

# CV

## Klavs Hansen

<http://www.klavshansen.cn/>

[klavshansen@tju.edu.cn](mailto:klavshansen@tju.edu.cn)

Wednesday 2<sup>nd</sup> October, 2024

### Affiliations

#### **Professor of physics**

Center for Quantum Studies,  
Department of Physics,  
School of Science,  
Tianjin University, China

#### **Senior visiting professor**

KU Leuven, Belgium  
Quantum Solid-State Physics,  
Department of Physics

**DOB** August 3rd 1958

**Citizenship:** Danish.

**Ph.D. degree** 1991 with the project title 'An Experimental Study of Electronic Shell Structure in Large Sodium Clusters' from the Niels Bohr Institute, Copenhagen.

### Research interests:

**Topics:** Quantal and statistical processes in nanoscale quantum systems. Thermodynamics of free clusters and the approach to thermal equilibrium.

**Systems:** Fullerenes; metal, carbon and molecular clusters; polycyclic aromatic hydrocarbon molecules.

**Tools:** Mass spectrometers, electrostatic storage rings, nano- and femtosecond lasers, theory.

### Publications:

194 peer-reviewed articles, incl. 16 Phys. Rev. Lett., two Nature, one Nature Photonics, one Science articles and one Nature Communications; two book chapters; one monograph (2nd edition 2018); h-index = 40, citations 5000+ (Web of Science).

### Positions held:

**Postdoc**, Department of Chemistry, UCLA, 1991-1992.

**Research assistant professor**, Niels Bohr Institute, Copenhagen, 1992-1995.  
**EU research fellow**, Max Born Institute, Berlin, 1995-1997.  
**Research associate professor**, University of Århus, 1997-1999.  
**Research scientist**, Johannes Gutenberg University, Mainz, 1999.  
**Senior researcher**, University of Jyväskylä, Finland, 1999-2003.  
**Associate professor**, Gothenburg University, Sweden, 2003-2016.  
**Professor**, Lanzhou University, China, 2020-2023.

### Scholarships, honors and awards

**Guest professor**, Tokyo Metropolitan University, October 2011-March 2012.  
**Guest professor**, Université Paris Sud, July 2014.  
**Visiting scientist**, Århus University, July 2014-June 2015.  
**1000 Talents professorship**, Tianjin provincial government, 1 million RMB prize, 2016.

### Academic leadership

**Board member** Chemical and Molecular Physics Section of the European Physical Society, 2004-2007. *Chair* 2007-2010, 2010-2013.  
**Leader** Gothenburg Nanoparticle Platform, 2007-2010.  
**Board member** NanoConnect Scandinavia, 2009-2012.  
**International program committee member** ECAMP10, Salamanca, Spain, 2010 and ECAMP11, Aarhus, Denmark, 2013.  
**Program committee member** of 'Negative ions and molecules in astrophysics' workshop, Gothenburg, Sweden, 2011.  
**International program committee member** of the Electrostatic Storage Devices (ESD) conference series, 2015 - present.  
**International committee member** of EGAS (European Group of Atomic Systems), 2016 - present.

### Reviewing; positions, prizes

**Reviewer for promotions:** V.V.Kresin, University of Southern California, to full professor, 2004; Mikko J. Sipilä to full professor, Helsinki University, 2021; Michael Ehn to full professor, Helsinki University, 2021.  
**Reviewer for positions:** Department of Physics, University of Helsinki, 2015, and 2016; Irish Research Council (postdoc and PhD positions), 2019 and 2022.  
**Prize:** Academic Research Excellence Award of the Chinese Ministry of Education, 2019.

### Conference, summer school and workshop organization

**Conferences:** ISSPIC13 (conference secretary), Gothenburg, 2006; ESD8 (chair), Tianjin 2019.

**Workshops:** 'Telluride Research Center Cluster Workshop', Telluride, 1993; 'Nucleation of inorganic atmospheric clusters and particles', Gothenburg, 2008; 'NICITA workshop on ions in the atmosphere', Gothenburg, 2013; 'Delocalized electrons in atomic and molecular nanoclusters', Erice, 2016; 'Photophysics of biomolecular ions', Telluride, 2017; 'Dynamics of Nanoclusters with Delocalized Electrons', Erice, August 2022. 'Dynamics of Nanoclusters with Delocalized Electrons', Erice, May 2025.

**Summerschools:** '1st STINT Summer School', Gothenburg, 2007; 'Shell structure in finite quantum systems', Erice, 2010; 'Storage Devices and Ion Traps', Gothenburg, 2011; 'Nordic Cluster Summer School', Gothenburg, 2014.

### **Student supervision:**

#### ***Ph.D. theses supervision:***

J. Toppari, M. T. Savolainen, L. Taskinen (w. J. Pekola, University of Jyväskylä); M. Kjellberg, E. Sundén (Gothenburg University) (all completed).

Minghao Li, Zahid Kumail (Tianjin, ongoing).

#### ***Master students:***

Eight completed.

### **Degree opponent and committees**

**Reviewer** for the docent degree of Aldana Rosso (Lund University, 2016).

**Ph.D. thesis opponent** of Tinja Olenius (Department of Physics, University of Helsinki, 2015).

**Opponent** at two Licentiate thesis defenses (Sweden).

**Ph.D. committee membership:** 10 Swedish, 1 Japanese, 1 French, 1 Belgian.

### **Editorial work**

**Special issue editor**, International Journal of Mass Spectrometry, vol. **252** (2006).

**Editor** of ISSPIC13 proceedings issue of Eur. Phys. J. D vol. **43**(1-3) (2007).

**Editorial board member** The Scientific World Journal (2012-2017); International Journal of Chemical Physics (2013-2015); International Journal of Mass Spectrometry (2016-present).

### **Invited & selected talks**

144 oral presentations, including invited and selected conference talks, talks at workshops and at non-home institutions.

### **Misc.**

Interviewed for *Nature Nanotechnology* **4** (2009) 701; *Physical Review Letters* editorial material (<http://physics.aps.org/articles/v9/16> (2016)); *Physics Focus* article (2017).