

Associate Professor, Physics
DNRF-center “Glass and Time”
Dept. of Sciences
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Academic qualifications and appointments

2009 **Associate Professor** Physics, Dept. of Sciences, Roskilde University
2007 **Assistant Professor** Physics, Dept. of Sciences, Roskilde University
2007 **Ph.D.** Laboratoire de Chimie Physique (LCP), Université Paris Sud
2003 **M.Sc.** Physics and Mathematics, Roskilde University

Research and Publications

Macroscopic experimental techniques: High-pressure dielectric spectroscopy, aging studied by dielectric measurements, shear-mechanical spectroscopy, and bulk-mechanical spectroscopy.

Experimental development: Implemented new high-pressure dielectric setup at LCP (Paris). Project manager on installation and implementation of high-pressure dielectric setup at Roskilde University. Developed and implemented a novel technique for measuring dynamical thermal expansivity, a project which required close collaboration with and project management of several technicians.

X-ray and neutron scattering: Taken part in 10 scattering experiments, in the period 2004–2008 with a total of more than 60 days beam time spread on 7 different instruments covering the techniques inelastic and quasielastic neutron scattering, inelastic X-ray scattering, inelastic UV-scattering, and neutron diffraction (Neutron sources: ILL (Grenoble) and LLB (Paris). Synchrotrons: ESRF (Grenoble) and Elletra (Trieste)). Main proposer and main coordinator on most of these experiments, which have lead to 5 papers.

Publications: Total of 19 peer-reviewed papers, 7 as first author (including a Phys. Rev. Lett. on the boson peak) and 4 as senior author (including a Nature Physics paper on isomorphs).

Oral Presentations Total of 16 oral presentations at conferences and workshop (14 international, 2 national), 2 invited talks (“6th IDMRCs”; Rome, 2009. “Glass and Entropy”; Trencin, 2008).

Teaching

Lecturer: 7.5 ECTS points course on Electrodynamics (3 times in the period 2008–2011).

Candidates produced and currently supervised (since 2007): 5 basis projects groups, 2 bachelor project groups, 4 Master degree students, 1 Ph.D. student (the thesis is currently being evaluated).

Summer School Lecturing: Co-organizer of and lecturer at the Ph.D.-school “Aging of slowly relaxing systems” June 19 - June 25, 2009, Sømimestationen, Holbæk, Denmark. Will moreover lecture this summer (2012) at the “Second NBIA Workshop-School on ESS Science” on the Niels Bohr Institute in June, and the “Applications of X-ray and Neutron Scattering in Biology, Chemistry, and Physics”-school at the Danish Technical University in August.

International collaborations (with common publications)

- Prof. M. Roland (Naval Research Laboratory, Washington DC, USA).
- Prof. C. Alba-Simionesco (Laboratoire Léon Brillouin, Orsay, France).
- Dr. B. Frick (Institut Laue Langevin, Grenoble, France).
- Prof. Alexei Sokolov (Department of Chemistry, University of Tennessee, USA).
- Dr. G. Monaco (European Synchrotron Radiation Facility, Grenoble, France).
- Dr. CNRS G. Tarjus (LPTMC, Université Pierre et Marie Curie, Paris, France).

Stays Abroad and Languages

2008	One month as visiting researcher with Prof. Simon at Texas Tech University (USA).
2004–2006	Three years as Ph.D. student with Dr. Alba-Simionesco at LCP, Paris (France).
1994–1995	One year resident and volunteer work, San José (Costa Rica).
1990–1991	18 months resident and international high school student, Katmandu (Nepal).

Danish (native), English (fluent), French (good), Spanish (basic), German (basic).

Grants

2007	L’Oreal grant “For Women in Science” 100,000 DKK. Grant given by L’Oreal in collaboration with the Royal Danish Academy of Sciences and UNESCO-
2003	“Internationaliserings stipendiat” 1,370,000 DKK grant given by Forskningsuddannelsesrådet (Denmark) to finance salary and research during the 3 year period of Ph.D. studies at LCP in Paris.

Outreach

- 30 talks for high school students about glass and physics (2007–2011).
- Head of the RUC-stand during 3 “Gender Days” at Experimentarium (2011).
- 4 years as a visitors guide at Science museum Experimentarium (1999–2003).

Interviews given about glass-science:

videnskab.dk/miljo-naturvidenskab/se-et-forsog-med-vaesker-i-laboratoriet (movie, K.Niss,2011).
 videnskab.dk/miljo-naturvidenskab/eksperimental-fysik-undersoger-ny-fasetilstand (movie, K.Niss,2010).
 videnskab.dk/miljo-naturvidenskab/forskerne-er-blevet-klogere-pa-vaesker (article, K.Niss&J.Dyre,2011).
 glass.ruc.dk/pdf/articles/Weekendavisen_2009_16_okt.pdf (article, Glass&Time,2009).

Committee work and organization

- Boardmember of Danish Women in Physics since 2008. Organized the annual meetings (2009 and 2010). Presently Danish representative in International Women in Physics (part of IUPAP).
- Member of Ph.D.-committees; at Chalmers Tekniska Högskola (Göteborg) June 2010, and at Roskilde University February 2011.
- Participant in a round table discussion on gender equality in research at the Danish Ministry of Research, February 2009.
- Member of appointment committees (“ansættelsesudvalg”) for 3 Ph.D.-positions.
- Co-organizer of “Glass and Time” annual international workshops (2005–2011).
- Co-organizer of the international workshop “Fragility of Viscous Liquids”, Copenhagen, October 8–10, 2008.
- Member of Mathematics and Physics council at RUC (VIP-repræsentant) since 2011.