

Curriculum vitae

Name, Date of birth: Göran Wahnström, Dec 13, 1955

Affiliation: Chalmers University of Technology

Education and degrees

Docent degree 1989 in Theoretical Physics, Chalmers University of Technology.

Ph.D. 1985 in Theoretical Physics, Chalmers University of Technology. Thesis: "Theoretical Investigation of the Motion of an Adsorbed Atom". Thesis advisor: Professor Alf Sjölander.

M.Sc. 1979 in Engineering Physics, Chalmers University of Technology.

Current and previous positions

Professor (Chaired Professor), from 7/2001, Dep. of Applied Physics, Chalmers. Research activity: 50%, Teaching activity: 25%.

Avdelningschef (Division Head, Materials and Surface Theory, Dep. of Applied Physics/Physics, Chalmers), since 2005.

Viceprefekt (Deputy Head of Department, Dep. of Applied Physics, Chalmers) 2005-2013.

Biträdande professor (Professor), 1996 to 2001, Dep. of Applied Physics, Chalmers.

Universitetslektor (Associate Professor), 1994 to 1996, Institute of Theoretical Physics, Chalmers.

Forskarassistent (Assistant Professor), 1988 to 1994, Institute of Theoretical Physics, Chalmers.

Postdoktor (Postdoctoral associate), 11/1985 to 10/1987, Dep. of Chemistry, University of Santa Barbara, USA, with Prof. Horia Metiu.

Distinctions, scholarships and awards

Strong evaluations in international reviews: In the international Evaluation of Swedish Condensed Matter Physics, 2004, by VR (rapportserie 12:2005) my theoretical research work got the highest rating, "Outstanding".

High-impact publication record: About 120 papers in scientific journals with referee system. H-index: 44. Total number of citations: about 5100. (Google Scholar, Jan 2018). 10 in Physical Review Letters, 3 invited chapters in books. <https://scholar.google.se/citations?user=bV94iAsAAAAJ&hl=sv>

I give talks at international conferences (2-5/year), often as invited speaker. I have given a series of lectures at the ICTP in Trieste. Invited presentations have been delivered at the American Physical Society (APS), Materials Research Society (MRS), European Materials Research Society (EMRS), Psik conference (Psik), Electrochemical Society (ECS), and Solid State Ionics (SSI) meetings. Keynote speaker at the International Conference on Solid State Protonic Conductors (SSPC).

Personal scholarships and awards: NFR/VR Senior Research Fellowship (2000-2005), Chalmers Pedagogical Price (1990), The John Ericsson Medal (1980), Chalmers Graduate Fellowship (1979-1983).

Supervising and Teaching experience

Teaching: I have been and am teaching various courses both at the undergraduate and graduate levels. I consistently get excellent evaluations on my teaching performance. In 1990 I was awarded the Chalmers Pedagogical Price, in particular for lecturing and developing courses at the undergraduate level.

Main Ph.D. supervisor for 15 PhD students: Yinggang Li 1993, Urban Engberg 1996, Thomas Mattsson 1997, Björn von Sydow 1997, Karin Carling 2003, Mikael Christensen 2004, Gustav Karlberg 2006, Per Sundell 2006, Mårten Björketun 2007, Sven Johansson 2010, Dan Fors 2011, Joakim Nyman 2012, Martin Petisme 2015, (shared) Edit Helgee 2015, Anders Lindman 2017. Additionally, **main supervisor** for two lic degrees, Mattias Slabanja 2005 and Erik Wensink 2006. **Associate supervisor** for >10 PhD students. **Postdoc supervisor** for Mikael Christensen 2004-2006, Sven Johansson 2010-2012 and Samrand Shafeie 2018-. **M.Sc. thesis supervisor** for about 40 master students.

At present main supervisor for PhD students Martin Gren, Erik Jedvik Granhed, and Erik Fransson.

Pedagogics education: I have complete pedagogics-training and -education (and leadership training) courses.

National and international assignments of importance

Research leadership: I am Excellence Profile Leader for the Theory and Modelling within Materials Science – A Chalmers Area of Advance: 2010- .

I am member of the ESF working group: Real Materials Properties/Interfaces.

Program director and scientific leader of the SSF supported program in materials science “ATOMICS”. Period of operation: 2000-2009. Budget: 32 MSEK.

Research community: I was member of NFR’s/VR’s working committee in Condensed Matter Physics during 1994-1996, 1999, 2010, and in Materials Science 2014-2015, 2018; co-chairmen 2015 and chairman 2018. I was member of the SSF’s evaluation committee for “The Ingvar Carlsson Award”, 2009 and for “Strategic recruitment of international top scientists”, 2007

Ph.D Student examinations: I have been opponent for several PhD doctoral dissertations; in Sweden, Denmark, Norway, France, Finland, and Iceland.

I frequently act as referee for international journals and evaluates applications for promotion. I am frequently on the evaluation committee for doctoral dissertations, and I have been co-organizer for several international conferences.

Current external funding

Granting agency (Role, Focus)	Years	Funding per year	Total amount
VR (PI)	2017-2020	1 025 kSEK	4 100 kSEK
Swedish Energy Agency (PI)	2018-2021	1 258 kSEK	5 033 kSEK
SSF (co-PI) RMA 15-0062 my share in parenthesis	2016-2021	6 142 kSEK (1 360 kSEK)	30 711 kSEK (6 800 kSEK)
Industry/Sandvik,SecoTools) (PI)	2017-2020	606 kSEK	2 425 kSEK

Innovation and outreach activities

Collaborates with Swedish industry (Sandvik, SecoTools), since 2000, with joint PhD projects.

One patent: S. Norgren, M. Christensen and G. Wahnström,

patent no SE 0401037-7 (22 April 2004), US patent 11/110,880 (April 21, 2005).