

## Curriculum Vitae for Carsten Svaneborg

**Born:** 22/8 1972, Roskilde, Denmark. Danish Citizenship.

**Marital Status:** Living together with girl friend and cat, no children.

### Contract:

- **Address:** Carsten Svaneborg, Paludan-Müllersvej 191, 8200 Århus N, Denmark
- **Phone:** +45 2066 2118 (mobile) **E-mail:** [job@zqex.dk](mailto:job@zqex.dk)
- **Home page:** <http://www.zqex.dk> and <http://www.zqex.dk/science>

### Competencies:

- **Natural science.** Analyse complex problems. Create, learn and apply knowledge.
- **Physics.** Statistical mechanics, soft-condensed matter, scattering techniques, rheology.
- **Modelling.** Computer modelling and simulation of complex problems.
- **Numerics.** Numerical techniques, optimizing algorithms, statistics.
- **Communication.** Presented results at international conferences, lectured courses.
- **Organization.** Created a graduate level university course and organized workshops.
- **Languages.** Fluent English. Reads/understands German and Swedish.
- **Programming.** High level languages e.g. C++, Perl, Mathematica, and SQL.
- **IT experience.** 20+ years with computers and programming. 10+ years with Linux/Unix.
- **Graphics.** Raytracing, OpenGL/GLUT programming. 3D visualisation.

### Employments:

- 1/7 2009 – 31/1 2010 Assistant Professor at the Dept. of Chemistry, University of Aarhus. Funded by a collaboration agreement with ENS-Lyon.
- 1/4 2006 - 30/6 2009 Assistant Professor at the Dept. of Chemistry, University of Aarhus, Denmark. Funded by a FNU Steno grant.
- 1/8 2003 - 31/3 2006. Post-doc at the Max Planck Institute for Complex Systems in the Department of Biological Physics lead by Dr. F. Jülicher, Dresden, Germany.
- 1/7 2001 - 30/7 2003. Post-doc at the Max Planck institute for Polymer Research in the Theory group lead by Prof. Dr. K. Kremer. Mainz, Germany.
- 1/3 1999 – 1/3 2001 Webmaster for the Physics and Chemistry department. Risø National Laboratory, Denmark.
- 1/3 1998 – 28/2 2001. Employed as a Ph. D. student at the Physics and Chemistry Department. Risø National Laboratory, Roskilde, Denmark.
- 1/9 1997 – 1/10 1997. Free-lance consultant job for E-scape Interactive. (implementing the mechanics of a sailing game for the home page of a Whitbread team)

### Education:

- 23/4 2001: Awarded the Ph. D. degree in Physics by the Technical University of Denmark.
- 20/6 1997: Awarded the Masters degree by the University of Copenhagen (cand.scient).
- 1/9 1991: Immatriculated at the University of Copenhagen, Faculty of Science.

### **Grants:**

- 1/11 2008 – 1/11 2011: Hardware grant for "Computational soft-condensed matter" from the Danish Centre for Scientific Computing (26,455 eur).
- 1/4 2006 – 30/6 2009: Danish Natural Science Research Council Steno grant for the project "Computational soft-condensed matter" (263,231 eur)

### **Supervision and teaching activities:**

- 2006–2009. Responsible for, organising and teaching in the graduate level course "Physical Chemistry of Soft-Matter".
- 2008. Supervisor of a project on liquid crystal simulations.
- 2007. Active in the "Scattering study group" teaching fundamental aspects of radiation-matter interactions and Fourier transform theory.
- 2006. Instructor of the (undergrad.) course "From atoms and molecules to materials".
- 2006 Co-organiser of "Simulating polymers" tutorial at Cecam, Lyon, France.
- 2005-2006 Manager and head developer of "[Project Gauss](#)" a patent WIKI-site.
- 2005 Co-organiser of "From colloids to polymers" tutorial at Cecam, Lyon, France.

### **Invited talks and research stays:**

- 18/1-27/1 2010. Research stay at Centre Blaise Pascal, Lyon, France.
- 29/11-5/12 2009. Research stay at Centre Blaise Pascal, Lyon, France.
- 26/11 2009. Talk "Scattering from complex structures - a LEGO approach." at University of Copenhagen Life Sciences faculty.
- 13-19/10 2009. Research stay at Sandia National Laboratories, Albuquerque, USA.
- 12/1 2009. Invited talk "Elastic Properties of Polymer Networks" Radisurf group. K. Daasbjerg, Århus, Denmark.
- 30/4 2008. Invited talk "Ageing and Stress Transfer in Polymer Networks". T. C. B. McLeish' group, Leeds, UK.
- 1/8 2007. One week research stay at Centre Européen de Calcul Atomique et Moléculaire. Cecam, Lyon, France.
- 8/9 2006. Invited talk "Microscopic Deformations, Macroscopic stresses, and Primitive Paths in Polymer Networks". T. C. B. McLeish' group, Leeds, UK.

### **Conference participation:**

- 18/10 2009. Multiple length and time scales in complex fluids. Santa Fe, USA, (poster)
- 13/8 2009. Danish Colloid and Interface Symposium. Århus, Denmark. (poster)
- 27/1 2009. 6th Nordic scattering workshop. Århus, Denmark. (poster)
- 21/1 2009. iNano årsmøde. Århus, Denmark. (poster)
- 11/11 2008. Jülich soft matter days. Bonn, Germany. (talk)
- 27/6 2008. Liquid Matter conference 2008. Lund, Sweden. (poster)
- 17/6 2008. Danish Physics Society meeting. Nyborg, Denmark. (talk)
- 29/5 2008. Danish Center for the use of Synchrotron X-ray and Neutron facilities. DanScatt, Århus, Denmark. (poster)
- 21/1 2008. iNano årsmøde. Århus, Denmark (poster).
- 2/4 2008. SimBioMa 2008 conference. Konstanz, Germany. (poster)
- 16/9 2007. 11th Polymer Discussion. Meissen, Germany. (talk)
- 16/8 2007. Danish Colloid and Interface Symposium. Århus, Denmark.
- 15/7 2007. Elastomers, Networks & Gels. Gordon Conference, New Hampshire, US. (poster)
- 24/6 2007. 4th. European Conference on Neutron Scattering. Lund, Sweden. (talk)
- 1/2 2007. 4th Scandinavian Workshop on Scattering from Soft Matter. Lund, Sweden (talk)
- 3/9 2006. PNG: Functional and Biological Gels and Networks. Sheffield, UK. (talk)

- 8/3 2006. Statistical Physics, Soft Matter and Biological Physics. Nordita, Copenhagen, Denmark. (talk)
- 27/3 2006. German Physics Society meeting. Dresden, Germany. (talk)
- 18/6 2005. Simulations of entanglements in polymeric liquids. Cecam workshop, Lyon, France. (talk)
- 4/3 2005. German Physics Society meeting. Berlin, Germany. (poster)
- 16/11 2004. Jülich Soft Matter Days. Kerkrade, Netherlands. (poster)
- 13/8 2003. Hairy interfaced and stringy molecules. Workshop/Summer school, SDU, Odense, Denmark. (poster)
- 28/3 2000. Scattering Methods Applied to Soft Condensed Matter. summer school, Bombannes, France. (talk)
- 6/6 1999. Methods in Molecular Simulation. CPP5 summer school, Manchester, UK. (poster)

#### **Reviewing:**

- Physical Review Letters
- Physical Review E
- Macromolecules

#### **Miscellaneous courses:**

- February 2009. Idea history – The modern world (Open University Århus)
- September 2008. Søren Kierkegaard (Open University Århus)
- Spring 2007. Course on university pedagogics. (University of Århus)
- February 2007. Introduction to philosophy (Open University Århus)
- May 2006. Course on public outreach. (Research and innovation ministry)

#### **Member of:**

- The Danish Physics Society
- European Physics Society
- Århus Bach selskab
- IT-politisk forening

#### **Spare time activities:**

- Philosophy in particular Søren A. Kierkegaard.
- Argentine Tango.
- Photography.
- Experiencing and enjoying the moment.