

CV - Hans Jørgen Henriksen, GEUS



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Name Hans Jørgen Henriksen
Date of Birth May 11, 1956
Nationality Danish
Education Technical University of Denmark, 1982, M.Sc. in Civil Engineering, Specialization: Hydrology
Roskilde University, 2005, MPO - Master of the Psychology of Organisation.

Employment Record

Year	Organisation	Position and Responsibilities
1993-date	Geological Survey of Denmark and Greenland (GEUS)	Senioradvisor; hydrology, Department of Hydrology. Construction of national water resource model for Denmark, groundwater protection and EU research projects MERIT, HarmoniQuA and NeWater.
1989-1993	Rambøll	Hydrologist, Environmental department. Groundwater flow and transport modelling, hydrology and watercourse quality
1987-1989	Tage Sørensen	Hydrologist. Groundwater modelling and development of hydrometrical software packages (HYDROS and STOQ)
1982-1987	Danish Land Development Compagny (Hedeselskabet)	Hydrologist, Hydrometrical department. Assessment of nutrient loads to lakes and fiords from river catchments.

Selected Experience Record – Research and Developmental Projects

- Project leader for prediction of climatic impacts on pesticide leaching to the aquatic environments (**PRECIOUS**) (from May 2009 -). Danish Environment Agency under the pesticide research programme.
- Work Block Co-ordinator for tools, guidance and training in the EU-FP6 Integrated Project 'New Approaches to Adaptive Management under Uncertainty (**NeWater**)' (2006-2008) EC contract no. 511179 (GOCE): Integrated project in Priority 6.3 Global Change and Ecosystems in the 6th EU framework programme. Responsible for WB4 guidance, tools and training material for adaptive water management.
- GEUS responsible for WP3 in **CLIWAT**: Boards/end-user dialogue and development of a generic participatory plan, organisation of boards and meetings. CLIWAT is an Interreg North Sea EU project 2008-2011 which has focus on adaptive and sustainable water management and protection of society and nature in an extreme climate.
- Project leader for the **Environmental Impact Assessment** (EIA) for Copenhagen Energy in relation to new licences for regional groundwater abstractions at seven regional wellfields, with model based screening and evaluation of vulnerability of wetlands and river habitats (2007-2008).
- Project participant in the EU-FP5 research project 'Harmonising Quality Assurance in model based catchment and river basin management (**HarmoniQuA**)'. EVK1-2001-00071. (2002-2006).
- GEUS responsible for the FP5 EU research project 'Management of Environment and Resources using Integrated Techniques (**MERIT**- Test of Bayesian belief networks and engagement of stakeholders as a tool for integrated water resource management)'. EVK1-CT2000-00085. (2002-2004)
- GEUS project leader for the National Water Resources Model (**DK-model**) (1996-2003)

Recent professional assignments

- Co-editor of the NeWater Guidebook on Adaptive water management (Synthesis product no. 9) and Uncertainty guidelines (Synthesis product no. 2). 2009. www.newater.info
- Published 65 reports and popular articles in Danish: <http://bibliotek.dk> (henriksen, hans jørgen)
- Reviewer for the Scientific Journals: *Agricultural Water Management*, *Journal of Hydrologic Engineering*, *Building and Environment*, *Ecological Economics*, *Ecology and Society*, *Environmental Modelling and Software*, *Water Resources Management*, *Water Resources Research*.

Scientific publications – selected references

Published 12 journal papers in ISI registered international scientific journals with 142 ISI citations:

- Henriksen, HJ, Refsgaard, JC, Højberg, AL, Ferrand, Gijsbers, N and Scholten, H (accepted): Public participation in relation to quality assurance of water resources modelling (HarmoniQuA). *Water Resources Management*. <http://dx.doi.org/10.1007/s11269-008-9395-9>
- Martinez-Santos, P., Henriksen, H.J., Zorilla, P. et. al (2009): Comparative reflections on the use of participatory modelling tools in conflictive water management settings: the Mancha Occidental aquifer, Spain. *Environmental Modelling and Software*. [doi:10.1016/j.envsoft.2008.11.011](https://doi.org/10.1016/j.envsoft.2008.11.011)
- Farmani, R, Henriksen, HJ, Savic, D (2009) An evolutionary Bayesian belief network methodology for optimum management of groundwater contamination **24** 303-310. *Environmental Modelling and Software*.
- Van der Keur, P, Henriksen, HJ, Refsgaard, JC Brugnach, M, Pahl-Wostl, C, Dewulf, A. and Buiteveld, H. (2008) Identification of major sources of uncertainty in current IWRM practice. Illustrated for the Rhine case. *Water Resources Management*. **22** 1677-1708
- Henriksen, HJ and Højberg, AL (2008) Model peer reviews and modeller-manager dialogues as an avenue to improved model credibility. In (ed): Refsgaard, JC, Kovar, K, Haarder, E and Nygaard, E (2008) Calibration and reliability in groundwater modelling: Credibility of modelling. ModelCARE 2007. IAHS Publication 320 pp. 101-107.
- Henriksen, HJ and Barlebo, HC (2008) Reflection on the use of Bayesian belief networks for adaptive management. *Journal of Environmental Management* **88** 1025-1036.
- Henriksen, HJ, Trolborg, L, Højberg, AL and Refsgaard, JC (2008) Assessment of exploitable groundwater resources of Denmark by use of ensemble resource indicators and numerical groundwater-surface water model. *Journal of Hydrology*. **348** (1-2) 224-240.
- Henriksen, HJ, Kjær, J, Brüsck, W, Jacobsen, LB, Jensen, JD, Grinderslev, D and Andersen, P (2007) Environmental benefits and social costs – an example of combining Bayesian networks and economic models for analysing pesticide management instruments. *Nordic Hydrology*. **38** (4-5) 351-371.
- Henriksen, H.J., Trolborg, L., Nyegaard, P., Højberg, A.L., Sonnenborg, T.O., Refsgaard, J.C. (2008) Evaluation of the quantitative status of groundwater-surface water interaction at a national scale. In: Quevauviller, P.: *Groundwater Science and Policy. An international overview*. RSC Publishing. The Royal Society of Chemistry 2008. pp 584-610 (book chapter)
- Henriksen, H.J. Rasmussen, P., Bromley, J., Portillo, ADLH, Llamas, M.R. (2007) Bayesian belief networks as a tool for participatory integrated assessment and adaptive groundwater management: the Upper Guadiana Basin, Spain. *Geological Survey of Denmark and Greenland Bulletin*. **13** 62-72.
- Henriksen, HJ, Rasmussen, P, Brandt, G, von Bülow, D and Jensen, FV (2007) Public participation modelling using Bayesian belief networks in management of groundwater contamination. *Environmental Modelling & Software* **22**, 1101-1113.
- Refsgaard JC, Henriksen HJ, Harrar WG, Scholten H and Kassahun A (2005) Quality assurance in model based water management – Review of existing practice and outline of new approaches. *Environmental Modelling & Software*, **20**, 1201-1215.
- Refsgaard JC and Henriksen HJ (2004) Modelling guidelines – terminology and guiding principles. *Advances in Water Resources*, **27**(1), 71-82.
- Harrar WG, Sonnenborg TO, Henriksen HJ (2003) Capture zone, travel time, and solute-transport predictions using inverse modeling and different geological models. *Hydrogeology Journal*, **11**, 536-548.
- Sonnenborg TO, Christensen BSB, Nyegaard P, Henriksen HJ and Refsgaard JC (2003) Transient modelling of regional groundwater flow using parameter estimates from steady-state automatic calibration. *Journal of Hydrology*, **273**, 188-204.
- Henriksen, HJ, Trolborg L, Nyegaard P, Sonnenborg TO, Refsgaard JC and Madsen B (2003) Methodology for construction, calibration and validation of a national hydrological model for Denmark. *Journal of Hydrology*, **280** (1-4), 52-71.