

Curriculum Vitae

Name: Johan Strömqvist

Nationality: Swedish

Email: johan.stromqvist@smhi.se

Telephone: +46114958589

Examina and employment

2007 – (current employment) Researcher at the Hydrological research department at the Swedish Meteorological and Hydrological Institute (SMHI), Norrköping, Sweden

2004 – 2006 Environmental consultant, ADAS UK ltd., Wolverhampton, United Kingdom

2004 Research assistant, Swedish University of Agricultural Sciences, Uppsala

2004 Master of Science in Aquatic and Environmental engineering, Uppsala University

Scientific fields of interest and expertise

Hydrological modelling and model development.

Large scale water quality (nitrogen and phosphorus) modelling.

Geographical Information Systems (GIS)

Reviewed publications

Lewerin, S.S., E. Sokolova, E., Wahlström, H., Lindström, G., Pers, C., Strömqvist, J. and Sörén, K. (2019). Potential infection of grazing cattle via contaminated water: a theoretical modelling approach. *Animal*
<https://doi.org/10.1017/S1751731118003415>

Strömbäck, L., Pers, C., Strömqvist, J., Lindström, G., and J. Gustavsson. (2019). A web based analysis and scenario tool for eutrophication of inland waters for Sweden and Europe. *Environmental Modelling & Software*, 111:259-267,
<https://doi.org/10.1016/j.envsoft.2018.07.012>

Sokolova, E., Lindström, G., Pers, C., Strömqvist, J., Sternberg Lewerin, S., Wahlström, H., and K. Sören. (2018). Water quality modelling: microbial risks associated with manure on pasture and arable land. *Journal of Water and Health*, 16(4): 549-561, <https://doi.org/10.2166/wh.2018.278>.

Højberg, A.L., Hansen, A.L., Wachniew, P., Zurek, A.J., Virtanen, S., Arustiene, J., Strömqvist, J., et. al. (2017): Review and assessment of nitrate reduction in groundwater in the Baltic Sea Basin. *Journal of Hydrology: Regional Studies*, Vol 12:50-68.
<https://doi.org/10.1016/j.ejrh.2017.04.001>

Arheimer, B. Donnelly, C. and Strömqvist, J. (2013) Large-scale effects of climate change on water resources in Sweden and Europe. *Journal of Water Management and Research* 69, 201-207

Strömqvist, J., Arheimer, B., Dahné, J., Donnelly, C. and Lindström, G. (2012) Water and nutrient predictions in ungauged basins: set-up and evaluation of a model at the national scale, *Hydrological Sciences Journal*, 57:2, 229-247.

Arheimer, B., Dahné, J., Donnelly, C., Lindström, G. and Strömqvist, J. (2012) Water and nutrient simulations using the HYPE model for Sweden vs. the Baltic Sea basin – influence of input-data quality and scale. *Hydrology Research* 43.4, 315-329.

Lindström, G., Pers, C.P., Rosberg, R., Strömqvist, J. and Arheimer, B. (2010) Development and test of the HYPE (Hydrological Predictions for the Environment) model – A water quality model for different spatial scales. *Hydrology Research* 41.3-4, 295-319.

Silgram, M., Anthony, S.G., Collins, A.L., Strömqvist, J., Bouraoui, F., Schoumans, O., Lo Porto, A., Groenendijk, P., Arheimer, B., Mimikou, M. and Johnsson, H. (2009) Evaluation of diffuse pollution model applications in EUROHARP catchments with limited data. *Journal of Environmental Monitoring*, 11, 554-571.

Silgram, M., Schoumans, O., Walvoort, D.J.J., Anthony, S.G., Groenendijk, P., Strömqvist, J., Bouraoui, F., Arheimer, B., Kapetanaki, M., Lo Porto, A. and Mårtensson, K. (2009) Subannual models for catchment management: evaluating model performance on three European catchments. *Journal of Environmental Monitoring*, 11, 526-539.

Davison, P.S., Withers, P.J.A., Lord, E.I., Betson, M.J. and Strömqvist, J. (2008) PSYCHIC – A process-based model of phosphorus and sediment mobilisation and delivery within agricultural catchments. Part 1: Model description and parameterisation. *Journal of Hydrology* 350, 290-302.

Strömqvist, J., Collins, A.L., Davison, P.S. and Lord, E.I. (2008) PSYCHIC – A process-based model of phosphorus and sediment mobilisation and delivery within agricultural catchments. Part 2: A preliminary evaluation. *Journal of Hydrology* 350, 303-316.

Silgram, M., Anthony, S.G., Fawcett, L. and Strömqvist, J. (2008) Evaluating catchment-scale models for diffuse pollution policy support: some results from the EUROHARP project. *Environmental Science and Policy*. 11, 153-162.

Collins, A. L., Strömqvist, J., Davison, P.S. and Lord, E.I. (2007) Appraisal of phosphorus and sediment transfer in three pilot areas identified for the catchment sensitive farming initiative in England: application of the prototype PSYCHIC model. *Soil Use and Management*. 23, 117-132.

Strömqvist, J. and Jarvis, N. (2005) Sorption, degradation and leaching of the fungicide iprodione in a golf green under Scandinavian conditions: measurements, modelling and risk assessment. *Pest Management Science*. 61, 1168-1178.

Other publications

Donnelly, C., Strömqvist, J. and Arheimer B. (2011) Modelling climate change effects on nutrient discharges from the Baltic Sea catchment: processes and result. *IAHS Publ.* 348:1-6.

Arheimer, B., Dahné, J., Lindström, G., Marklund, L. and Strömqvist, J. (2011) Multi-variable evaluation of an integrated model system covering Sweden (S-HYPE). *IAHS Publ.* 345:145-150.

Strömqvist, J., Dahné, J., Donnelly, C., Lindström, G., Rosberg, J., Pers, C., Yang, W. & Arheimer, B. (2009) Using recently developed global data sets for hydrological predictions. *IAHS Publ.* 333: 121-127.

Donnelly, C., Dahné, J., Lindström, G., Rosberg, J., Strömqvist, J., Pers, C., Yang, W. & Arheimer, B. (2009) An evaluation of multi-basin hydrological modelling for predictions in ungauged basins. IAHS Publ. 333: 112-120.

Arheimer, B., Lindström, G., Pers, C., Rosberg, J. & Strömqvist, J. (2008) Development and test of a new Swedish water quality model for small-scale and large-scale applications. NHP Report 50:483-492.

Donnelly, C., Arheimer, B., Capell, R., Dahné, J. & Strömqvist, J. (2013) Regional overview of nutrient load in Europe – challenges when using a large-scale model approach, E-HYPE. IAHS Publ. 361:49-58.

Donnelly, C., Dahné, J., Rosberg, J., Strömqvist, J., Yang, W. and Arheimer, B. (2010) High-resolution, large-scale hydrological modelling tools for Europe. IAHS Publ. 340:553-561.