

SIGURDUR M. GARDARSSON, Ph.D.

Dean of Engineering and Natural Sciences and Professor

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ACADEMIC POSITION

Dean of Engineering and Natural Sciences and Professor, University of Iceland

RESEARCH FIELD

Environmental Engineering, Fluid Dynamics, Renewable Energy, Hydropower, Hydrology, Water Quality, Computational Fluid Dynamics

DEGREES

Ph.D., Civil and Environmental Engineering, University of Washington, 1997
M.Sc., Applied Mathematics, University of Washington, 1995
M.Sc., Civil and Environmental Engineering, University of Washington, 1993
B.Sc., Civil Engineering, University of Iceland, 1991

PROFESSIONAL HISTORY

Dean of Engineering and Natural Sciences, University of Iceland, 2017-present
Professor, University of Iceland, University of Iceland, 2007-present
Associate Professor, Department of Civil and Environmental Engineering, University of Iceland, 2003-2006
Vice Head of Faculty, Faculty of Civil and Environmental Engineering, University of Iceland, 2014-2017
Head of Faculty, Faculty of Civil and Environmental Engineering, University of Iceland, 2008-2014
Departmental Chair, Department of Civil and Environmental Engineering, University of Iceland, 2007-2008
Assistant Departmental Chair, Department of Civil and Environmental Engineering, 2005-2007
Part time lecturer in Fluid Mechanics, University of Iceland, 2000-2003
Research/Teaching Assistant, Dept. of Civil and Environmental Eng., University of Washington, 1992-1997
Research Engineer, University of Iceland, summer 1990 and 1991
Visiting Professor, Dept. of Civil and Environmental Engineering, Tufts University, USA, fall 2014
Visiting Professor, Dept. of Civil and Environmental Eng., University of Washington, USA, fall 2010
Visiting Associate Professor, Institute of Envir. and Resources, Technical University of Denmark, spring 2006

INDUSTRIAL EXPERIENCE

Senior Project Engineer, VST Consulting Engineers Ltd., Iceland, 2000-2003
Senior Project Engineer, WEST Consultants, Inc., Seattle, USA, 1997-2000
Instructor, HEC-RAS short courses by American Society of Civil Engineers (ASCE), 1999-2000
Consultant, recreation of Leonardo da Vinci experiments, CD-ROM, Corbis, 1996

UNIVERSITY SERVICES

Chair, University of Iceland Quality Committee, 2015-2018
Co-Chair, Strategy of the University of Iceland 2016-2021 Committee, 2015-2016
Chair, School of Engineering and Natural Science Facility Committee, 2013-2017
Dean Search Committee member, School of Engineering and Natural Sciences, 2012
Science Committee, Faculty of Engineering, 2011- 2014
Dean Search Committee member, School of Engineering and Natural Sciences, 2008
Teaching Committee, Faculty of Engineering, 2006-2008
Grant Evaluation Committee, Faculty of Engineering and Science, 2006-2007

PROFESSIONAL SERVICES

Chair of the Board of the University of Iceland Science Park, 2020-present
 Bord member, Landsvirkjun, 2025-present
 Board member, Eyvör, National Coordination Centre of Iceland (NCC-IS), 2024-present
 Board member, Tæknisetur ehf., 2021-2025
 Chair of the Board of GEORG – Geothermal Research Cluster, 2009-2025
 Board member, Nordtek, Network of Technical Universities in the Nordic and Baltic countries, 2017-2023
 Chair, Nordtek Conference Committee, 2022
 Chair, Science Committee for the GEORG Geothermal Workshop 2018
 Board member, University of Iceland Science Park, 2015-2017
 Chair, Science Committee for the GEORG Geothermal Workshop 2016
 Board member, ISCOLD, 2012-2017
 Board member, Landsvirkjun Energy Fund, 2011-2017
 Chair, the Icelandic Research Fund for Graduate Students, 2009-2012
 Board member, Geothermal Association of Iceland, 2010-2012
 Board member, the Institute of Continuing Education at University of Iceland, 2001-2008
 Board member, the Educational Committee of the Association of Chartered Engineers in Iceland, 2001-2017
 Treasurer, the Civil Engineering Student Society at the University of Iceland, 1990-1991
 President, the Civil Engineering Student Society at the University of Iceland, 1989-1990

RESEARCH GRANTS

In alphabetical order:

Centres of Excellence and Research Clusters 2009 – 2016
 Horizon 2020
 Icelandic Research Fund
 Icelandic Research Fund for Research Equipment
 Landsvirkjun Research Fund
 Nordic Council of Ministers
 Orkuveita Reykjavíkur Research Fund
 Seventh Framework Programme (FP7)
 University of Iceland Engineering Institute Fund
 University of Iceland Research Fund
 University of Iceland Equipment Fund

DOCTORAL STUDENTS

7. Darri Eypórsson PhD 2023 (main advisor) (now postdoc at the University of Calgary)
Historical and future trends in global snow conditions – observed by remote sensing and forecasted by spatio-temporal modelling
6. Andri Gunnarsson, PhD 2022 (main advisor) (now at Landsvirkjun Power Company)
Modeling of energy and mass balance using remote sensing for seasonal snow and glaciers in Iceland
5. Morgane Celine Priet-Mahéo, PhD 2018 (PhD committee member) (now at the Icelandic Meteorological Office)
Internal dynamics of a medium-sized subarctic lake: field measurements and numerical modeling
4. Elizabeth Anne Unger, PhD 2018 (PhD committee member) (now at EOM Offshore LLC, USA)
Renewable and Conventional Energy Sources, Cross-Border Interactions, and Electricity Prices within the Nord Pool Market
3. Irina Kampel, TU Wien, Vienna, PhD 2017 (PhD committee member) (now Environm. Eng. in Salzburg, Austria)
Vortex induced hydrodynamic impact upstream of sluice gates

2. Snjólaug Ólafsdóttir, PhD 2014 (main advisor) (now at Svarmi)
Near Field Fate of Atmospheric Hydrogen Sulfide from two Geothermal Power Plants
1. María J. Gunnarsdóttir, PhD 2012 (main advisor) (now Research Scientist at University of Iceland)
Safe drinking water: Experience with Water Safety Plans and assessment of risk factors in water supply

MASTERS STUDENTS

34. Rafael Daníel Vias, 2025 (co-advisor) (now doctoral student at University of Iceland)
Modeling Measurement Error with Bayesian Gaussian-Gaussian Models: With Applications to the Generalized Power-Law Discharge Rating Curve Model
33. Sturla Sigurðarsson, 2017 (now at Verkfræðistofa Bjarna Viðarssonar)
Tengsl niðurgangstilfella við frávik í vatnsveitum og mikla úrkomu
32. Sidney Marschollek, 2017 (now at Capgemini, Germany)
Discharge Modelling of the Tungnaá River in Iceland using the Hype Model
31. Snævarr Örn Georgsson, 2016 (now at EFLA Consulting Engineers)
Samspil grunnvatns og rennsli Tungnaár
30. Urbanus Kioko Mbithi, 2016 (now at Kenya Electricity Generating Company Ltd (Kengen))
Interpretation of Feedzones to Map Sub-surface Permeability Structures and Natural State Simulation: A Case Study of Olkaria Domes Geothermal System in Kenya
29. Sveinn Gauti Einarsson, 2016 (now independent consultant)
Feasibility of a wind farm at Sandvíkurheiði
28. Darri Eypórsson, 2015 (now doctoral student at University of Iceland)
Development of a multivariable ablation forecasting model for Brúarjökull in South East Iceland
27. Reynir Óli Þorsteinsson, 2015 (now at the Icelandic Road and Coastal Administration)
Improving spring melt calc. of surface runoff in the Upper Þjórsá River using measured snow accumulation
26. Bjarki Ómarsson, 2015 (now at the Icelandic Road and Coastal Administration)
Ebb Shoal Water Depth at Hornafjörður Tidal Inlet with Respect to Sediment Transport
25. Ásbjörn Egilsson, 2015 (now at EFLA Consulting Engineers)
Frumathugun á virkjun Múlaár í Gilsfirði
24. Seyedeh Masoumeh Safavi, 2015 (co-advisor) (now at DTU)
Enhanced methane production using pulsed electric field pre-treatment
23. Halla Bryndís Jónsdóttir, 2014
Hermun framburðar í inntakslóni Laxárvirkjana
22. Birta Kristín Helgadóttir, 2014 (now at EFLA Consulting Engineers)
Possible impacts of climate change on the wind energy potential in Búrfell
21. Ólafur Birgir Davíðsson, 2014 (co-advisor) (now at DeCode)
Bayesian Flood Frequency Analysis using Monthly Maxima
20. Kjartan Elíasson, 2014 (co-advisor) (now at the Icelandic Road and Coastal Administration)
Mapping Evaluation of the Future Arctic. Implications for Iceland
19. Helgi Sigurðarson, 2014 (co-advisor) (now at ISAVIA)
Bayesian Generalized Rating Curves
18. Kevin Franke, 2013 (now at MWH Global, UK)
Investigation of the complex flow in high energy spillways by means of computational modelling and experiments
17. Gísli Steinn Pétursson, 2013 (now at Vatnaskil Consulting Engineers)
Model Investigation of a Low Froude number Roller Bucket at Urriðafoss HEP
16. Ágúst Guðmundsson, 2013 (now at Vatnaskil Consulting Engineers)
Model Investigations of a Juvenile Fish Bypass System at Urriðafoss HEP
15. Anna Heiður Eydísardóttir, 2013 (co-advisor) (now at EFLA Consulting Engineers)
Relating measured physical roughness of hydropower waterways to hydraulic roughness
14. Magnús Bernhard Gíslason, 2012 (co-advisor) (now at Statistics Iceland)
Straumfræðileg hermun jökulhlaups niður suðurhlíðar Eyjafjallajökuls í apríl 2010: Ákvörðun Manningsst.

13. Andri Gunnarsson, 2012 (now at Landsvirkjun)
Physical Model Investigation on the Hvammur HEP Spillway
12. Helgi Gunnar Gunnarsson, 2012 (now at Vatnaskil Consulting Engineers)
Öldureiknilíkan fyrir strönd Akraness og Akraneshöfn
11. Tinna Þórarinsdóttir, 2012 (now at Icelandic Met Office)
Development of a methodology for estimation of Technical Hydropower potential in Iceland using high resolution Hydrological Modeling
10. Fjalarr Páll Mánason, 2012 (co-advisor) (now at Mannvit Consulting Engineers)
Bayesian flood analysis with added uncertainty in extreme discharge measurements
9. Fannar Gíslason, 2011 (now at Icelandic Maritime Administration)
Sediment transport modelling along the South Coast of Iceland.
8. Kristinn Már Ingimarsson, 2009 (co-advisor) (now at Alcoa)
Discharge Rating Curves Using Bayesian Statistics
7. Charles Ruesch, 2007 (from Institut National des Sciences Appliquées de Lyon, Lyon, France)
Kárahnjúkar Hydropower Project. Háslón Reservoir: Influence of Sedimentation and Climate Change on Electricity Production during the next 100 years
6. Eiríkur Gíslason, 2007 (now at Icelandic Met Office)
Assessing avalanche hazard in ski areas with the SAMOS 2D snow avalanche model
5. Snjólaug Ólafsdóttir, 2007 (now doctoral student at University of Iceland)
Modeling of hydrogen sulfide concentration in Reykjavik City due to emissions from geothermal power plants
4. Sveinbjörn Jónsson, 2007 (now at Samskip)
Flóðrakning með takmörkuðum gögnum
3. María Stefánsdóttir, 2006 (from the University of Washington, USA, now at Mannvit Consult. Eng.)
A simulation of the 9500 year glacial sediment delivery and deposition history of Lake Lagarfljot
2. María J. Gunnarsdóttir, 2005 (now research scientist at University of Iceland)
Neysluvatnsgæði og vatnsvernd
1. Reynir Sævarsson, 2004 (now at EFLA Consulting Engineers)
Greining á Skerjaffarðarveitu

TEACHING AND/OR SUPERVISOR

Engineering Hydraulics 1	Hydropower Plants	Renewable energy: introduction
Engineering Hydraulics 2	Coastal Engineering	Turbulence and Dispersion of Contaminants
Hydrology	Turbulent Flow	Environmental Impact Assessment 1

CONSULTING PROJECTS

Andakilsa river. Sediment transport review (Orka náttúrunnar)

Assistant judge. Case E-4971 (District Courts of Iceland)

Helguvík. Review of air quality (Skipulagsstofnun)

Compliance to the Icelandic drinking water regulation (Food and Veterinary Authority (MAST))

Grundartangi. Review of Environmental impact (Faxaflóahafnir)

Urridafoss juvenile fish bypass physical modeling. Urridafoss Hydropower Project (Landsvirkjun)

Urridafoss spillway physical modeling. Urridafoss Hydropower Project (Landsvirkjun)

Hvammur spillway physical modeling. Hvammur Hydropower Project (Landsvirkjun)

Projects at VST (now Verkís) Consulting Engineers included:

Háslón reservoir spillway hydraulic design at Karahnjúkar dam. Karahnjúkar hydropower project (Landsvirkjun).

Tailrace canal and tailrace tunnel hydraulic design. Karahnjúkar hydropower project (Landsvirkjun).

Environmental impact assessment with respect to sediment transport and sedimentation in Nordlingaöldulón reservoir. Nordlingaölduveita diversion (Landsvirkjun).

Study of the impact of Karahnjukar hydropower project on hydrology for Jokulsa a Dal, Jokulsa i Fljotsdal and Lagarfljot rivers, including river discharge, sediment transport, sedimentation and erosion (Landsvirkjun).

Study and measurements of bed load transport in Jokulsa a Dal river in cooperation with the Icelandic National Energy Authority (Landsvirkjun).

Study of potential temperature impact in Lagarfljot lake. Karahnjukar hydropower project (Landsvirkjun).

Study of mitigation measures for water elevation changes in Jokulsa i Fljotsdal. Karahnjukar hydropower project (Landsvirkjun).

Study of sediment transport and sedimentation in Efri-Thjorsa river (Landsvirkjun).

Study of sediment transport changes in Grimsa river due to Grimsar dam (RARIK) .

Hydraulic design of the Saudafellslon canal to Thorisvatn reservoir. Nordlingaolduveita diversion (Landsvirkjun).

Hydraulic study of Thorisvatn lake bottom outlet (Landsvirkjun).

Study of impact of Blöndustíflu dam break on the Blanda power station (Landsvirkjun).

Environmental impact assessment with respect to sediment transport and sedimentation for Villinganes hydropower project (RARIK).

Study of dam heightening in Laxá river with respect to sedimentation and ice problems (Landsvirkjun).

Projects at WEST Consultants included:

Study for the US Army Corps of hydraulic conditions, past, current, and future, along Upper Mississippi River and Illinois River (UMR from Cairo to St. Paul Minnesota and Illinois River from the confluence with Mississippi to Chicago) to evaluate the need of enlarging the locks and dams on the river system (US Army Corps, Rock Island District).

Study of availability of suspended sediments on the Missouri River in the Kansas City area for construction of a flood control levee (US Army Corps, Kansas City District).

Study of reservoir sedimentation related to increasing flood frequency in the vicinity of Pierre, South Dakota, in the Big Bend Reservoir on Missouri River (US Army Corps, Omaha District).

Numerical modelling of the Calossahatchee River in South Florida (South Florida Water Management District).

Wetland modelling of the Loxahatchee National Wildlife Refuge (South Florida Water Management District).

Bridge scour calculation for numerous bridges in Washington and Oregon (Washington/Oregon Departments of Transportation).

Evaluation of contamination at a sewer outfall on the Duwamish River in Seattle, Washington (Elliot Bay/Duwamish Restoration Program Panel for King County).

Consultant in litigation for a flooding of Holiday Inn in Issaquah due to overtopping of Issaquah Creek, Washington (CH2M Hill).

Consultant in litigation for an embankment failure at the Banks-Lowman Highway, Idaho (Federal Highway Administration).

FEMA flood study for the Santa Ana River in South California (US Army Corps, Los Angeles District).

Review of design of river restoration projects (US Army Corps, Seattle District).

PROFESSIONAL REGISTRATIONS

Registered Professional Civil Engineer, State of Washington, #36962, 2003, USA
Registered Engineer, Iceland, 1991

AWARDS

Best Teacher Award 2006, Civil Engineering Student Association
Scholarship, NATO Science Fellowship Programme, 1994
Valle Scholarship for graduate studies at the University of Washington, 1991-1993
Fulbright grant for graduate studies in the USA, 1991

PROFESSIONAL SOCIETIES

American Society of Civil Engineers (ASCE)
Association of Chartered Engineers in Iceland (VFI)

PUBLICATIONS

orcid.org/0000-0002-4705-1572

ResearcherID: A-6680-2008

Google Scholar: scholar.google.is/citations?user=9od7-GkAAAAJ&hl=en&oi=sra

Articles

- Rossi, P.M., Gunnarsdottir, M.J., Myrmel, M., Gardarsson, S.M., Eriksson, M., Albrechtsen, H., Bergkvist, G.K.S., Matilainen, B.R., Hansen, L.T., Jensen, P.E., Maréchal, J.Y.A., Kalheim, F.C., Persson, K.M., Bjerken, A., Bartram, J. (2025). Small water supplies in Nordic countries: climate change effects, risks and contingency planning. *Submitted*.
- Bartram, J., Gunnarsdottir, M.J., Gardarsson, S.M., Eriksson, M., Albrechtsen, H., Bergkvist, K.S.G., Rossi, P.M., Matilainen, R., Hansen, L.T., Jensen, P.E., Maréchal, J.Y.A., Myrmel, M., Kalheim, F.C., Persson, K.M., Bjerken, A., Bayona, A. (2025). Lessons from Covid-19 effects on small Nordic water supplies: futures resilience and vulnerability. *Submitted*.
- Vias, R.D., Hrafnkelsson, B., Hodson, T., Rögnvaldsson, S., Jansson, A.Ö., and Gardarsson, S.M. (2025). Evaluating the applicability of the generalized power-law rating curve model: With applications to paired discharge-stage data from Iceland, Sweden, and the United States. *Journal of Hydrology*. DOI [10.1016/j.jhydrol.2024.132537](https://doi.org/10.1016/j.jhydrol.2024.132537)
- Gunnarsdottir, M.J., Tomasdottir, S., Orlygsson, O., Andradottir, H.O., Gardarsson, S.M. (2025). Impact of wildfire on the drinking water catchment for the capital area of Iceland - A case study. *Environmental Science: Advances*. DOI [10.1039/D4VA00352G](https://doi.org/10.1039/D4VA00352G).
- Bayona, A., Gunnarsdottir, M.J., Rossi, P.M., Albrechtsen, H., Bergkvist, K.S.G., Gardarsson, S.M., Eriksson, M., Hansen, L.T., Jensen, P.E., Maréchal, J.Y.A., Myrmel, M., Persson, K.M., Bjerken, A., Kalheim, F.C., Bartram, J. (2024). Water quality for citizen confidence: The implementation process of 2020 EU Drinking Water Directive in Nordic countries. *Water Policy* **26** (8): 793-816. DOI [10.2166/wp.2024.013](https://doi.org/10.2166/wp.2024.013).
- Gunnarsson, A., Gardarsson, S.M. (2024). Spatial estimation of snow water equivalent for glaciers and seasonal snow in Iceland using remote sensing snow cover and albedo. *Hydrology*, **11**(1). DOI [10.3390/hydrology11010003](https://doi.org/10.3390/hydrology11010003)
- Gunnarsdottir, M.J., Gardarsson, S.M., Eriksson, M., Albrechtsen, H., Bergkvist, K.S.G., Rossi, P.M., Matilainen, R., Hansen, L.T., Jensen, P.E., Maréchal, J.Y.A., Myrmel, M., Kalheim, F.C., Persson, K.M., Bjerken, A., Bartram, J. (2023). Implementing risk-based approach to improve drinking water quality in small water supplies in the Nordic region - barriers and solutions. *Journal of Water and Health*, **21**(12). DOI [10.2166/wh.2023.088](https://doi.org/10.2166/wh.2023.088)
- Gunnarsson, A., Gardarsson, S.M., Palsson, F. (2023). Modeling of surface energy balance for Icelandic glaciers using remote sensing albedo. *The Cryosphere*, **17**, 3955–3986. DOI [10.5194/tc-17-3955-2023](https://doi.org/10.5194/tc-17-3955-2023)
- Eythorsson, D., Gardarsson, S.M., Nijssen, B. (2023). Projected Changes to Northern Hemisphere Snow Conditions over the period 1950-2100, given two emission scenarios. *Remote Sensing Applications: Society and Environment*, **30**, 100954. DOI [10.1016/j.rsase.2023.100954](https://doi.org/10.1016/j.rsase.2023.100954)
- Eythorsson, D., Gardarsson, S.M., Gunnarsson, A., and Sveinsson, O.G.B. (2023). Observed and predicted trends in Icelandic snow conditions for the period 1930–2100. *The Cryosphere*, **17**, 51-62. DOI [10.5194/tc-17-51-2023](https://doi.org/10.5194/tc-17-51-2023)
- Hrafnkelsson, B., Vias, R.D., Rögnvaldsson, S., Jansson, A.O., and Gardarsson, S.M. (2023). Bayesian Discharge Rating Curves Based on the Generalized Power Law. *Statistical Modeling using Bayesian Latent Gaussian Models with Applications in Geophysics and Environmental Sciences*, edited by Hrafnkelsson, B., Springer, 2023, 109-128. DOI [10.1007/978-3-031-39791-2](https://doi.org/10.1007/978-3-031-39791-2)
- King, R., Gunnarsdottir, M.J., Narfason, Th., Hjaltadottir, S., Sigurdsson, A., Herschan, J., Gardarsson, S.M., McKeown, R.M., Pond, K. (2022). Adapting sanitary inspections for the monitoring and surveillance of small drinking water supplies in Iceland. *Journal of Water and Health*, **20**(5), 755-769. DOI [10.2166/wh.2022.144](https://doi.org/10.2166/wh.2022.144)
- Hrafnkelsson, B., Sigurdarsson, H., Rögnvaldsson, S., Jansson, A.O., Vias, R.D., Gardarsson, S.M. (2022). Generalization of the power-law rating curve using hydrodynamic theory and Bayesian hierarchical modeling. *Environmetrics*, **33**(2), 1-28. DOI [10.1002/env.2711](https://doi.org/10.1002/env.2711)
- Gunnarsson, A., Gardarsson, S.M., Palsson, F., Johannesson, T., and Sveinsson, O.G.B. (2021). Annual and interannual variability and trends of albedo for Icelandic glaciers. *The Cryosphere*, **15**, 547-570. DOI [10.5194/tc-15-547-2021](https://doi.org/10.5194/tc-15-547-2021)
- Barich, A., Hjalti Pall Ingolfsson, H.P., Gardarsson, S.M., Bjorgvinsson, S.T., Bogason, S., Stoklosa, A.W., Urban, T., Jonsson, S.O., Palsson, B., Chatenay, C., Aradottir, E.S., Asbjornsson, E.J., Tryggvadottir, L., Hauksdottir, S., Unnthorsson, R., Geirsson, H. (2021). GEORG Geothermal Energy Research Cluster Initiative – Bridging the Community Gap. *Proceedings World Geothermal Congress 2020+1*. Reykjavik, March - October, 2021.

- Gunnarsdóttir, M.J., Gardarsson, S.M., Schultz, A.C., Albrechtsen, H.J., Hansen, L.T., Bergkvist, K.S.G., Rossi, P.M., Klöve, B., Myrmel, M., Persson, K.M., Eriksson, M., and Bartram, J. (2020). Status of risk-based approach and national framework for safe drinking water in small water supplies of the Nordic water sector. *International Journal of Hygiene and Environmental Health*, **230** (2020) 113627. DOI [10.1016/j.ijheh.2020.113627](https://doi.org/10.1016/j.ijheh.2020.113627)
- Gunnarsdóttir, M.J., Atladóttir, A.S., and Gardarsson, S.M. (2020). Waterborne outbreaks in Iceland - analysis of scale and causes. *The Icelandic Medical Journal*, **106**(6), 293-301. DOI [10.17992/ibl.2020.06.585](https://doi.org/10.17992/ibl.2020.06.585)
- Benediktsdóttir, E., Gunnarsdóttir, M.J., Omarsdóttir, B.D., Sigurjonsson, V.I., Gardarsson, S.M. (2020). Virus inactivation in groundwater in postglacial lava field in arctic climate. *Letters in Applied Microbiology*, **70**(4), 282-289. DOI [10.1111/lam.13271](https://doi.org/10.1111/lam.13271)
- Gunnarsdóttir, M.J., Gardarsson, S.M., Figueras, M.J., Puigdomènech, C., Juárez, R., Saucedo, A., Arnedo, M.J., Santos, R., Monteiro, S., Avery, L., Pagaling, E., Allan, R., Abel, C., Eglitis, J., Hamsch, B., Hügler, M., Rajkovic, A., Smigic, N., Udovicki, B., Albrechtsen, H.-J., López-Avilés, A., and Hunter, P. (2020). Water safety plan enhancements with improved drinking water quality detection techniques. *Science of the Total Environment*, **698** (134185). DOI [10.1016/j.scitotenv.2019.134185](https://doi.org/10.1016/j.scitotenv.2019.134185)
- Gunnarsson, A., Gardarsson, S.M., and Sveinsson, O.G.B. (2019). Icelandic snow cover characteristics derived from a gap-filled MODIS daily snow cover product. *Hydrol. Earth Syst. Sci.*, **23**, 3021–3036. DOI [10.5194/hess-23-3021-2019](https://doi.org/10.5194/hess-23-3021-2019)
- Eythorsson, D., Gardarsson, S.M., Ahmad, S.K., Hossain, F., and Nijssen, B. (2019). Arctic climate and snow cover trends – Comparing Global Circulation Models with remote sensing observations. *International Journal of Applied Earth Observation and Geoinformation*, **80**, 71-81. DOI [10.1016/j.jag.2019.04.003](https://doi.org/10.1016/j.jag.2019.04.003)
- Gunnarsdóttir, M.J., Gardarsson, S.M., Andradóttir, H.O., and Schioth, A. (2019). Áhrif loftlagsbreytinga á vatnsveitur og vatnsgæði á Íslandi – áhættuþættir og aðgerðir. *Verktaekni, Journal of the Association of Chartered Engineers in Iceland*, **25**(1).
- Eythorsson, D., Gardarsson, S.M., Gunnarsson, A., and Hrafnkelsson, B. (2018). Statistical summer mass-balance forecast model with application to Bruarjökull glacier, South East Iceland. *Journal of Glaciology*. **64**(244), 311-320. DOI [10.1017/jog.2018.22](https://doi.org/10.1017/jog.2018.22)
- Unger, E.A., Ulfarsson, G.F., Gardarsson, S.M., and Matthiasson, T. (2018). The effect of wind energy production on cross-border electricity pricing: The case of western Denmark in the Nord Pool market. *Economic Analysis and Policy*. **58**, 121-130. DOI [10.1016/j.eap.2018.01.006](https://doi.org/10.1016/j.eap.2018.01.006)
- Holmgeirsson, S.; Ingolfsson, H. P.; Eichelberger, J.; Pye, S.; Normann, R.; Kaldal, G. S.; Blankenship, D.; Mortensen, A.; Markusson, S.; Paulsson, B.; Karlsdóttir, S. N.; Wallevik, S. O.; Gardarsson, S. M.; Tester, J.; Lavalley, Y. (2018). Krafla Magma Testbed (KMT): Engineering Challenges of Drilling into Magma and Extracting its Energy. *Geothermal Resources Council Transactions*, **42**.
- Ingolfsson, H. P.; Gardarsson, S. M. (2018). GEORG Geothermal Energy Research Cluster Initiative – Organizational Structure and Synergy. *Geothermal Resources Council Transactions*, **42**.
- Barich, A.; Ingolfsson, P.I.; Gardarsson, S.M., and Urban, T. (Editors) (2018). GEORG Geothermal Workshop – Book of Abstracts. *GEORG Geothermal Workshop 2018*, November 14-15th, 2018.
- Gunnarsdóttir, M.J., Persson, K.M., Andradóttir, H.O., and Gardarsson, S.M. (2017). Status of small water supplies in the Nordic countries: Characteristics, water quality and challenges. *International Journal of Hygiene and Environmental Health*. **220**(8), 1309-1317. DOI [10.1016/j.ijheh.2017.08.006](https://doi.org/10.1016/j.ijheh.2017.08.006)
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