Curriculum Vitae for Klas Hjort

Professor, Materials Science esp Microsystem Technologywork address:Dept. Engineering Sciences, Uppsala University, Box 534, 751 21 Uppsalavoice:Phone +46 18 4713141, Mobile: +46 70 425 0597, Skype: klas.hjorte-mail:klas.hjort@angstrom.uu.se

- 1. Master Exam: M.Sc. in Engineering Physics at Uppsala University, 1988
- 2. Ph.D. exam: Ph.D. (Eng.) in Materials Science, Uppsala University, 1993
- **3. Post-doc position:** 1994, Inst. of High Frequency Electronics, Darmstadt Univ. of Technology, Germany
- 4. Ability degree: 1997 (Docent in Materials Science).
- **5. Present Positions:** Head of the MST Programme and Prof. at the Dept. of Engineering Sciences, Uppsala University. (2012–ongoing, 5% teaching, 95% research); Part-time guest professor at of School of Mechanical Science and Engineering, Huazhong University of Science and Technology, Wuhan, China (2015–2020); Part-time Director of the Pilot facility for Customized Microfluidics for SciLifeLab (2016–ongoing).
- 6. Previous positions: Part-time guest professor at the Technical Research Centre of Finland (2009–2013) Prof. at the Dept. of Engineering Sciences, Uppsala University. (2008–2012)
 Assoc. Prof. (lektor) at the Dept. of Engineering Sciences (2001–2008) Director of the VINNOVA Competence Centre on Surface and Microstructure Technology, SUMMIT (2001–2005) Researcher at the Materials Science Division, Uppsala University (1995–2000).
- 7. Parental leave for 3 months 1992
- 8. Main supervisor of 8 Ph.D.'s (name and year of exam): V. Lekholm (2015) S. Ogden (2013)
 G. Sharma (2010) R. Bodén (2008) H. Yousef (2008) M. Lehto (2007) M. Skupinski (2006) M. Lindeberg (2003) D. Pasquariello (2001) H. Björkman (2000). Presently, main supervisor of 4 graduate level students (planned Ph.D. exam 2020, 2022, 2022) and ass. supervisor of 4. Supervisor of 8 international Post-doc fellows: Drs. Bo Chang (2014-2016, Aalto University, Espoo, Finland) Z.G. Wu (2006-2008, Nanyang. Univ. Technol, Singapore) M. Farrell (2004-2005, Univ. of Dublin, Ireland) A. Raspet (2003-2004, Univ. of Ljubljana, Slovenia) I. Enculescu (2002-2004, Bucharest Univ., Romania) M. Abid (2002-2003, Louis Pasteur Univ., Strasbourg) H. Majjad (2002-2003, Univ. of Franche-Comté, Besançon, France) I. Schuchert (2001, Darmstadt Univ. of Technology, Germany).
- **9. Awards:** Awarded FiDiPro Professorship by the Finnish Distinguished Professorship Program, 2010. As a member of MEMSWAVE awarded as one of ten finalists for the Descartes Prize 2002 of the Commission of the European Union, 2002.
- 10. Networks in academia and industry: Co-founder and PI of four Swedish research centres of excellence with two of them active (in bold) Uppsala Berzelii Technology Centre on Neurodiagnostics, Uppsala VINNOVA Excellence Centre on Wireless Sensor Networks (Wisenet), FORMAS' Uppsala Microbiomics Center (UMC) and the Centre for Natural Disaster Science (CNDS). Over the years direct collaboration with a multitude of partners from academia and industry. Nearly half of the papers are of international collaborations. Today active engagements in Sweden with Agellis, Centre for Rural Medicine, Lund University,

Mycronic, RISE-Acreo, Sandvik Materials Technology, SciLifeLab, and Uppsala University (Data Communication, Surgical Sciences).

On-going international collaboration with Hanoi Univ. of Science and Technology (Vietnam), Huangzhong Univ. of Science and Technology (China), ISMB (Italy), KAIST (South Korea), ST Microelectronics (Italy), MYSPERA (Spain), Evalan (The Netherlands), Warrant Group (Italy).

11. Research projects, 2011 – on-going (* marks Hjort being the main PI)

- 2010-2022, Swedish Governmental directed faculty funding "Centre for Natural Disaster Science" (100 k€ of 1,200 k€/year)
- *2018-2021, VR, "Softer, thinner and more compliant cochlear implants" (240 k€ of 330 k€)
- *2017-2020, Familjen Kamprads stiftelse, Teknik för avancerad patientnära diagnostik i virtuella hälsorum" (500 k€)
- *2017-2019, Vinnova, "Smarter melt Innovative building set for sensors in steel production" SIP Smartare elektronik (420 k€)
- *2016-2018, SciLife Lab Uppsala "SciLife Costumized Microfluidics"
- 2015-2018, VR-Ram, "The 3NANO electronic sensor for single-base detection" (100 k€ of 1000 k€)
- *2016-2017, Vinnova, "Smarter melt" SIP Smartare elektronik (60 k€ of 100 k€)
- *2015-2017, Vinnova, "Innovative deep exploration, phc 1" (250 k€ of 420 k€)
- 2015-2017, Horizon 2020, "Plasmonic-based autOmated lab-on-chip SEnsor for the rapid In-situ Detection of LegiONella Poseidon" (770 k€ of 3,500 k€)

2006-2016, VINNOVA/VR "Uppsala Berzelii Technology Centre on Neurodiagnostics" (800 k€ of 10,000 k€)

*2012-2015, VR, "Supercritical Microfluidics" (400 k€ of 500 k€)

*2012-2015, Swedish Research Council (VR) "Supercritical Microfluidics" (330 k€ of 545 k€)

*2014-2014, Vinnova, "Innovative deep exploration" (20 k€ of 55 k€)

2012-2014, Finnish Academy of Science, "Programmable wetting of surfaces" (120 k€ of 820 k€)

- 2007-2014, Swedish Governmental Agency for Innovation Systems (VINNOVA) "Uppsala VINN Excellence Centre on Wireless Sensor Networks, WISENET" (1,100 k€ of 8,000 k€)
- 2011-2013, Swedish Civil Contingencies Agency (MSB) "To predict and prevent natural hazards" (120 k€ of 800 k€)
- *2011-2013, TEKES, FiDiPro project "Integrated Microactuators in Analytic and Diagnostic Microfluidic Systems, IMADIMS" (1,035 k€)
- *2009-2011, Swedish Research Council (VR) "Microfluidic Hydraulics" (150 k€ of 240 k€)

12. Commissions of trust, selected

Assoc. Editor for the J. Micromech. Microengineer. **Member of the Program Committee** for several Workshops and Conferences on microsystem and nano technology. **Chairman or co-chairman of the Workshops and Conferences:** European Ion Track Technology (EITT), Uppsala, Sweden, September 10-11, 1998; IEEE/LEOS Int. Conf. on Optical MEMS, Kauai, Hawaii, Aug. 21-24, 2000; Int. Workshop on Ion Track Technology, Caen, France, March 17-20, 2002; 2nd Int. Workshop on Ion Track Technology, Uppsala, Sweden, February 26-27, 2004; 5th Workshop on MEMS for Millimeterwave Communications, MEMSWAVE, Uppsala, June 30 - July 2, 2004; Micromechanics and Microsystems Europe Workshop, Espoo, Sept 1-4, 2013; Microsystem Workshop 2014, Uppsala; 8th Int, Symp. on Microdialysis, Uppsala, Sweden, May 25-27, 2016; 28th Micromechanics and Microsystems Europe Workshop, Uppsala, Aug. 23-24, 2017. **Deputy Director of** the Centre for Natural Disaster Science (CNDS). **Member of Expert Evaluator Panels** for several national and international funding organisations. **Expert Evaluator for the Theses:** Isabelle Dufour's 'L'Habilitation a Diriger des Recherches en Sciences', ENS du Cachan, 2000; Ph.D. of Jyrki Kiihamäki, Helsinki Univ. Technology, 2005; Ph.D. of Chen Bangtao, Nanyang Univ. Technology, Singapore, 2007; Ph.D. of Mohsen Asadniaye Fard Jahromi, Nanyang Univ. Technology, Singapore, 2014. **Faculty Opponent** for the Ph.D. of Kai Kolari, Helsinki Univ. of Technology, 2007; Niklas Sarius, Linköping Univ., 2010; Mikael Hillmering, KTH, 2014; Harisha Ramachandraiah, KTH 2017.

13. Bibliographic information

In total more than 300 scientific and 12 other publications (popular or in technical/industrial journals). Inventor in 6 patents / patent families (in total 12 patents). In Google Scholar more than 140 scientific journal publications and 4,700 citations registered; h-index 35.