

## Curriculum Vitae (updated 2<sup>nd</sup> October 2017)



### PERSONAL INFORMATION

**Henri Jansen** (born 17 May 1962 in the Netherlands)

Address: Danchip/CEN, Technical University of Denmark (DTU), Kgs. Lyngby.

Nationality: Dutch. Languages: Dutch (mother tongue), English & German.

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### SCIENTIFIC FOCUS AREAS

Applied physics and engineering in general. **Present research** covers plasma etching and physics, accurate nanofabrication, design and fabrication of 3 dimensional (3D) nanodevices, nanoporated membranes, Knudsen transport, clean water and sustainability, energy harvesting, black silicon for super-hydrophobicity and solar heat conversion, and X-ray and gravitational sensors for space applications. **Previous research** covers Communication, Radar and Sonar technology, MEMS fabrication, RF MEMS, micropropulsion for deep space, theory and application of microfluidics, capillary action, cell trapping, microscopic gas transport, hydrogen separation, edge and corner lithography and fractal fabrication.

### EDUCATION

- 1992-1996 PhD in Physics, University of Twente (UT), Transducers Science and Technology (TST)  
April 4<sup>th</sup> 1996: Thesis: "*Plasma etching in microtechnology*"
- 1985-1991 MSc, Electrical Engineering, University of Twente  
June 15<sup>th</sup> 1992: Special topics: Quantum Physics, Materials Science
- 1979-1985 Communication technology and computer science, Royal Dutch Navy

### CURRENT POSITION

- 2016-present Professor in Semiconductor Fabrication Technology, Dept. of Danchip/CEN,  
Technical University of Denmark (DTU), Kongens Lyngby, Denmark.

### PREVIOUS POSITIONS

- 2015-2016 Guest professorships in Vietnam (Ho Chi Minh City, LNT) and Denmark (Danchip)
- 2003-2014 Associate professor, UT
- 2002-2003 Assistant Professor, UT
- 2000-2001 Postdoc in prototyping RF MEMS switches,  
Interuniversitair Micro-Electronica Centrum (IMEC), Leuven, Belgium
- 1998-2000 Postdoc in education and engineering, UT
- 1997-1998 Postdoc in optimization of plasma engineering,  
Centre Suisse d'Electronique et de Microtechnique (CSEM)
- 1996-1997 Postdoc in plasma engineering, UT-TST

### SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- 2016-present 4 PhD, Dept. Danchip/CEN, Technical University of Denmark
- 2002-2016 6 Postdoc, 12 PhD, 30 MSc, Dept. TST, University of Twente

## MANAGEMENT EXPERIENCE as Principal Investor (PI)

Project name	kEuro	Role
2017 Vy Nguyen	300	PI
2017 Chantal Silvestre	300	co-PI
2016 Bingdong Chang	300	PI
2016 Pele Leussink	300	PI
2015 Rolf vermeer: <a href="#">Advanced micro machining schemes for scanning probe tips</a>	300	PI
2010 Berker Mogulkoc: <a href="#">Reflow Bonding of Burosilicate Glass Tubes of Silicon Substrates as Fluidic Interconnect</a>	300	PI
2010 Yiping Zhao: <a href="#">High-Resolution Stamp Fabrication by Edge Lithography</a>	300	PI
2009 Sandeep Unnikrishnan: <a href="#">Micromachined Dense Palladium Electrodes for Thin-film Solid Acid Fuel Cells</a>	300	PI
2009 Marcus Louwerse: <a href="#">Cold Gas Micro Propulsion</a>	300	PI
2008 Srinivas Vanapalli: <a href="#">High-frequency Operation and Miniaturization aspects of Pulse-tube Cryocoolers</a>	300	PI
2007 Laura Vargas	300	PI
2007 Imran Fazal: <a href="#">Development of a gas microvalve based on fine and micromachining</a>	300	co-PI
2006 Jeroen Haneveld: <a href="#">Nanochannel Fabrication and characterization using bond micromachining</a>	300	PI
2004 Hien Tong: <a href="#">Microfabricated palladium-based membranes for hydrogen separation</a>	300	PI
2002 Henk Wensink: <a href="#">Fabrication of microstructures by powder blasting</a>	300	PI

## TEACHING ACTIVITIES

Planning and executing lectures related to **master studies** in MEMS design, MEMS technology, Nanofabrication, Plasma physics and Plasma etching. And teaching in the **bachelor studies**: Electronics, Mathematics, and Physics.

## INSTITUTION RESPONSIBILITIES

2016-present	Faculty member and graduate student advisor
2002-2016	Advisory board member for the MESA+ cleanroom design and infrastructure and ongoing updating of high-end nanofabrication equipment.

## REFEREE FOR INTERNATIONAL JOURNALS

Journal of Micromechanics and Microengineering, Journal of Microelectromechanical Systems, Nanotechnology, Transactions on Nanotechnology, Journal of Vacuum Science and Technology, Microelectronics journal, Journal of the American Ceramic Society, Journal of the Electrochemical Society,...

## INTERNATIONAL RELATIONS

Most plasma equipment suppliers

## PUBLICATION BIBLIOMETRICS AND PATENTS

<i>h</i> -index 34	[Scopus]
104 peer-reviewed papers	[Scopus]
4235 citations	[Scopus]
1 book	<a href="#">Silicon Micromachining</a>
7 patents: <a href="#">EP1251577</a> , <a href="#">US20030042567</a> , <a href="#">US20040124497</a> , <a href="#">US7002439</a> , <a href="#">EP2112130</a> , <a href="#">US7835157</a> , <a href="#">EP01398811</a>	

