

1. Education

- **PhD in physics** (excellent 5/5, top 10%), thesis grading *Laudatur* (top 1%), Univ. Helsinki, Finland, April 18th 2008
- **MSc in physics** (excellent 5/5, top 10%), thesis grading *Laudatur* (top 1%), Univ. Helsinki, Finland, October 21st 2005

2. Research positions held, including post-doctoral positions

- **Professor**, ACES, Stockholm University, Sweden, 2017-
- **Associate Professor**, ACES, Stockholm University, Sweden, 2011-2016
- **Adjunct Professor**, Department of Chemical Engineering, Carnegie Mellon University, USA 2011-
- **Docent**, Department of Physics, University of Helsinki, Finland, 2011-
- **Dreyfus post-doctoral fellow**, Center for Atmospheric Particle Studies, Carnegie Mellon University, USA, 2009-2011
- **Post-doctoral researcher**, Department of Physics, University of Helsinki, Finland 2009-2010
- **Doctoral student**, Department of Physics, University of Helsinki, 2003-2009

3. Awards and honors

- **Thomson Reuters highly cited researcher 2016**
- **Wallenberg Academy Fellow 2015**
- **IUGG (International Union for Geodesy and Geophysics) Early Career Scientist Award** in meteorology, 2014
- **Smoluchowski Award** for significant contributions to aerosol science, Gesellschaft für Aerosolforschung (GAeF), 2014
- **Membership of Academy Club for Young Scientists**, Finnish Academy of Science and Letters, 2010-2011
- **Sheldon K. Friedlander Award** for excellent dissertation, American Association for Aerosol Research (AAAR), 2010
- **The Award of the Finnish Association for Aerosol Research (FAAR)** for excellence in aerosol research, 2010
- **Doctor Prima** in the 95th conferment of the Faculty of Philosophy, University of Helsinki, 2010
- **Invited participant of ACCESS IX** (Atmospheric Chemistry Colloquium for Emerging Senior Scientists), MT, USA, 2007
- **PhD thesis award** of the University of Helsinki, all faculties, 2008
- **MSc thesis award** of the Department of Physics, University of Helsinki, 2005
- **Pro Mathematica Medal** for excellence in Finnish national mathematics baccalaureate examination, 2001

4. Publications and presentations

- **118 peer-reviewed articles** in scientific journals (15 *ISI* highly cited papers, i.e. in the top 1% in the field of geophysics; 3 in *Nature*, 2 in *Science*, 2 in *Nature Geosci.*, 1 in *Nature Communications*, 1 in *Nature Protocols*, 1 in *Chem. Soc. Rev.*, 1 in *Proc. Nat. Acad. Sci.*), 5179 (4576) citations, *h*-index 37 (*ISI Web of Science*, March 2017); **5 book chapters** in *Boreal Forest and Climate Change*, Springer 2008; *Nature's Nanostructures*, Pan Stanford publishing 2011; *From the Earth's Core to Outer Space*. Springer 2012; > **200 peer-reviewed conference papers**; **40 invited talks** at scientific conferences, universities and seminar series during 2004-2017; **29 other oral presentations** as the first author at international scientific conferences during 2004-2017

5. Research leadership

- **Unit head**, Atmospheric Science Unit, ACES, Stockholm University, 2016-
- **Deputy unit head**, Atmospheric Science Unit, ACES, Stockholm University, 2014-2016
- **Research Area leader**, Bolin Centre for Climate Research, 2013-2016
- **Principal investigator**, project ATMOGAIN (1.5 MEur) funded by the European Research Council starting grant, 2011-2016
- **Principal investigator**, Wallenberg Academy Fellowship (5 MSEK), 2016-2020
- **Work package leader / co-investigator**, European integrated project EUCAARI, 2007-2011; Nordic Centers of Excellence CRAICC, 2012-2015 and eSTICC 2014-2019; ACAS project funded by Knut and Alice Wallenberg Foundation, 2017-2021
- **Principal investigator** for several smaller projects (with overall funding over 1 MEur), funded by Vetenskapsrådet, Formas, University of Helsinki funds, Camille and Henry Dreyfus foundation, Maj and Tor Nessling foundation, Vilho, Yrjö and Kalle Vaisala foundation and Magnus Ehrnrooth foundation, during 2006-
- **Board / directorate memberships**: American Association for Aerosol Research (AAAR) Board of Directors, 2013-2016; Nordic Society for Aerosol Research (NOSA) board, 2011-2017; Department of Applied Environmental Science board, Stockholm University, 2012-; SITES measurement network board, 2014-2017; University of Helsinki board, 2018-2021.
- **Principal (co-)advisor of 11 PhD students (6 ongoing)**: Taina Yli-Juuti (2013, Univ. Helsinki), Erica Trump (2013, Carnegie Mellon University), Silja Häkkinen (2015, Univ. Helsinki), Juan Acosta Navarro (2017, Stockholm Univ), Elham Baranizadeh (2017, Univ. Eastern Finland), Narges Rastak (expected 2017, Stockholm Univ., lic. completed 2014), Maryam Dalirian (expected 2017, Stockholm Univ., lic. completed 2014), Samuel Lowe (lic. Expected 2017, Stockholm University); Ivica Crljenica (Stockholm Univ.); Emelie Graham (Stockholm Univ.); Ines Skoko (Stockholm Univ.) **8 post-doctoral researchers**: Dr. Jan Julin (2011-2016, Stockholm Univ.), Dr. Lars Ahlm (2012-2016, Stockholm Univ.), Dr. Benjamin Murphy (2012-2015, Stockholm Univ.), Dr. Paul Zieger (2013-2016, Stockholm Univ.), Dr. Vidya Varma (2013-2016, Stockholm Univ.), Dr. Tinja Olenius (2015-), Dr. Daniel Schlesinger (2016-), Dr. Tanja Dallafior (2017-); **10 MSc students**: S. Arnoldt (2014, Stockholm Univ.), N. Rastak (2012, Stockholm Univ.), J. Acosta Navarro (2013, Univ. Helsinki), S. Häkkinen (2012, Univ. Helsinki), L. Riuttanen (2009, Univ. Helsinki), L. Li (2009, Univ. Helsinki), T. Yli-Juuti (2009, Univ. Helsinki), S. Mazon (2008, Univ. Helsinki), H. Manninen (2007, Univ. Helsinki), T. Nieminen (2007, Univ. Helsinki); **4 BSc**

students: H. Stalheim (2017, Stockholm Univ.), S. Häkkinen (2010, Univ. Helsinki), M. Hulkkonen (2008, Univ. Helsinki), T. Yli-Juuti (2007, Univ. Helsinki)

6. Positions of trust and consulting

- **Editor/Associate editor**, *Atmospheric Chemistry and Physics* (2011-); *AMBIO* (2011-2016)
- **Grant proposal reviewer**, European Commission, Natural Environment Research Council (NERC), UK; National Science Foundation (NSF), USA; National Oceanic and Atmospheric Administration (NOAA), USA; Academy of Sciences of the Czech Republic; Estonian Research Council; Canada Council for the Arts, Vetenskapsrådet 2006-
- **Manuscript reviewer**, *AMBIO*, *Aerosol Science and Technology*, *Atmospheric Environment*, *Atmospheric Research*, *Journal of Physical Chemistry*, *Environmental Science and Technology*, *Chemical Physics Letters*, *International Journal of Thermal Sciences*, *Journal of Geophysical Research*, *Atmospheric Chemistry and Physics*, *Journal of Aerosol Science*, *Nature Geoscience*, 2006-
- **Appointment as opponent**, PhD defense of Anton Laakso (Univ. Eastern Finland), 2016; Lic. defense of Melissa Gomis (Stockholm Univ.), 2016
- **Thesis reviewer/committee member**, PhD J. Soares (2016, Univ. Helsinki), PhD A.-M. Sundström (2014, Univ. Helsinki), PhD A. Horst (2013, Stockholm Univ.), PhD A. Palm Cousins (2013, Stockholm Univ.), PhD E. Kirillova (2013, Stockholm Univ.), PhD T. Hede (2013, Stockholm Univ.), PhD E. Emanuelsson (2013, University of Gothenburg), PhD X. Li (KTH, 2011), PhD S. Mikkonen (2011, Univ. Eastern Finland), PhD T. Raatikainen (2010, Univ. Eastern Finland), Lic. Xiang-Yu Li (2016, Stockholm Univ.), BSc J. Koskinen (2009, Univ. Helsinki).
- **Invited expert**, European Research Area Board (ERAB) meeting on the scientific strategy of the European Research Area, European Commission, 2009
- **Invited panelist**, European Science Foundation (ESF) in panel discussion “Educating new generation of scientists”, ESF annual meeting, Stockholm, Sweden, 2008

7. Other academic and professional activities and memberships

- **Professional memberships:** American Geophysical Union (AGU), Finnish Association for Aerosol Research (FAAR), American Association for Aerosol Research (AAAR), Nordic Association for Aerosol Research (NOSA), American Chemical Society (ACS)
- **Conference organisation/steering committee memberships:**
- Program committee member, *IAMA meeting* 2015 and 2017, USA
- Conference Chair, *NOSA annual meeting* 2014, Sweden
- Program committee member, *IAMA meeting* 2013, USA
- Workshop Chair, *Early Career Scientist Workshop*, *iLEAPS conference* 2011, Germany
- Member of the program committee, *Finnish/Nordic Physics days* 2011, Finland
- Member of the steering group, *Millennium Youth Camp* 2010, Finland
- Chair, *Workshop on saturation vapour pressures of atmospheric organic compounds* 2010, Denmark

8. Teaching at the university level

- **Lecturer on** *Environmental Physics* (Stockholm University, 2016); *Air quality outdoors and indoors* (Stockholm University, 2015, 2016, 2017); *Cloud physics* (Stockholm University, 2013, 2014, 2015, 2016); *Organic aerosols* (summer school organized by University of Gothenburg, 2013); *Aerosols, clouds and climate* (Stockholm University, 2012; 2014); *The Earth's climate and climate change* (Stockholm Summer School, Bert Bolin Centre for Climate Research, Stockholm University, 2012); *Atmospheric particle formation* (2-day intensive course given at Stockholm University, University of Galway, University of Leeds, University of Manchester, University of Cologne, Paul Scherrer Institute, University of Gothenburg, Lund University, University of Copenhagen, University of Prague, Leibniz Institute for Tropospheric Research, during 2008-2011) ; *Formation and growth of atmospheric aerosol* (University of Helsinki, 2006, 2008, 2010, 2012, 2014); *Environmental Physics II* (University of Helsinki, 2008 and 2011); *Physics and chemistry of air pollution* (University of Helsinki, 2006, 2007, 2008); *Introduction to physical sciences* (University of Helsinki, 2006, 2008)
- **Teaching assistant on** *Physics and chemistry of air pollution* (University of Helsinki, 2005); *Thermophysics* (University of Helsinki, 2004, 2005)
- **Pedagogical training:** *Course design* (3 ECTS, Stockholm University, 2013); *Teaching in the disciplines* (4.5 ECTS, Stockholm University, 2014)