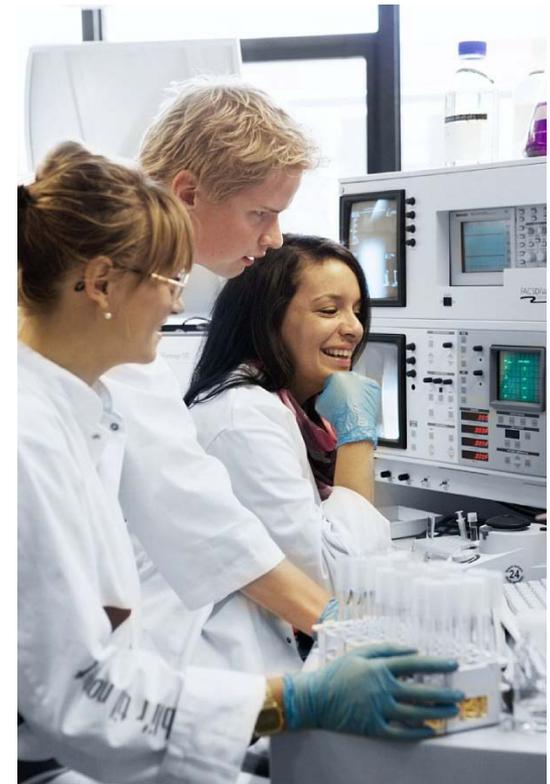


Nordic5Tech

European University Alliance (TU München/TU Eindhoven)

# DTU – International Campus Life

- Every fourth Faculty member is recruited internationally
- More than half of our Post Docs are recruited internationally
- Half of our PhD students are recruited internationally
- 1,073 foreign staff in 2010
- 83 different nationalities, top 5 :
  - Chinese: 150
  - German: 118
  - Swedish: 87
  - Italien: 68
  - French: 52
- DTU has guest residences and halls of residence for MSc and PhD students and guest houses for Faculty



# IFS - International Faculty Services

- Advice to International Research staff at DTU on
  - residence and work permit
  - health insurance
  - visa etc.
- Close relation with the Danish Immigration Service [www.nyidanmark.dk](http://www.nyidanmark.dk) and to authorities in general
- Continuous focus on how to attract and maintain foreign employees at DTU
- Collaboration with experts:
  - Deloitte for tax matters
  - Language schools
  - Relocation companies for integration and relocation – fixed and flexible packages e.g. job search for spouses, house search, assistance with school and daycare etc.
- Social activities, networking



Vacancies - Windows Internet Explorer

http://www.dtu.dk/English/About\_DTU/vacancies.aspx

File Rediger Vis Favoritter Funktioner Hjælp

Vacancies

Education Research Industrial Collaboration Public Sector Consultancy **About DTU** Departments

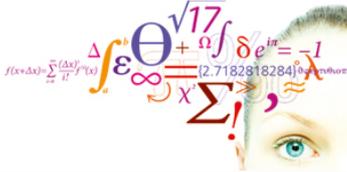
About DTU > Vacancies

Send link Print

### Vacancies

> Organization  
> History of DTU  
v Vacancies  
> Create a jobagent  
> Employment at DTU  
> Facts and Figures  
> How to get to DTU  
> External offers for DTU students  
> Supplier information  
> Clubs and Associations  
> DTU News  
> Annual magazine  
> DYNAMO Magazine  
> Calendar  
> Send postcard

All personnel types  
All categories  
All of DTU



Position	Location	Apply Date
Postdoc in WDM Optical Fibre Access Networks	DTU Fotonik	02.03.2011
Assistant Professor in Building Services for Low Energy Buildings	DTU Civil	03.03.2011
TEST stilling - test af ansøgningsformular - HC Ørsted Postdoc	Research and Innovation	03.03.2011
PhD scholarships in Carbohydrate Chemistry	DTU Chemistry	04.03.2011
Postdoc in Space weather	DTU Space	04.03.2011
Researcher within the field of Traffic Safety	DTU Transport	04.03.2011
PhD scholarship in Theoretical Ultrafast Science	DTU Chemistry	07.03.2011
Postdoc for development of HTPEM Fuel cells and durability testing	DTU Chemistry	07.03.2011
Postdoc in Climate Change Mitigation	Risø DTU	07.03.2011
Post Doc position: Experimental Investigations on Emission Reductions of Sulfur and Soot	DTU Chemical	08.03.2011
Senior Researcher in Climate Change Activities with a focus on Asia	Risø DTU	09.03.2011
Postdoc for the solid mechanics of functional ceramics	Risø DTU	11.03.2011
Senior Researchers in Ceramic Processing	Risø DTU	11.03.2011
Postdoc/Researcher for Development of Solid Oxide Electrolyser Cells	Risø DTU	13.03.2011
Postdoc/Researcher for the development and fabrication of Ceramic Fuel Cells	Risø DTU	13.03.2011

1 2 3

Create jobagent

Lokalt intranet 100%

Start Indbakke - Microsoft Out... KBBE WP2012 og Gaps m... RE: Marie Curie præsent... Portalen - Windows Inter... Vacancies - Windows ... Microsoft PowerPoint - [...]

08:55

# See you at DTU!

**Contact:**

Lone Falsig Hansen  
lfal@adm.dtu.dk

