

Curriculum vitae

Hans Peter Christensen

Born 1951

M. Sc. EE: Technical University of Denmark, 1976

PhD: Department of Electro Physics, Technical University of Denmark, 1979

The A.R. Angelos price 1983

Education in Marketing, Næstved School of Commerce and Trade, 1987-1989

Studies of Philosophy at the Open University, Copenhagen University, 1995-1999

- 1980-82: Post-Doctoral Research Associate at the Crystal Physics and Optical Electronics Lab., Massachusetts Institute of Technology, USA
- 1982-83: Research Associate at the Department of Electro Physics, Technical University of Denmark
- 1983-84: Design Engineer, NESELCO SPD, Denmark
- 1984-85: Manager of the Department of Design, Great Northern Micro Systems, Denmark
- 1985-87: Project manager for a European ESPRIT-project, DANTEC, Denmark
- 1987-88: Teacher at the Technical High School (HTX) in Slagelse, Denmark
- 1988-90: Assistant Professor at the Engineering College in Haslev, Denmark
- 1990-99: Associate Professor at the Engineering College in Haslev, Denmark
 - 1990-96: Vice-chairman of the study board
 - 1994-96: Head of Electronics Department
 - 1997-99: Chairman of the study board
- 1999-03: Associate Professor at Centre for Engineering Educational Development (CDM), Technical University of Denmark
- 2003-06: DTU Teacher-Training Coordinator, LearningLab DTU, Technical University of Denmark
- 2006-11 Head of study programme in Arctic Engineering, Centre for Arctic Technology, Saanartormik Ilinniarfik & Technical University of Denmark, Sisimiut, Greenland
- 2011-12 Visiting Professor at Universidad de los Andes, Bogota, Colombia
- 2012-15 Study programme coordinator in Arctic Engineering, Department of Civil Engineering, Technical University of Denmark
- 2015-18 Head of study Programme in Civil Engineering, Technical University of Denmark

Member of committees etc.

Review board at the European pilot-evaluation of the education in electronics at the Engineering College of Copenhagen, 1995

Participating personal substitute at the Ministry for Education's board for the Secondary Technical Education in Denmark, 1995-96

Steering committee for the international cooperation on Active Learning in Engineering Education (ALE), 2000-2014
- Chairman 2004-2006

Coordinating group for the Pedagogical Network for Danish Engineering Education (IPN), 2001-2006

Principal organiser of ALE2002Scandinavia, the 2nd Workshop on Active Learning in Engineering Education, Copenhagen-Denmark/Gothenburg-Sweden, June 3rd – 7th, 2002

Member of the organising committee for the Nordic Symposium on Faculty Development in Engineering Education, Odense, Denmark, November 2004

Member of the board for the Danish University Pedagogical Network (DUN), 2005-2006

Network on Nordic Engineering Education Development (NEED), 2005-2006

Publications in Physics

H.P. Christensen: *Spectroscopic analysis of lithium terbium tetrafluoride*, Phys. Rev. **B 17**, 4060-4068 (1978)

H.P. Christensen: *Low-cost optical cryostat system*, J. Phys E: Sci. Instr. **11**, 742 (1978)

H.P. Christensen: *Spectroscopic analysis of LiHoF₄ and LiErF₄*, Phys. Rev. **B 19**, 6564-6572 (1979)

H.P. Christensen: *Spectroscopic analysis of LiTmF₄*, Phys. Rev. **B 19**, 6573-6582 (1979)

C.A. Morrison, H.P. Christensen, and H.P. Jenssen: *Optical spectra, energy levels, and crystal-field parameters of Ho in Rb₂NaHoF₆*, 15th Rare-Earth research Conference, Rolla, USA, Jun. 1981

H.P. Christensen, D.R. Gabbe, and H.P. Jenssen: *Fluorescence lifetime for neodymium-doped yttrium aluminum garnet and yttrium oxide powders*, Phys. Rev. **B 25**, 1467-1473 (1982)

H.P. Christensen and H.P. Jenssen: *Broad-Band Emission from Chromium Doped Germanium Garnets*, IEEE J. Quan. Electr. **QE-18**, 1197-1201 (1982)

Publications in popular science

H.P. Christensen, D.R. Gabbe, H.P. Jenssen og V. Belrus: *Laserkrystaller*, Naturens Verden 1985/2, 41-50 (in Danish)

H.P. Christensen: *Laser-våben er ikke reatistiske*, Dagbladet Information, 82.02.26 (in Danish)

H.P. Christensen: *Umuligt at standse teknologi-eksport*, Dagbladet Information, 82.04.30 (in Danish)

H.P. Christensen: *Røntgenlasere og de store bestråbelser*, Dagbladet Information, 82.08.06 (in Danish)

Books on electronics

H.P. Christensen: *Anvendt elteknik*, Bind 1, Teknisk Forlag 1994 (in Danish)

H.P. Christensen: *Anvendt elteknik*, Bind 2, Teknisk Forlag, 1997 (in Danish)

Publications and presentations on engineering education

H.P. Christensen: *Det pædagogiske udviklingsprojekt "Evaluering af Teori gennem Anvendelse" – Afsluttende rapport (Assessment of Theory through Applications – Final report)*,

CDM Report, DTU 1999 (in Danish)

H.P. Christensen: *What should students know to become good learners?*, 4th Baltic Region Seminar on Engineering Education, Denmark, September 1st – 3rd, 2000; published in the UICEE Seminar Proceedings, pages 27-30

H.P. Christensen: *Afsluttende rapport fra forsøg med studieintroduktion på 3 fagpakker i efteråret 1999/foråret 2000 (Final report on pilot introduction programmes for new students)*, CDM Report, DTU 2000 (in Danish)

H.P. Christensen: *Undervisningsporteføljer (Teaching Portfolios)*, notes for the DTU teacher-training programme (UDTU), CDM, DTU 2000 (in Danish)

H.P. Christensen: *Teacher Training at DTU*, Workshop on Active Learning in Engineering Education, Caracas, Venezuela, January 29th – February 1st, 2001

H.P. Christensen: *Nye roller i studentercentreret undervisning – Gruppearbejde • Vejledning (New roles in student centred teaching – Group Work • Tutoring)*, CDM's skriftserie nr. 6, DTU 2001 (in Danish)

H.P. Christensen: *Study Strategies for Engineering Students at DTU, Part 1: Data Fall 1999 – Spring 2001*, CDM Report, DTU 2001

H.P. Christensen, F. Christiansen and C. Rump: *Solving Engineering Problems: Conceptual Change from Student to Experienced Engineer*, Earli (European Association for Research on Learning and Instruction) Conference, Freiburg, Switzerland, August 28th – September 1st, 2001

J. Walkinton, H.P. Christensen and H. Kock: *Developing critical reflection as a part of teacher training and teaching practice*, European Journal of Engineering Education, vol. 26, no. 4, pages 343-350, 2001

H.P. Christensen: *A suggestion for international teacher training in active learning in engineering education*, 2nd Workshop on Active Learning in Engineering Education, Copenhagen-Denmark/Gothenburg-Sweden, June 3rd – 7th, 2002

H.P. Christensen: *Study strategies for engineering students at DTU*, 30th SEFI (Société Européenne pour la Formation des Ingénieurs) Annual Conference, Firenze, September 8th – 11th, 2002

P. Sørensen, H.P. Christensen and R.F. Christensen: *Evaluering af ugeskema ved DTU forår 2002 (Evaluation of the weekly timetable at DTU Spring 2002)*, CDM report, DTU 2002 (in Danish)

H.P. Christensen: *A total active learning environment for engineering competencies*, 3rd Workshop on Active Learning in Engineering Education, Olin College, Boston, USA, June 16th – 20th, 2003

H.P. Christensen, B. Lemoult, J. Miller-Jones, M. Duque and J.T. Hernández: *ALE: The international Active Learning in Engineering Education network*, 31st SEFI (Société Européenne pour la Formation des Ingénieurs) Annual Conference, Porto, Portugal, September 7th – 10th, 2003

H.P. Christensen: *The double-loop feedback for active learning with understanding*, World Congress on Engineering and Technology Education (WCETE'04), Santos, Brazil, March 14th – 17th, 2004

- H.P. Christensen: *Crating a learning environment for engineering education*, 'Faculty Development in Nordic Engineering Education', pages 49-65, Ed. A. Kolmos et al., Pedagogical Network for Danish Engineering Education (IPN) & Aalborg University Press 2004
- E. de Graaff and H.P. Christensen: *Theme issue on active learning in engineering education*, European Journal of Engineering Education, vol. **29** no. 4, 461-463, 2004
- N. Schultz and H.P. Christensen: *Seven-step problem-based learning in an interaction design course*, European Journal of Engineering Education, vol. **29** no. 4, 533-541, 2004
- H.P. Christensen: *The implication of engineering science on engineering didactics*, 'Forskningsskonference: Ingeniørvidenskab, kompetence og dannelse' (Research conference: Engineering science, competence and education), Aalborg University, March 3-4, 2004
- H.P. Christensen, Ed.; *Undersøgelser af studerendes forudsætninger, læring, forståelse og studiestrategier. - Udvalgte besvarelser på en UDTU-opgave (Investigations of students' prerequisites, learning, understanding and study strategies – Selected answers to a UDTU-assignment)*, 2nd Edition, LearningLab DTU, April 2005 (mostly in Danish)
- H.P. Christensen: *Study strategies and approaches to learning*, Earli (European Association for Research on Learning and Instruction) Conference, Nicosia, Cyprus, August 23-26, 2005
- H.P. Christensen: *At the crossroad between behaviourism and cognitive constructivism*, SEFI (Société Européenne pour la Formation des Ingénieurs) Annual Conference, Ankara, turkey, September 7th – 9th, 2005
- L.J. Genalo, H.P. Christensen and S.E. Watkins: *Trends in pre-college engineering and technology education*, Guest Editorial, International Journal of Engineering Education, vol: **23**, issue: 1, page 2, 2007
- L.J. Genalo, H.P. Christensen and S.E. Watkins: *Trends in pre-college engineering and technology education*, Guest Editorial, International Journal of Engineering Education, vol: **23**, issue: 5, page 842, 2007
- H.P. Christensen: *Interdisciplinary just-in-time teaching*, International Workshop on Active Learning in Engineering Education, 2008, Bogotá, Colombia
- H.P. Christensen: *De las competencias a los objetivos educacionales*, 'Ciencia e Ingeniería en la Formación de ingenieros para el siglo', 42-58, 2008,
- H.P. Christensen: *De la actividad al aprendizaje activo*, 'Ciencia e Ingeniería en la Formación de ingenieros para el siglo', 87-116, 2008
- H.P. Christensen, M.E. Vigild, E.V. Thomsen, A. Horsewell and P. Szabo: *Active teaching methods, studying responses and learning*, 9th International Workshop on Active Learning in Engineering Education, 2009, Barcelona
- B. Hoffmann, U. Jørgensen and H.P. Christensen: *Culture in Engineering Education*, 7th International CDIO Conference, Copenhagen, June 20-22, 651-663, 2011
- T. Ingeman-Nielsen (Invited author) and H.P. Christensen (Invited author): *Interdisciplinary case-based teaching of engineering geosciences and geotechnics*, Proceedings of the 7th International CDIO Conference, Copenhagen, 2011
- H.P. Christensen, A. Gras-Marti and C.A. Ávila Bernal: *Towards an Analysis of Study Habits of University Students*, eLC Research Paper Series, issue: 4, 21-26, 2012

H.P. Christensen: *The Continuous Challenge in teaching Engineering to Students from a Society with no Tradition for Higher Education*, Proceedings of the 12th Active Learning in Engineering Education Workshop, Caxias do Sul, Brazil, 2014

K. Hendriksen and H.P. Christensen: *The intercultural challenges of engineering education in a Greenlandic context*, Arctic Yearbook 2014, 28-43, 2014

Other activities on teaching and learning

Invited to give workshops and lectures on ‘teaching for learning’ and ‘teacher training’ at Universidad de los Andes, Bogotá, Colombia, October 10th – 17th, 2002

Guest Editor with Professor Erik de Graff, TU Delft for a special issue of European Journal of Engineering Education on ‘Active Learning’, vol. **29** no. 4. 2004

Invited to give presentations on ‘teaching and assessing for engineering competences’ at Ecole des Mines de Nantes, France, March 31st – April 2nd, 2004

Hands-on activity ‘Assessing for Engineering Competencies’ at the 4th International Workshop on Active Learning in Engineering Education, ALE/SEFI, Ecole des Mines de Nantes, France, 6th – 9th June, 2004

Principal organiser and lecturer at a 5-day workshop on active learning, Universidad Tecnológica de Bolívar, Cartagena, Colombia, July 12th – 16th, 2004

Principal organiser and lecturer at a 4-day workshop on active learning, Universidad de los Andes, Bogotá, Colombia, July 26th – 29th, 2004

Invited keynote speaker on ‘Teacher training for professional competence’ at the Foro Educativo, Medellín, November 2nd – 4th, 2005

Invited by the Colombian vice-minister of education to lecture on learning, competences and teacher training, March 6th – 10th, 2006

Principal lecturer at a 3-day workshop on active learning, Universidad de los Andes, Bogotá, Colombia, March 15th – 17th, 2006

Lecturers on active learning, Universidad Nacional, Medellín, Colombia, March 20th – 24th, 2006

Principal organiser and lecturer at a 5-day workshop on active learning in Mathematics, Universidad Austral de Chile, Chile, June, 2006

Principal lecturer at a 3-day workshop on active learning, Universidad del Norte, Barranquilla, Colombia, January 19th – 19th, 2007

Principal lecturer at a 3-day workshop on active learning, Universidad Nacional, Bogotá, Colombia, January 24th – 26th, 2007

Principal organiser and lecturer at two 3-day workshops on active learning, School of Engineering of Antioquia, Medellín, Colombia, January 29th – 31th, 2007

Invited lecturer at Aprendizaje Activo – Aspectos curriculares y Metodológicos para la Formación de Ingenieros de Calidad, Asociación Colombiana de Facultades de Ingeniería (ACOFI) & Escuela de Ingeniería de Antioquia, Medellín, Colombia, June, 2008

Principal lecturer at a workshop on Math and Intradisciplinary Teaching, Escuela de Ingeniería de Antioquia, Medellín, Colombia, 2011

Research and development on engineering education

IPN-project: Assessment of Theory through Applications, DTU Sydsjælland, Denmark, 1997-98

Introduction programme for new students at the Technical University of Denmark, 1999-2000

Investigation of students' study strategies, 1999-2001

Evaluation of the weekly schedule at DTU, 2002

TeSt-Learn: Teaching, Learning and Studying, 2007-2009

Project Øsken: Retention through increased study competence, 2007-2010

Curriculum development

New curriculum for B.Eng. in Electronics Engineering integrated with Mechanical Engineering, Engineering College in Haslev, Denmark, 1997

New curriculum with interdisciplinary courses for B.Eng. in Arctic Engineering, DTU, 2007

New curriculum for B.Eng. in Civil Engineering, DTU, 2017