

CURRICULUM VITAE FOR PER OLOF HOLTZ

PhD exam

Dissertation: May 1984 at Linköping University

Supervisor: Bo Monemar Research area: Material Physics / Semiconductor Physics

Thesis: "Optical Properties of Some Complex Defects in Compound Semiconductors"

Postdoc periods

1987-1989 University of California at Santa Barbara (UCSB), Engineering Dept., Prof Jim Merz

1997: 4 months, UCSB, Materials Dept., Prof Pierre Petroff

2004: 3 months, UCSB, Materials Dept., Prof Pierre Petroff and Prof. Arthur Gossard

2009: 1 month, UCSB, Materials Dept., Prof. Arthur Gossard

Present employment:

Professor, Dept. of Physics, Chemistry, Biology, Linköping Univ. Time sharing within this position:

25% Director of the PhD education at IFM

35% Director of the graduate school Agora Materiae

40% Research and supervision

Earlier employments

1982-1983 Junior researcher (forskarassistent), Solid State Physics, Lund University

1983-1987 Junior researcher (forskarassistent), IFM, Linköpings University

1987-1989 Postdoc, UCSB

1989- 1997 Assoc. Professor (universitetslektor), IFM, Linköping University

1997 Visiting researcher, UCSB

1997-1999 Assoc. Professor (universitetslektor), IFM, Linköping University

1998- Professor, IFM, Linköping University

2004 and 2009 Visiting researcher, UCSB

2011 Visiting researcher, Chulalongkorn University, Bangkok

Appointments

1990 "Docent", IFM Dept., University of Linköping

1998- Director of PhD studies at Dept. of Physics IFM, Linköping University

2003 Vice Head (proprefekt), Dept. of Physics IFM, Linköping University

2011 Vice Dean, responsible for dissertations and Chairman of the Board for postgraduate studies at LiTH

2012 Head of the graduate school Agora Materiae

Teaching

- Exam from the "Teacher Institute, Malmö"

- Teaching (mathematics and physics) during a 6-year period

- Responsible for the course "Semiconductor physics" 1989-2008 Y-line Program, LiTH

- Responsible for new profile "Condensed Material Physics", Physics program, LiTH, 1995

- Responsible for extended "Semiconductor physics" course 1995-2008, Physics program, LiTH

- Responsible for new course "New materials", 1997-2006, Physics and Y-line Program, LiTH

- Responsible for course "Physics for Technical Biology", 1998/99, LiTH

- Responsible for development of new course "Nanophysics", 2002-2006, Y-line Program, LiTH

- Popular scientific talks for high school (gymnasium) students, several talks every year

Supervision

Supervised the following PhDs as main supervisor to their exam

Cesar Ferreira 1996

Thomas Lundström 1997

Joakim Dalfors 1999

Somrit Wongmanerod 2000

Hamid Haratizadeh 2004

Fredrik Karlsson 2004

Mats Larsson 2005

Linda Höglund 2008

Arvid Larsson 2011

Chi-Wei Hsu, 2013

Supervised the following PhDs as deputy supervisor to their exam

Bouchaib Adnane: 2010

Anders Lundskog, 2012

Supalock Amloy, 2013

Daniel Dufåker, 2013

Supervised the following graduate students to licentiate exam

Daniel Dufåker, lic exam 2011

Göran Rune, lic.exam 1991

At present main supervisor for:

Martin Eriksson, planned dissertation: 2015

and PhD students as deputy supervisor:

Sanna Palmgren, planned dissertation: 2014

Thomas Jemson, planned lic. presentation: 2014

Research Contributions

- About 510 publications accepted at international conferences/published in scientific journals
- Author of the book "Impurities Confined in Quantum Wells" by P. O. Holtz and Q.X. Zhao, Materials Science series no 77, Springer Verlag, Sept 2004
- Program director, NANOPTO SSF program: "Quantum Wires /Dots for Optoelectronics", 2000-05
- Program director, NANOPTO SSF: "Quantum Wires/ Dots for Optoelectronics, extension", 2006-08
- Program director of the NANOPTO SSF consortium: "Nitride Based Quantum Wires and Dots for Optoelectronic Devices, NANO-N", 2006-12

Miscellaneous

- Board member in the Swedish Physical Society 2005-2011
- Board member in IUPAP, 2012-
- Finalist in the Mentor4Research program 2013
- Starting and heading the graduate school Agora Materiae, 2012-

International collaborators

- Prof Kamata, Saitama University, Japan, Nitride quantum wells and dots
- Petroff, UCSB, California, III-V and nitride quantum dots
- Prof Gossard, UCSB, California, III-V quantum dots
- Prof Arikawa, Tokyo University, nitride based quantum dots
- Prof Kapon, EPFL, Lausanne, Switzerland: V-groove quantum wires
- Prof Akasaki, Meijo University, nitrid based quantum structure
- Prof Fukatsu, University of Tokyo, III-V quantum dots embedded in Si
- Prof Kumagai, University of Tokyo, simulations on the growth of nitride semiconductors
- Prof Weman, University of Trondheim, III-V nano rods
- Prof K H Chen, Taiwan University, Taipei, nitride based quantum dots and wires
- Prof Reinhardt Botha, Port Elizabeth University, South Africa, ZnO nano rods
- Prof L C Chen, Taiwan University, Taipei, nitride based quantum dots and wires
- Prof Pelucchi, Tyndall University, Cork, Ireland, pyramidal quantum dots

Industrial/institutional collaborators

- Jan Y. Andersson, Assoc. Prof., Manager Industrial Nano- and Microtechnology, Acreo, Kista
- Susan Savage, Project leader within semiconductor sensors and electronic devices, Acreo, Kista
- Steven Savage, Coordinator of the FOI nano program, FOI, Linköping
- Stefan Molin, TE Conductivity, Järfälla

Hosted external postdocs during the last 8 years

- Dr Evgenii Moskalenko, Ioffe Inst St Petersburg, InAs/GaAs quantum dots, 10 times in 2001-11
- Dr Tanya Shubina, Ioffe Inst, St Petersb, nitride quantum dots, several times during 2001-07
- Dr Alex Toropov, Ioffe Inst, St Petersb, nitride based quantum dots, several times during 2001-07
- Dr C Hsiao, Taiwan University, Taipei, nitride based quantum rods, 2005, 2006, 2007
- Prof S Fukatsu, University of Tokyo, III-V quantum dots embedded in Si, 2005, 2010
- Prof. L C Chen, Taiwan University, Taipei, nitride based quantum rods, 2005, 2006, 2007
- Dr H Murakami, Tokyo University, Tokyo, growth of nitride based semiconductors, 2008
- Dr H Cho, University of Tokyo, simulations on the growth of nitride semiconductors, 2009
- Dr C Hsu, Taiwan University, Taipei, SNOM on nitride based quantum rods, 4 times in 2005-09
- Dr Sakuntam, Chulalongkorn University, Bangkok, growth of nitride/diluted semiconductors, 2010
- Prof L C Chen, Taiwan University, Taipei, nitride based quantum dots and wires, 5 times in 2001-11
- Prof K H Chen, Taiwan University, Taipei, nitride based quantum dots and wires, 4 times in 2001-11
- Dr Rui Masuda, University of Tokyo, simulations on the growth of nitride semiconductors, 2010
- Prof Reinhardt Botha, Port Elizabeth University, South Africa, ZnO nano rods, 2010 and 2011
- Dr Rie Togashi, University of Tokyo, simulations on the growth of nitride semiconductors, 2011
- Dr Y-T Chen, Taiwan University, Taipei, SNOM on nitride based quantum dots and wires, 2011-12
- Dr Zhou Shuai, Beijing University, Simulations on pyramidal quantum dots, 2012-13