

Curriculum vitae

Karin Birte Svensson, Ph.D. (Lic. Scient.), Dr. Sc. h.c., Professor

Work address: Enzyme and Protein Chemistry, Department of Systems Biology, Technical University of Denmark, Søtofts Plads, Bldg 224; DK-2800 Kgs. Lyngby, Denmark. Phone: +45 4525 2740; Fax: +45 4588 6307; **e-mail:** bis@bio.dtu.dk

Birthdate: August 2nd, 1946, Frederiksberg, Denmark

Danish citizen; married; children born 1975 and 1978

Home address: Åbjergvej 10 C, DK-2720 Vanløse. Phone: +45 3874 9036. Cell phone: +45 2074 6205

Education

1970 Cand. scient. (M.Sc., summa cum laude) (Biochemistry) University of Copenhagen and Carlsberg Laboratory

1974 Lic. scient. (Ph.D.) (Protein Chemistry and Enzymology) University of Copenhagen and Carlsberg Laboratory

Employment

2004- Professor in Food Protein Chemistry and Head of Group, Enzyme and Protein Chemistry (EPC), Department of Systems Biology, the Technical University of Denmark

1979-03 Senior Research Biochemist, Group Leader, Carlsberg Laboratory, Department of Chemistry

1977-79 Associate Professor, Department of Biochemistry C, University of Copenhagen

1976-77 Research Biochemist, Carlsberg Laboratory, Department of Chemistry

1973-76 Postdoctoral Fellow ("seniorstipendiat", University of Copenhagen) at Carlsberg Laboratory, Department of Chemistry (1973); Institut Pasteur (Paris), Service de Chimie des Protéines (1974); University of Copenhagen, Department of Biochemistry C (1975-76)

1970-73 Research Biochemist, Carlsberg Laboratory, Department of Chemistry

1988-91 External Lecturer (Biochemistry), Department of Biological Chemistry B, University of Copenhagen

Honors

1991 7th Dexter French Memorial Lecturer (Iowa State University)

1998-2013 Adjunct Professor, Molecular Biology (University of Southern Denmark)

1998 Award of Merit, Japanese Society of Applied Glycoscience

2005 Member Danish Academy of Technical Sciences

2007 Dr. Sc. honoris causa (natural science) at University of Copenhagen

2010 Lifetime Achievement Award, ALAMY-4, Smolenice, Slovakia

Publications, Patents and Presentations

243 papers in journals with peer-review; 28 refereed, 22 non-refereed proceedings papers; 5 book chapters; 5 popular scientific papers; 2 patents; 436 conference and workshop presentations; 14 invitations as speaker at international conferences 2008-10. Citations: >8200; H index: 50; average citations: ca. 32.8.

Research interests

Protein chemistry, protein engineering, and proteomics focusing on i) structure/function relationships of enzymes and regulatory proteins from plants and microorganisms using mutational analysis, enzyme kinetics, biophysics and molecular interaction analysis, and crystallography; ii) cereal seed proteomics (quality, germination, plant pathogen interaction); iii) proteomics in protein discovery in probiotics acting on carbohydrate prebiotics. Special expertise: i) carbohydrate-active enzymes, proteinaceous enzyme inhibitors, redox proteins; ii) proteomics including protein identification by 2D gel electrophoresis and MS; comparative proteomics using DIGE; coupling of proteomics and transcriptomics; iii) thioredoxin systems in plants and lactic acid bacteria.

Project management

Coordinator of two (FP3, FP4), participant in 9 EU projects (FP 2-6), coordinator of three large national projects (Biotech: 1995-2000; SUE: 2000-04; FøSu: 2008-12).

International relations

Participant in EU projects (see above), numerous international collaborations (as illustrated by list of publications), co-organizer of international conferences and member of international committees for Carbohydrate Bioengineering Meeting (CBM 1-8; co-founder), European Symposium on enzymes in Grain processing (ESEGP 1-5), Plant Polysaccharide Workshop (biannual since 1980). Member of five COST actions, three as national representative (see below).

Major grant (2008 – present)

2008-12 Principal investigator. Danish Strategic Research Council, programme committee on Food and Health, with S. Jacobsen, M. Abou Hachem, M. Jakobsen, A. Blennow, E.B. Hansen, A. Ouwehand, S. Lahtinen, H. Frøkiær, L. Jespersen, M. Lawther, O.B. Sørensen: “Gene discovery and molecular interactions in prebiotics/probiotics systems. Focus on carbohydrate prebiotics”. (in total 13.884.360 DKK).

Commissions of Trust and Professional Reviewing

2011- Member, ERC L9 evaluation panel

2010 Member, chemistry panel, Norwegian research Council (FRINAT)

2008-10 Member, two committees, Agence National de la Recherche (ANR, the French Research Council).

2005- Member, Board of Directors of the Danish Research Foundation.

1995-00 Member, Danish Natural Science Research Council.

1999-05 Member Board of Representatives, the Technology Council.

2005- Member, Board of Danish Proteome Society.

2006- Deputy Chair, Scientific Advisory Council “The Biomime Consortium” (KTH, Stockholm).

2006- Member, Board of Plant Biotech Denmark.

2006- Deputy Member, Managing Board of COST action 928 “Control and exploitation of enzymes for added-value products”.

2007- Member, Executive Committee of COST action FA0603 “Plant Proteomics in Europe”.

2009- Head of task force of Protein.DTU.

2011- Member, Managing Board of COST action FA1005 “Improving health properties of food by sharing our knowledge on the digestive process (INFOGEST)”.

Editorial advisor, 1993-2008 Biochem. J.; 1998- FEBS J; Member editorial board, 1994-07 Biotech. Appl. Biochem.; 1997- Biologia (Cell. Mol. Biol.); 1998-04 Biochim. Biophys. Acta; 2002- J. Cereal Sci.; 2002-06 Cell. Mol. Life Sci.; 2002- J. Appl. Glycosci. Referee of numerous manuscripts on protein chemistry, proteomics, and enzymology. Reviewed >300 international grant proposals (Australia, AUS, BE, CND, FR, NL, NO, SE, U.S.A., EU, HFSP, ERC). Evaluation of institutions (INRA; CNRS; GBB, RUG), appointments (CND, DK, FI, NO, SE), career promotions (Australia, BE, DK, FI, FR, SE, U.K., U.S.A.). External Ph.D. examiner (Australia, CND, DE, DK, ES, FI, FR, India, IT, NO, SE, U.K., U.S.A.).

Supervision

Advisor to 65 postdoctoral associates and visiting scientists, 28 Ph.D. and 22 M.Sc. students. Currently advisor or co-advisor of 5 post docs, 11 Ph.D. and 4 M.Sc. students, 2 technicians.

7 Ph.D. and 15 M.Sc. completed since 2006. 3 Ph.D. and 4 M.Sc. completed in 2010.