

CURRICULUM VITAE for Erik Dahlquist 510911-1434 (Sept,2004)

A Professional preparation:

Erik Dahlquist was born in Uppsala 1951, but grow up in Osthrammar. He got his BSc from Uppsala University 1974 in Chemistry and Biology. Started working for ASEA (later ABB) in 1975. Studied Mathematics 40p at the newly started Malardalen Univeristy 1977/78. Tekn Lic (dr) at KTH in Chemical Engineering in 1987, and PhD at KTH in 1991 (in parallel with the work at ASEA/ABB).Adjunct professor at KTH, Royal inst of Technology 1997-2000. Full professor at Malardalen University, Vasteras, from May 1 ,2000.

Started work at ASEA Research Sept 1975. Worked as an engineer with nuclear power , trouble shooting of electrical equipments and manufacturing processes until 1980. Then started with Process Development towards automation of water treatment plants. Was working with Novatune, a self tuning adaptive controller. In 1982 started with energy technology towards pulp and paper industry in cooperation with ASEA Stal (now Alstom Power). Developed year round fuel production from Peat. 1984 development work in Off-shore engineering, as ASEA Oil and Gas was formed. Did PhD thesis in separation technology for off-shore platforms in relation to this work. Was technical project manager for development of Cross Flow Membrane filter. This led to the formation of ABB Membrane filtration. The filter is now a commercial product under Metso, a Finnish company, after ABB selling off the water treatment activity. From 1989 project leader for ABBs Black Liquor Gasification project, in cooperation with ABB Combustion Engineering and ABB Flakt, both now part of Alstom Power. From 1992 Department manager for Combustion and Process Industry Technology at ABB Corporate Research. Also member of the board of directors for ABB Corporate Research in Vasteras. From January 1996- April 2000 General Manger for the Product Responsible Unit "Pulp Applications" world wide within ABB Automation Systems. The product area was Advanced Control, Diagnostics, Optimization , Process Simulation and Special Sensors. Adj prof at KTH 1997-2000 and full prof at Malardalen University in Energy Engineering since May 1 , 2000. Responsible for research in Energy, Building and Environmental Technology.

B. Appointments:

Member of the board for Research School for Energy Systems (SSF/STEM).

Member of the board for Varmeforsk work group for Modern Process Control systems

Swedish representative in EFCE Working party Separation and Filtration 1985-1995

Secretary in Gunnar Engstrom-ABB Foundation for Energy Research 1986-1992.

Member of organisation committee for Energitinget in Eskilstuna (STEM+Malardalen University)

Reciever of ABB Corporate Research Award 1989

Approximatly 20 patents. Approximatly 75 Scientific publications.

Swedish representative in EFCE Working Party "Filtration and Separation" since 1987. Chairman of World Filtration Conference i Budapest 1996, session "Industrial applications of separation technology".

EU technical evaluator for the JOULE program 1996.

Key note speaker at on-line fault detection and supervision in chemical process industries at 4th IFAC workshop in Korea June 7-8 , 2001.

Coordinator of research cooperation between Malardalen University and Jiao Tong University in Shanghai, China.

Deputy Dean for Faculty of Science and Technology at Malardalen University since 1 July 2001.

Member of the board of Scandinavian Simulation Society, division of IFAC, since September 2002.

Member of R&D board of KCEM since 2002.

C . Entrepreneurial achievements

Participated in starting up ABB Membrane Systems AB in 1989 , which later incorporated FLOOTEK, and finally was sold to Raisio and Valmet , now Metso. Main product the Membrane Filter CR-Filter, which I was the technical manager for . Many installations world wide , mostly in Pulp and Paper industry. Project manager for development of ABB´s Black Liquor Gasification process 1990-1995.

Was working with Jan Stromblad , Environmental Management manager for ABB Ltd under Percy Barnevik (ABB former president) . Participated in implementing Environmental Management within ABB world wide.

Started simulator activity within ABB for Pulp and Paper applications. Have been driving on-line simulation , diagnostics and root cause analysis within ABB, which now has become key features in ABB´s concept "Industrial IT". Have been in project steering committees in several of the key development projects within ABB for SoftWare development for Industrial IT. Right now on it´s way to become products.

D . Other merits of relevance

Started up and developed research at Malardalen University at Department of Energy in 1997. Now leading the research profile "Process Optimization", the second biggest research profile at Mdh with 30 PhD students and 20 PhDs.

E. References

Original Papers in Refereed Journals ,Patents or Conference Proceedings:

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3. Lägesrapport om ABBs svartlutsförgasningsprocess, Sodahuskonferensen 27 nov 1994, p 123-126, Erik Dahlquist,Torbjörn Ringvall, Bob Jacobs och Erik Simonsson.
4. Development of a Dry Black liquor gasification process,Pulp and Paper Canada 95:2(1994)T73-74,Erik Dahlquist and Bob Jacobs.

5. Development of a Dry Black liquor gasification process,TAPPI Recovery conference in the US 1993, proceedings, 7 p,Bob Jacobs and Erik Dahlquist.
6. Patent: A CFB Black Liquor Gasification system operating at low pressure using a circulating fluidized bed,US Patent 5,284,850,Michael Tanca,Erik Dahlquist and Sune Flink (June 1992).
7. Patent:Black Liquor Gasification process operating at low pressures using a circulating fluidized bed,US Patent 5,284,550,Michael Tanca,Erik Dahlquist and Sune Flink (June 1992).
8. Patent:Sätt och anordning för absorption av svavelväte ,SE Patent 9300533-8, Erik Dahlquist,Sune Bengtsson,Erik Simonsson och Mats Wallin.
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10. Erik Dahlquist Malardalen Univ and Torbjorn Ringtval,ABB Corporate Research: Presentation of a dry black liquor gasification process with direct caustization developed by ABB. Proceedings 2nd Olle Lindstrom Symposium on Biomass Research, June 1999 in Stockholm
11. A study on the importance of fiber properties and filter structure on the efficiency of coalescence filters,Filtech Conference Proceedings, Utrecht 1987, p 36-43, Erik Dahlquist and Fredrik Setterwall.
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13. The influence of surfactants on coalescence filtration,Progress in Colloid & Polymer Science 82:155-162 (1990) ,Erik Dahlquist and Fredrik Setterwall.
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21. Patent: SE 8700811-6 Dynamiskt membran för separering av ett vätskeformigt, åtminstone huvudsakligen av vatten bestående medium, Erik Dahlquist and Milan Teppler.
22. Patent :SE 8604085-4: Koalescencefilter(regenererbart).Erik Dahlquist
23. Patent: SE 8704422-8: Anordning för separering av i ett filter avskiljbara beståndsdelar från ett vätskeformigt medium innehållande sådana beståndsdelar. Erik Dahlquist et al.
24. Patent: US 4,740,312 : Method of regenerating a separation means for a liquid medium containing undissolved constituents. Erik Dahlquist,Milan Teppler, Bertil Åkerblom, Sune Flink and Sören Stridsberg.
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26. Patent:SE 880 1287-7 ,Extraction of waste water from bleacheries, Erik Dahlquist
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