

Flemming Besenbacher



Academic experience: 2008: Professor Honoris Causa from Huazhong Normal University, Jilin University, and Zhejiang University of Technology, China; 2007: Honorary Prof. at Henan University (China) and Tianjin University (China); 2004-09: Honorary Prof. at Aalborg University; 1997: Visiting Prof., Lawrence Berkeley Nat. Lab., USA; 1996: Full Prof., Aarhus University; 1994: D.Sc., Aarhus University; 1989-95: Associate Prof., Aarhus University; 1986-89: Assoc. Res. Prof. by the Danish Council for Research Policy; 1982-86: Associate Prof., Aarhus University; 1982 and 1983: visiting scientist, Sandia Nat. Lab., Albuquerque; 1978: graduated from Institute of Physics, Aarhus University.

Research awards: 2009: Aarhus Trade Prize. 2008: Recipient of one of the prestigious ERC advanced research grants from the European Research Council. 2008: Bird-Steward- Lightwood Lectureship award at the Dept. of Chemical and Biological Engineering at University of Wisconsin-Madison, 2007: The Knight's Cross of the Order of the Dannebrog; 2007: Honoris Causa from Henan University and Tianjin University, China. 2006: The Grundfos award for outstanding research within nanoscience; 2004: Industrial Prize of the Danish Academy of Natural Sciences; 2003: Villum Kann Rasmussen Award for outstanding research achievements in science and great efforts in nanotechnology; 2002: co-recipient of grant for center of excellence: "Towards a new hydrogen economy"; 2001: Co-recipient of grant for center of excellence: "Nanoscience and Tissue Engineering approaches to improved bio-compatibility; 2000: member of Scientific Advisory Board, Max-Planck-Institut für Festkörper-forschung, Germany; 1995: Danish Physical Society's Research Prize for research achievements in surface science using scanning tunneling microscopy; 1993-2003: Corecipient of grant for the center of excellence: Center for Atomic-scale Materials Physics (CAMP) by the Danish National Research Foundation.

Leadership: 2008: Board member of the MedTech Innovative Center, Aarhus, Denmark. 2005-: Member of the board of the Carlsberg Foundation; 2005: Member of the board of the Carlsberg research Laboratories; 2005-: Member of the board of the Carlsberg Breweries; 2005-: Board member of the Tuborg Foundation; 2005-: Appointed Director of the NANOFood consortium; 2004: Danish representative on EU Program Comm. for 7th Framework Programme; 2002-: Head of iNANO graduate school (iNANOSchool), Aarhus University; 2002-: Head of Interdisciplinary Nanoscience Center (iNANO) Aarhus University; 2001: Danish representative on Phys. and Eng. Sciences unit, European Science Foundation; 2001: Danish representative on EU COST-Nanoscience; 2001: advisory comm. on nanotechnology, Danish Ministry of Education; 2001: Head of scientific advisory comm. on nanotechnology, Danish Research Ministry; 1999: EU expert comm. on Nanotechnology in 6th Framework Program; 1993-2002: Vice-director of "Center for Atomicscale Materials Physics" (CAMP) sponsored by the Danish National Research Foundation;

Research Areas: Nanoscience, nanotechnology, nanocatalysis, structure and reactivity of clean, adsorbate-covered and alloy surfaces, scanning tunnelling microscopy, atomic force microscopy, nucleation and growth of nanoclusters, interaction of hydrogen with defects in metals, hydrogen storage, quantized conductance in nanowires, different penetration phenomena, adsorption of bio-molecules at surfaces, biocompatibility, biosensors

Memberships of committees: International Organizing Committee of NTNE09 (2009); International Advisory Committee of ISSS-5 (2008), International Organizing Committee of NTNE08 (2008); Scientific Advisory Committee, NANOMAT Programme (2008); Member of international evaluation committee of MESA+ (2008); Danish National Network for the 7th EU Framework Programme (2007-); Scientific Advisory Board, Centre for Molecular (Bio) medicine, Trieste, Italy (2005-); Member of the Danish Natural Science Research Council (1998-2004); Scientific Committee of the Fifth Nordic Conference on Surface Science (Finland 2004); Chair of the Programme Committee for NANO-7 & ECOSS-21; International Advisory Board of ECOSS-22; Elected Fellow of the Royal Danish Academy of Sciences, 1998, of the Danish Academy of Technical Sciences (ATV), 1997, of the Danish Academy of Natural Sciences (DNA) 1997, and Fellow of the Institute of Nanotechnology.

Editorial board of: NANOMEDICINE: Nanotechnology, Biology and Medicine (2008-); ACS-NANO (2008-); Advanced Biomaterials (2008-); Open Condensed Matter Physics Journal (2007-); Journal of Nano Education (2007-2009); Nano Today (2006-); Nanoscale Research Letters (2006-); Physical Review Letters (2006-2008); Journal of Scanning Probe Microscopy (2006-2008); Journal of Nanotechnology (2004-2008); Small (2004-); Nanoletters (2003-) Surface Science (2003-2008); Journal of Physics - Condensed Matter (2001-); Journal of Nanoscience (2002-); Journal of Nanoscience and Nanotechnology (2001-); Progress in Surface Science (1999-); Probe Microscopy (1999-); Surface Review and Letters (1998-); Chemical Physics Letters (1996-2000)

Referee for: Science, Nature, Nature Materials, Nature Nanotechnology, Phys. Rev. Letters, Phys. Rev. B, JACS, ACS-NANO, Surface Science, Jour. Chem. Phys., Langmuir, Angewandte Chemie, Nanotechnology, NanoLetters, Europhysics Letters, Chemical Physics Letters, Surface Review and Letters, Probe Microscopy; Progress in Surface Science, European Research Council. I have been referee for larger research proposal for the research councils in Japan, US, Sweden, Italy, Netherlands, Switzerland, Ireland, Germany, Austria and Norway.

Invited talks: Plenary at int. conf.: 159 since 1990, at research institutions and universities: approx. 90 since 1990

EU grants: ERC, Advanced research grant, European Research Council, VIN; Integrated project, the 6th Framework, PICOINSIDE; Network of Excellence the 6th Framework, FRONTIERS; STREP under the 6th Framework, Nanocues; Research Training Network,

Atomic and molecular manipulation as a new tool for science and technology (AMMIST); Research Training Networks, Reactivity of clean and modified oxide surfaces (OXIDESURFACES); Information Society Technology, Bottom-Up-Nanomachines (BUN); Training and Mobility of Researchers (TMR) Programme.

Publications: As per January 2009, my publication list contains 12 patents and more than 390 entries in international, refereed journals, including: Book chapters and Reviews: 19, Nature: 3, Nature Materials: 3, Nature Nanotechnology: 1, Science: 10, Physical Review Letters (PRL): 48, Journal of Applied Physics: 12, Applied Physical Letters: 6, JACS: 11. My published articles have been cited more than 10.634 times and my H-index is 57.

Supervision 1999 - 2009: 26 PhD students are currently supervising 13 PhD students. I have supervised 18 Master of Science students. Since 1994 I have been a member of the PhD Committee at the Department of Physics and Astronomy and as such been head of the evaluation committee at more than 20 PhD exams. Since 2003 I have been the director of the graduate school, iNANOSchool, in which 125 PhD students are currently enrolled.