

## Curriculum Vitae

**Name:** Lars Rosén  
**Year of birth:** 1962  
**Nationality:** Swedish

### Key Qualifications

Lars Rosén is professor in Engineering Geology at Chalmers University of Technology in Göteborg, Sweden. He has twenty years of consulting and research experience in hydrogeology and environmental engineering. Consulting as well as research activities have mainly been directed at vulnerability assessments, risk management and cost-benefit analysis for water protection and remediation of soil and groundwater. Lars has authored four handbooks for Swedish Authorities. He is currently the manager of the competence centre *Forum for Risk Investigation and Soil Treatment* (FRIST) at Chalmers ([www.frist.chalmers.se](http://www.frist.chalmers.se)) and a senior researcher within the DRICKS research center ([www.dricks.chalmers.se](http://www.dricks.chalmers.se)) on drinking water risk assessments and protection. Lars is currently supervising five PhD candidates.

### Country Experiences

Cyprus, USA, Namibia, Botswana, Holland, Denmark, Norway, South Africa, Mauritius, Thailand, Laos, Costa Rica, Sweden

### Education

- 2010** Professor in Engineering Geology, head of the research group, at the Department of Civil and Environmental Engineering, Chalmers University of Technology, Göteborg, Sweden.
- 2007** Professor in Engineering Geology at the Department of Civil and Environmental Engineering, Chalmers University of Technology, Göteborg, Sweden.
- 2002** Associate professor (docent) in Engineering Geology at the Department of Geology, Chalmers University of Technology, Göteborg, Sweden.
- 1995** Ph.D. in Engineering Geology (Hydrogeology) at the Department of Geology, Chalmers University of Technology, Göteborg, Sweden.  
**Thesis:** Estimations of hydrogeological properties in vulnerability and risk assessments.
- 1991** Licentiate degree in Quaternary Geology at the Department of Geology, Göteborg University.  
**Thesis:** Classification of groundwater vulnerability.
- 1987** Master of Science degree in Quaternary Geology at the Department of Geology, Göteborg University.

### Employment record

- 2007-** Professor, Department of Civil and Environmental Engineering, Chalmers University of Technology. Manager of the competence centre *Forum for Risk Investigation and Soil Treatment* (FRIST).
- 2002-07** Associate Professor (Docent), Department of Geology, Chalmers University of Technology. Manager of the competence centre *Forum for Risk Investigation and Soil Treatment* (FRIST).
- 2002-** Consultant at SWECO International, Göteborg.
- 1990-02** Hydrogeologist at Scandiaconsult International, Göteborg.
- 1999-02** Assistant Professor, Department of Geology, Chalmers University of Technology
- 1996-99** Research Associate, Department of Geology, Chalmers University of Technology, Göteborg.
- 1991-95** Ph.D-student, Department of Geology, Section of Engineering Geology, Chalmers University of Technology, Göteborg.
- 1989-91** Licentiate-student, Department of Geology, Section of Quaternary Geology, University of Göteborg and Chalmers University of Technology, Göteborg.
- 1987-89** Project hydrogeologist at seven Swedish communities regarding groundwater resource management.
- 1986** Project geologist at K-Konsult, Kalmar. Main fields: engineering geology, hydrogeology.

## **1981-1982** Military Services

### **Research projects – Chalmers University of Technology**

- 1993-96** Groundwater vulnerability classification as a tool in municipal planning. Funded by the National Swedish Council for Building Research (BFR).
- 1994-95** Assessment and protection of groundwater resources in the Central Plateau of Mauritius. Funded by BITS (Sida).
- 1996-98** Assessment of Cumulative Uncertainty in Spatial Decision Support Systems: Application to Examine the Contamination of Groundwater From Diffuse Sources. Funded by the European Commission Environment and Climate Programme 1994-1998.
- 1999- 04** Risk-based decision analysis for investigations and remedial actions at sites with contaminated soil and groundwater. Funded by the Swedish Geotechnical Institute (SGI).
- 2003-** Forum for Risk Investigation and Soil Treatment (FRIST). Funded by Stena Metall AB, Renova AB and Chalmers University of Technology.
- 2003-11** DRICKS - Drinking water safety from source to tap. The Swedish Water & Waste Water Association.
- 2004-06** Environmental economical valuation of risks at contaminated sites. Funded by the Swedish Environmental Protection Agency.
- 2005-09** TECHNEAU Water Management from source to tap. Funded by the European Union (6<sup>th</sup> Framework Programme)
- 2009-12** VRAKA Development of a protocol for risk assessment of potentially polluting shipwrecks in Scandinavian waters. Funded by FORMAS.
- 2009-12** Sustainable remediation in construction projects on contaminated land. Funded by The Development Fund of the Swedish Construction Industry (SBUF) and NCC Construction.
- 2009-12** Sustainable and cost-effective remediation of contaminated sites in the built environment. Funded by FORMAS and the Swedish Construction Sector Innovation Center (BIC).
- 2010-13** Multi-criteria analysis for identification of sustainable remediation alternatives. Funded by FORMAS.
- 2010-12** Multi-criteria analysis of remediation to assess their overall impact and cost/benefit with focus on soil function and sustainability. Funded by the SNOWMAN Programme (EU).
- 2012-2015** MERMAID. Innovative Multi-purposE off-shoRe platforMs: plAnnIng, Design and operation. Funded by the European Union (7<sup>th</sup> Framework Programme).
- 2012-2013** Pre-feasibility study of the potential for artificial groundwater recharge in Botswana. Funded by Sida and the Ministry of Minerals, Environment and Water Resources, Botswana.
- 2012-2017** Risk management of groundwater drawdowns in subsidence sensitive areas: Cost-benefit analysis of safety measures in infrastructure projects. Funded by Formas.

### **Supervision of graduate student projects**

- 1993-96** Marie-Louise Bengtsson. Groundwater vulnerability classification as a tool in municipal planning. Licentiate degree. Deputy supervisor.
- 1997-02** Helen Stejmar Eklund. The use of hydrogeological type settings as a basis for groundwater risk and vulnerability assessments. Licentiate degree. Deputy supervisor.
- 1996-99** David Wladis. Hydrogeological studies on the regional scale: Risk assessment and decision analysis. Doctoral degree. Deputy supervisor.
- 1999-04** Jenny Norrman. On Bayesian Decision Analysis for Evaluating Alternative Actions at Contaminated Sites. Doctoral degree. Main supervisor.
- 1999-03** Pär-Erik Back. Uncertainty and Data Worth in Decision Analysis for Contaminated Land. Licentiate degree. Main supervisor.
- 2004-06** Pär-Erik Back. Data-worth Analysis for Investigations at Contaminated Sites. Doctoral degree. Main supervisor.
- 2005-10** Andreas Lindhe. Risk Assessment of Water Production Systems from Source to Tap. Licentiate and Doctoral degrees. Main supervisor.
- 2006-13** Miriam Zetterlund. Doctoral degree. Tunneling construction based on the observational method. Deputy supervisor.

- 2009-13** Petra Brinkhoff. Cost-effective and sustainable remediation in building exploration. Licentiate degree. Main supervisor.
- 2010-13.** Yevheniya Volchko. The Soil Function Concept as part of Multi-Criteria Analysis (MCA) for sustainable remediation of contaminated sites. Doctoral degree. Main supervisor.
- 2010-2015** Sara Kvartsberg. Method for rock condition assessment and tunnel design. Doctoral degree. Assistant supervisor.
- 2010-14** Hanna Landqvisit. Development of a protocol for risk assessment of potentially polluting shipwrecks in Scandinavian waters.
- 2012-2017** Jonas Sundell. Doctoral degree. Risk management of groundwater drawdowns in subsidence sensitive areas: Cost-benefit analysis of safety measures in infrastructure projects.

### **Post-doc collaborations**

- 2008-** Jenny Norrman, decision support methods for prioritization of remedial actions at contaminated sites.
- 2009-** Pär-Erik Back, decision support methods for prioritization of remedial actions at contaminated sites.
- 2010-** Andreas Lindhe, risk management of drinking water systems.