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Education

6/1982 M.Sc. in Biology, Department of Microbial Ecology, University of Copenhagen, Denmark
6/1986 Ph.D. in Microbiology, Department of General Microbiology, Univ. of Copenhagen, Denmark

Work Experience

10/82-6/83 Course Lecturer in Microbiology and Microbial Ecology, Dept. of General Microbiology, Univ. of Copenhagen, Denmark
7/83-6/86 Ph.D. Student, Dept. of General Microbiology, Univ. of Copenhagen, Denmark
1986-1990 Leader of for the Nordic Ministerial Council's Program in Bioenergy, Dept. of Biotechnology, The Technical University of Denmark
7/87-8/88 Visiting Professor, Division of Environmental Health Science, School of Public Health, University of California, Los Angeles, U.S.A.
2/90-2/97 Consultant and Research Director, Danish Technological Institute (part time)
1991-1994 Head of the Nordic Ministerial Council's Center for Bioenergy and Environment, Dept. of Biotechnology, The Technical Univ. of Denmark
1993-97 Assoc. Prof., Dept. Environmental Engineering, The Technical University of Denmark
1992-95 Specialist for UNDP, UNIDO, World Bank on Programs related to Global Environment. Project evaluator for projects in developing countries throughout Asia and Africa
1995-99 Co-Head of the DTU Center for Microbial Physiology and Ecology financed by the Danish Research Councils Biotechnology Program
1997-01 Professor. Department of Civil and Environmental Engineering. University of California, Los Angeles
1999- Professor. BioCentrum, DTU
2004- Head of Danish Center for Biofuels with researchers from 4 universities and 5 industries. Head of BST with 45 scientists working within "biofuels and biochemicals" or "biomedical research"
2006- Co-Founder and Managing Director of the spin-off company BioGasol (www.biogasol.com) specialized in second-generation bioethanol. Head of the Maxifuel pilot facility

- Organizer, keynote speaker and invited speaker at more than 50 international meetings
- Extended experiences in research management as Center Leader, Project Coordinator and Project Leader of both National and International Programs
- Heads the EU project: BioTroll- integrated production from biofuels from olive pulp and major research activities running within the field of bioethanol and biofuels in Denmark
- Member of: The International Energy Agency Group on Liquid BioFuels- Task 39, Academy of Technical Sciences (ATV), The Technical Council (Teknologirådets repræsentantskab), The Danish Research Council for Foreign Research, The Board of the Hede Nielsen Foundation,

The Board of Energinet.dk (the whole energy supply system in Denmark- a 8 billion \$ turnover)

- 198 publication in refereed journals, 380 other publications, 3 patents and 5 patent applications, many scientific award- 2 major awards In 2006 for biofuel research
- Graduated 28 PhD students and 35 MSc students

Selected publications

Ahring, B.K, Mikkelsen, M.J. and Clausen, A (2003) Plasmids from an extremely thermophilic microorganism and derived expression vectors. International Patent Application PCT/DK02/00535.

Ahring, B.K. and Thomsen, A.B. (2003) Method for processing lignocellulosic material. US Patent no. 6,555,350.

Ahring BK, Mikkelsen, MJ (2006) Production of fermentation products in biofilm reactors using microorganism immobilized on sterilized granular sludge. Danish Patent Application.

Ahring, BK, Munck J (2005) Method of treating biomass and organic waste with the purpose of generating desired biologically based products. EP patent application.

Alatríste-Mondragón, F; Samar,P ;Huub, HJ; Ahring, BK; Iranpour, R (2006). Anaerobic Codigestion of Municipal, Farm and Industrial Organic Wastes: A Survey of Recent Literature. *Water Environment Research*; 78, 607-36.

Bangsø Nielsen, H; Ahring, BK (2006). Responses of the Biogas Process to Pulses of Oleate in Reactors Treating Mixtures of Cattle and Pig Manure. *Wiley InterScience*, 95 (1): 97-105.

Clausen A., Mikkelsen, M.J., Schöder, I., Ahring, B.K. (2004) Cloning, sequencing and sequence analysis of two novel plasmids from a hyperthermophilic anaerobic microorganism. *Plasmid* 52: 131-138.

Flotats, X; Palatsi, J; Ahring, BK; Angelidaki, I (2006). Identifiability study of the proteins degradation model, based on ADM1, using simultaneous batch experiments. *Water Science & Technology*; 54: 31-9.

Garibay-Orijel, C; Ahring, BK; Rinderknecht-Seijas, N; Poggi-Varaldo, HM (2006). A simple model for simultaneous methanogenic-denitrification systems. *J. Chem. Tech. & Biotech.*; 81, 2: 173-81.

Gavala. HN; Skiadas, IV; Ahring, BK (2006). Biological hydrogen production in suspended and attached growth anaerobic reactor systems. *Int. J. of Hydrogen Energy*; 31: 1164–75.

Gavala, HN; Skiadas, IV; Ahring, BK; Lyberatos, G (2006). Thermophilic anaerobic fermentation of olive pulp for hydrogen and methane production; modelling of the anaerobic digestion process. *Water Science and Technology*; 53, 8: 271-79.

Hartmann, H; Ahring BK (2006). Status of ADSW 2005. *Water Science and Technology*; 53, 8: 1-6.

Hartmann, H; Ahring, BK (2006). Strategies for the anaerobic digestion of the organic fraction of municipal solid waste. *Water Science and Technology*; 53, 8: 7-22.

Haagensen F, Thomsen AB, Kivaisi A and Ahring BK (2003) Potential for bioethanol production from lignocellulosic residues in East Africa. *Biores.Technol.* 88: 25-29.

Ishøy, T; Kvist, T; Westermann, P; Ahring, BK (2006). An improved method for single cell isolation of prokaryotes from meso-, thermo- and hyperthermophilic environments using micromanipulation. *App. Microbiol Biotechnol*; 69: 510-14.

Klinke HB, Thomsen AB and Ahring BK (2001) Potential inhibitors from wet oxidation of wheat straw and their effect on growth and ethanol production by *Thermoanaerobacter mathranii*. *Applied Microbiology and Biotechnology*, 57 (5-6): 631-638.

- Klinke HB, Olsson L, Thomsen AB and Ahring BK (2003) Potential inhibitors from wet oxidation of wheat straw and their effect on ethanol production of *Saccharomyces cerevisiae*: Wet oxidation and fermentation by yeast. *Biotechnology and Bioengineering*, 81 (6): 738-747.
- Lissens G, Klinke HB, Verstraete W, Ahring BK and Thomsen AB (2004) Wet oxidation pre-treatment of woody yard waste: parameter optimization and enzymatic digestibility for ethanol production. *J.Chem.Technol.Biotechnol* 79: 889-895.
- Lissens G, Thomsen AB, De Baere L, Verstraete W and Ahring BK (2004) Thermal wet oxidation improves anaerobic biodegradability of raw and digested biowaste. *Environ.Sci.Technol.* 38: 3418-3424.
- Lissens G, Klinke HB, Verstraete W, Ahring BK and Thomsen AB (2004) Wet oxidation pre-treatment of organic household waste enriched with wheat straw for simultaneous saccharification and fermentation into ethanol. *Env. Technol.* 25:647-655.
- Mikkelsen, MJ, Ahring, BK (2006) *Thermoanaerobacter mathranii* strain BG1. Danish Patent Application.
- Mladenovska, Z; Hartmann, H; Kvist, T; Sales-Cruz, M; Gani, R; Ahring, BK (2006). Thermal pretreatment of the solid fraction of manure: Impact on the biogas reactor performance and microbial community. *Water Science and Technology*; 53, 8: 59-67.
- Nielsen HB, Ahring BK (2006). Responses of the biogas process to pulses of oleate in reactors treating mixtures of cattle and pig manure. *Biotech. & Bioeng.*; 95,1: 96-105.
- Onyenwoke RU; Lee YJ; Dabrowski S; Ahring BK; Wiegand J (2006). Reclassification of *Thermoanaerobium acetigenum* as *Caldicellulosiruptor acetigenus* comb. nov and emendation of the genus description. *Int. J. Systematic & Evol. Microbiol.*; 56: 1391-5.
- Sommer P., Gregieva T., Ahring BK (2003) *Thermophiles* 32: 283-289.
- Torry-Smith M, Haagensen F, Nguyen Q, Thomsen AB and Ahring BK (2003) Lignocellulosic hydrolysates from steam explosion and wet oxidation: Effect of inhibition on fermentation and enzymatic hydrolysis. *Applied Biochemistry and Biotechnology*. 32:1567-1578.
- Torry-Smith M, Sommer P and Ahring BK (2003) Purification of bioethanol effluent in an UASB reactor system with simultaneous biogas formation. *Biotechnology and Bioengineering*, 84 (1): 7-12.
- Uellendahl, H; Mladenovska Z; Langvad, N; Ahring, BA (2006). Wet oxidation pre-treatment – the way to improve economics of energy production from manure? 12th Ramiran International Conference, Aarhus, Denmark, DIAS report no. 122; 1: 115-8.