

Curriculum Vitae: Jakob Birkedal Wagner

Danish citizen, born May 28, 1974, Married, 2 children.

Work address: Technical University of Denmark (DTU), Center for Electron Nanoscopy, Building 307, 2800 Kongens Lyngby, Denmark **Phone:** +45 45256471, **E-mail:** jakob.wagner@cen.dtu.dk

Field of research:

My research interests include high-resolution electron microscopy, energy-filtered imaging and *in situ* electron microscopy, with a primary emphasis on characterization and *in situ* study of semiconductor nanowires, nanoparticle catalysts and low-contrast materials. I am particularly interested in atomic scale imaging and spectroscopy of nanostructured materials response to the presence of gas and heat.

Education and Professional Career:

- 1999** Master of Science, double major in Physics and Mathematics, University of Southern Denmark, Odense, Denmark.
- 1999-2002** PhD in Physics at University of Copenhagen and Haldor Topsøe A/S, Lyngby, Denmark
Dissertation: *In situ* transmission electron microscopy of catalyst particles.
- 2003-2005** Postdoctoral researcher at Fritz-Haber Institut der Max-Planck Gesellschaft, Department Inorganic Chemistry, Berlin, Germany.
- 2005-2007** Postdoctoral researcher at Lund University, Materials Chemistry, Lund, Sweden.
- 2007-2013** Senior Scientist at Center for Electron Nanoscopy, DTU.
- 2013-** Scientific Director, Professor at Center for Electron Nanoscopy, DTU.

Academic Achievements:

- Author and co-author of more than 100 scientific papers published in international refereed journals, with a total of 2800+ citations (WoS September 2016)
- H-Index: 26 (Web of Science; ISI ResearcherID: H-5392-2011).
- Supervised and co-supervised 8 PhD students to completion and several masters and bachelor students to completion.
- Currently supervising 1 PhD student and co-supervising 4.

Awards, Honours and Funding:

- 2011** Awarded 'AEG Elektronprisen 2011' - Danish award.
- 2009-2014** *Principal Investigator* and supervising PhD students. 'CASE: 'Catalysis for Sustainable Energy' Danish Agency for Science. Investment Capital for University Research (UNIK), Center of Excellence.
- 2011-2015** *Principal Investigator* and supervising Post Doc. – 'Graphene chemical vapour deposition: Roll to roll technology'. Funded within the FP7 framework. NMP.2011-6, Project ID: 285275
- 2012-2015** *Principal Investigator* and supervising Post Doc. – 'Nanowires for solid state lighting'. Funded within the FP7 framework. NMP.2011.2.2-3, Project ID: 280773
- 2013-2017** *Principal Investigator* and supervising Post Doc. – 'Indium replacement by single-walled carbon nanotube thin films'. Funded within the FP7 framework. NMP.2013.4.1-1, Project ID: 604472
- 2014-2018** *Principal Investigator* – 'A plant-produced immunoenhanced pig vaccine against PRRS – PIGVAC' Funded by Det Strategiske Forskningsråd
- 2016-2024** Principle Investigator – V-Sustain – 'VILLUM Center for the Science of Sustainable Fuels and Chemicals' Funded by research grant (9455) from VILLUM FONDEN