

Curriculum Vitae for Bernt Nilsson

Personal Data

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Home address: Trumslagaregränden 1
226 39 LUND, Sweden
Born: April 21, 1959, Grimeton, Sweden
Married, one daughter born 1991

Professional preparation

1. Lund University, Lund, M.Sc. in Chemical Engineering, 1984
2. Lund University, Lund, Tekn.Lic. in Automatic Control, 1989
3. Lund University, Lund, Ph.D. in Automatic Control, 1993
4. Lund University, Lund, Honorary docent in Chemical Engineering, 2000

Appointments

- 2003-..., Associate Professor, Dept of Chemical Engineering, Lund University.
- 1997-2003, Assistant Professor, Dept of Chemical Engineering I, Lund University.
- 1995-1997, Assistant Professor, (part time), Dept of Chemical Engineering II, Lund University.
- 1995-1997, Assistant Professor, (part time), Dept of Automatic Control, Lund University.
- 1993-1995, Research Engineer, Dept of Automatic Control, Lund University
- 1985-1993, PhD student, Dept of Automatic Control, Lund University

Commissions of trust

- Member of the board of *Centre for BioSeparation*, CBioSep, VINNOVA Competence centre, 2004-...
- Program director for the SSF funded *Centre for Chemical Process Design and Control*, CPDC, 2001-...
- Director of studies *CPDC graduate school – Phase I and Phase II*, 1999-...
- Director of studies at the undergraduate program for *Chemical Engineering*, Lund University, 2001
- Chairman at International Conference on Intelligent Systems in Process Engineering, 1996.
- Reviewer for a number of journals and conferences like; *Journal of Chromatography*, *Journal of Process Control*, *Automatica*, *Chemical Engineering and Technology*, etc

Networks in academia and industry – a selected list

- Prof Alois Jungbauer (research contact), Institut für Angewandte Mikrobiologie, Universität für Bodenkultur, Wien, Austria
- Prof Massimo Morbidelli (research contact), Laboratorium für Technische Chemie, ETH, Zürich, Switzerland
- Prof Sten Bay Jorgensen and prof Raficul Gani (research contact), Dept of Chemical Engineering, DTU, Copenhagen, Denmark

- Assoc prof Elling Jacobsen (research contact), Dept. of Automatic Control, Royal Institute of Technology, Stockholm, Sweden
- Prof Bengt Andersson and prof Anders Rasmuson (research contact), Dept of Chemical Engineering, Chalmers Technical University, Göteborg, Sweden
- Dr Jan Peter Axelsson (industrial contacts), Pfizer, Strängnäs, Sweden
- Civ-ing Karl Johan Brink (industrial contacts), BioInvent, Lund, Sweden
- Dr Rolf Edvinsson and Dr Mats Nyström (industrial contacts), Eka Chemicals, Sweden
- Dr Henrik Kockum and Civ-ing Tommy Norén, (industrial contacts), Alfa Laval, Lund, Sweden
- Dr Magnus Pettersson (industrial contacts), Höganäs AB, Höganäs, Sweden
- Dr Jörgen Hager (industrial contacts), BD Medical Systems, Helsingborg, Sweden

Thesis examined

- PhD thesis "*Calibration of Chromatography Models*", Dr Patrik Persson, 2004, Dept of Chemical Engineering
- PhD thesis "*Aspects of the Design of Preparative Chromatography for Purification of Antibodies*", Dr David Karlsson, 2004, Dept of Chemical Engineering (joint supervision with Prof Anders Axelsson)
- PhD thesis "*Modeling of Hindered Diffusion in Gels*", Dr Jan Gutenwik, 2003, Dept of Chemical Engineering (joint supervision with Prof Anders Axelsson)
- Assistant supervisor for 4 graduated PhD students.
- Examined 29 MSc theses.

Teaching activities

- Developed several PhD courses in the area of *Mathematical Modelling, Process Simulation, Transport Phenomena* and *Theory of Chromatography*.
- Responsible for the following undergraduate courses:
 - Advanced course *Process Simulation*, 1997-...
 - Basic course *Process Calculation*, 1995-1997
 - Basic course *Process Control*, 1997
- Experience in teaching basic courses in Chemical Engineering, 1999-...
- Experience in teaching basic courses, advanced courses and industrial courses in Automatic Control, 1985-1997.

Entrepreneurial activities

- Main developer of software tools and toolboxes for computer aided protein separation. (BioSim, BioSep Toolbox, etc.). Currently in industrial use at two biopharmaceutical companies in Sweden.

Other qualifications of relevance

- Invited lecture at the national conference *Processteknik 2004*, "Modellering av industriell kromatografi för proteinseparation", Göteborg, Sweden, October 5-7, 2004
- Invited lecture at *International Symposium on Preparative and Process Chromatography, PREP-2004*, "Calibration of chromatography models", Baltimore, USA, May 23-26, 2004
- Member of the thesis committee for 5 PhD theses
- *Sydkrafts Forskarstipendium*, (Sydkraft Research Grant), 1994, 30000 sek, for the work behind the thesis "*Object-Oriented Modeling of Chemical Processes*."

- SAAB-Scania Young Researcher Award, 1992, 50000 sek, for work in "Object-Oriented Modelling" and for development in education of "Process Control".