CURRICULUM VITAE

Personal:

Name: Løset, Sveinung
Born: 1956
Nationality: Norwegian
Present position: Vice Dean Research & Innovation, Faculty of Engineering, NTNU
Professor in Arctic Marine Technology, Department of Civil and Environmental Engineering, Norwegian University of Science and Technology (NTNU)
Adjunct Professor, the University Centre in Svalbard (UNIS)
Honorary Doctor, Peter the Great St. Petersburg Polytechnic University, Russia
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Education:

1990-93: Dr.ing. (PhD) in Arctic Marine Technology, The Norwegian Institute of Technology,
1976-80: "Sivilingeniør" in Applied Physics, The Norwegian Institute of Technology (NTH).

Awards:

2017 POAC Founders Lifetime Achievement Award
Statoil's Excellence in Research Award (2004)
ESSO's Research Award 1993 for the most excellent dr.ing. dissertation in applied research at NTH.

Employment:

Nov. 05-present: Honorary Doctor, St. Petersburg State Polytechnical University, Russia
May 04-Nov. 05: Vice-dean, Faculty of Engineering Science and Technology, NTNU.
Jan. 02-present: Professor, Department of Civil and Transport Engineering, NTNU.
Sep. 02-May 04: Head of Study Program "I&IKT", NTNU
Jan. 02-Sep. 02: Head of Study Program "Civil and Environmental Engineering", NTNU.
Jan. 99-Dec. 01: Vice-dean, Faculty of Civil and Environmental Engineering, NTNU.
Jan. 97-present: Adjunct professor, University Centre in Svalbard, UNIS.
Mar. 95-Dec. 02: Professor, Department of Structural Engineering, NTNU.
June 94-Feb. 95: Associate Professor, Department of Structural Engineering, NTH.
Sep. 93-May 94: Research Manager, SINTEF Norwegian Hydrotechnical Laboratory.
Sep. 90-Sep. 93: Dr. student, Department of Structural Engineering, NTH.
1986-Sep. 90: Research Manager, SINTEF Norwegian Hydrotechnical Laboratory.
1984-1985: Senior Res. Eng., Norwegian Marine Technology Research Inst. A/S (MARINTEK).
1981-1984: Research Engineer, The Ship Research Institute of Norway (NSFI).
Jan.-May 1981: Assistant Professor, Div. of Physics, The Norwegian Institute of Technology.
June-Aug. 1979: Student scholarship, The Israely Institute of Technology, Haifa, Israel.

Professional societies and other assignments:

Professional membership: Norwegian Academy of Technological Sciences (NTVA)
European Geophysical Society/ Norwegian Geophysical Association
Member of Norwegian Academy of Polar Sciences (NVP) (2008-)
International Association for Hydraulic Research (IAHR)
Norwegian Society of Chartered Engineers (NIF).

Assignments:

President of POAC (Port and Ocean Engineering under Arctic Conditions), 2014-2016
Member of the Board of the Research Council of Norway's Polar Research Programme (POLARPROG), 2014-

Member of the Board of the Faculty of Engineering Science and Technology, NTNU, 2012-
NTVA, registrar of the membership committee, 2012-
Member of ISO WG8 Arctic Offshore Structures Standard, Technical Panel Leader
Member of the Norwegian Council for Higher Education (UHR), Technology, 2003-07
President of POAC (Port and Ocean Engineering under Arctic Conditions), 2002-2004
International Ship and Offshore Structures Congress, 1996-97, Norway's member of the Specialist Committee on Ice-Structure Interaction
Member of the Norwegian MAST Reference Group, 1995- 97
International Association for Hydraulic Research (IAHR), Norway's Committee Member of the IAHR Committee on Ice Research and Engineering, 1992-2014.
Norway's Committee Member of the POAC International Committee, 1993-2009
Regularly referee of international journals, and chairman on international conferences.

Key qualifications:

Scientific: Knowledge and direct experience of ice engineering from 1986. Chief scientist in a number of Arctic expeditions and ice tank studies including numerical modelling:

- Ice physics and mechanics
- Ice loads on offshore and coastal structures (field/laboratory investigations, computations)
- DP and station-keeping in ice
- Sea ice dynamics and rheology (field/laboratory investigations, computations)
- Statistics on sea ice and icebergs, Barents Sea
- Thermodynamics of icebergs and sea ice ridges
- Cold climate engineering
- Friction of solid materials on snow and ice

International collaboration:

President of the 23rd International POAC Conference, Trondheim, 2015.
President of the 17th International POAC Conference, Trondheim, 2003.
President of 12th International IAHR Ice Symposium, Trondheim, 1994.
World wide keynote lecturer, reviewer and expert in Arctic marine technology (ISO, Canada, USA, Russia, China, Korea).

Administr.: Chief Scientist on the "Oden Arctic Technology Research Cruise (OATRC2015)" in 2015 including the icebreakers Oden and Frej.
Dep. Chief Scient. on the "Oden Arctic Technology Research Cruise (OATRC2013) in 2013.
Chief Scientist on the "Oden Arctic Technology Research Cruise (OATRC2012)" in 2012.
Director of the Centre for Research Based Innovation (SFI): "Sustainable Arctic Marine and Coastal Technology" (SAMCoT) (2011-)
Chairperson of Board "The Innovation Centre at Gløshaugen" (IG) (2005-2012)
Member of Board, Faculty of Engineering Science and Technology, NTNU (15.09.2014-; 2008-2012).
Vice-dean, Faculty of Engineering Science and Technology, NTNU (May 2004-Aug. 2005).
Head of study programme I&IKT, NTNU (Sep. 2002-June 2004)
Head of study programme Civil and Environmental Engineering, NTNU (Jan.2002-Sep.02)
Vice-dean, Faculty of Civil and Environmental Engineering, NTNU (1999-2001).
Member of Board, Faculty of Civil and Environmental Engineering, NTNU (1999-2001).
Member of Board, Department of Structural Engineering, NTNU (1997-1999).
SINTEF NHL's Leader Team (1987-1990).
SINTEF NHL, Res. Manager, Cold Environment Section (1987-1990).
SINTEF's Coordinator of Arctic Research (1988-1990).

Language: Fluency in English and German, moderate skills in Spanish, French and Russian.

PhD supervising:

Supervised:

Hansen, E. (1998): A discrete element model to study marginal ice zone dynamics and the behaviour of vessels moored in broken ice. Doctoral theses at NTNU, 1998:105.

Moldestad, D.A. (1999): Some aspects of ski base sliding friction and ski base structure. Doctoral theses at NTNU, 1999:137.

Høyland, K. (2000): Measurements and simulations of consolidation in first-year ice ridges, and some aspects of mechanical behaviour. Doctoral theses at NTNU, 2000:94.

Jensen, A. (2002): Evaluation of concepts for loading of hydrocarbons in ice-infested waters. Doctoral theses at NTNU, 2002:114.

Økland, J. (2002): Numerical and physical modelling of oil spreading in broken ice. Doctoral theses at NTNU, 2002:130.

Liferov, P. (2005): First-year ice ridge scour and some aspects of ice rubble behaviour. Doctoral theses at NTNU, 2005:84.

Bonnemaire, B. (2005): Arctic offshore loading: Submerged turret loading and loading down time in drifting Ice. Doctoral theses at NTNU, 2005:158.

Bjerkås, M. (2006): Ice actions on offshore structures. Doctoral theses at NTNU, 2006:9.

Moslet, P.O. (2007): In-situ measurements of sea-ice parameters that affect the loads on coastal and offshore structures. Doctoral theses at NTNU, 2007:5.

Shafrova, S. (2007): First-year sea ice features: Investigation of field strength heterogeneity and modelling of ice rubble behaviour. Doctoral theses at NTNU, 2007-176.

Klein-Paste, A. (2007): Runway Operability under Cold Weather Conditions. Doctoral theses at NTNU, 2007-215.

Gürtner, A. (2009): Experimental and Numerical Investigations of Ice-Structure Interaction. Doctoral theses at NTNU, 2009-26, 182 p.

Eik, K.J. (2010): Ice management in Arctic Offshore Operations and Field Developments. Doctoral theses at NTNU, 2010:220, 214 p.

Lubbad, R. (2011): Some Aspects of Arctic Offshore Floating Structures. Doctoral theses at NTNU, 2011:9, 112 p.

Aksnes, V. (2011): Experimental and numerical studies of moored ships in level ice. Doctoral theses at NTNU, 2011:14, 120 p.

Strub-Klein, L. (2012): Field measurements and analysis of the morphological, physical and mechanical properties of level ice and sea ice ridges. Doctoral theses at NTNU, 2012:133, 193 p.

Sukhorukov, S. (2013): Ice-Ice and Ice-Steel Friction in Field and Laboratory. Doctoral theses at NTNU, 2013:300, 106 p.

Breitschädel, F. (2014): Technical Aspects to improve performance in cross-country skiing. Doctoral theses at NTNU, 2013: 127, 133 p.

Dalane, O. (2014): Some Aspects of Conical Floaters Exposed to Ice Actions. Doctoral theses at NTNU, 2014: 334, 123 p.

Kulyakhtin, A. (2014): Numerical Modelling and Experiments on Sea Spray Icing. Doctoral theses at NTNU, 2014: 338, 203 p.

Lu, W. (2014): Floe Ice - Sloping Structure Interactions. Doctoral theses at NTNU, 2014: 324, 314 p.

Metrikin, I. (2015): Experimental and Numerical Investigations of Dynamic Positioning in Discontinuous Ice. Doctoral theses at NTNU, 2015: 329, 290 p.

Tsarau, A. (2015): Numerical Modelling of the Hydrodynamic Effects of Marine Operations in Broken Ice. Doctoral theses at NTNU, 2015: 281, 159 p.

Hendrikse, H. (2017): Ice-Induced Vibrations of Vertically Sided Offshore Structures. Doctoral theses at Delft University of Technology, 2017, 155 p.

Berg, M. v d: (2019): Discrete Numerical Modelling of Broken Ice - Structure Interaction. Doctoral theses at NTNU,

Skarbø, R. (2019): Ice drift prediction and mitigation of impact from sea ice on marine operations. Doctoral theses at NTNU,

<u>Co-supervised:</u>

Oggiano, L. (2010): Drag reduction and aerodynamic performances in Olympic sports. PhD thesis at NTNU, 2010-118, 162 p.

Serre, N. (2011): Study of ice rubble action in scale-model ice ridge impact on seabed structures. Doctoral theses at NTNU, 2011:161, 128 p.

Liu, Z. (2011): Analytical and numerical analysis of iceberg collisions with ship structures. Doctoral theses at NTNU, 2011:235, 160 p.

Sinitsyn, A. (2011): Pile foundations in plastically frozen soils. SPbSPU, 114 p.

Repetto, A. (2011): Experimental basin- and laboratory-scale studies related to ice ridges, rubble accumulations and freeze-bonds. Doctoral theses at NTNU, 2011:256, 166 p.

Shestov, A. (2013): The Role of the Thermodynamic Consolidation of Ice Ridge Keels in the Seabed Gouging Process. Doctoral theses at NTNU, 2013:253, 200 p.

Kim, E. (2014):	Experimental and numerical studies related to the coupled behaviour of ice mass and steel structures during accidental collisions. Doctoral theses at NTNU, 2014:35,220p.
Wåhlin, J. (2014):	The effect of aqueous solutions on compacted snow hardness. 201. Doctoral theses at NTNU, 2014:255, 135 p.
Haugen, J. (2014):	Autonomous Aerial Ice Observation. Doctoral theses at NTNU, 2014:291, 129 p.
Zhang, Q. (2015):	Image Processing for Ice Parameter Identification in Ice Management. Doctoral theses at NTNU, 2015:340, 146 p.
Storheim, M. (2016):	Structural Response in Ship-Platform and Ship-Ice Collisions. Doctoral theses at NTNU, 2016:14, 348 p.
Jørgensen, U. (2014):	Use of unmanned surface and underwater vehicles for IM measurements.
Kjerstad, Ø.K. (2016):	Dynamic positioning of marine vessels in ice. Doctoral theses at NTNU, 2016:168, 184 p.
Yulmetov, R. (2017):	Observations and Numerical Simulation of Icebergs in Broken Ice. Doctoral theses at NTNU, 2017:24, 173 p.
Andersson, L. E. (2018):	Short-term Iceberg Drift Estimation and Prediction. Doctoral theses at NTNU, 2018:186, 252 p.
Heyn, H. M. (2019):	Motion sensing on vessels operating in sea ice. Doctoral theses at NTNU, 2019.
Keijdener, C. (2019):	The effect of hydrodynamics on the bending failure of level ice. Delft University of Technology, 2019.
Li, H. (2020):	Modelling Wave-Ice Interactions in the Marginal Ice Zone. Doctoral theses at NTNU, 2020.
Bjørnø, J. (2022):	Characterize managed ice as produced by an icebreaker, and study methods for monitoring the state of managed ice. Doctoral theses at NTNU, 2022.
Abbasi, H. (2022):	Modelling of oil spill and response in the marginal ice zone.

Publication, patent and research summary

Indicator	**Achievement**
Books/compendia	13
International peer reviewed journal publications**	>70
International conference papers	>180
H-index (Hirsch index)*	24
PhD students graduated	25
Co-supervised PhD students graduated	15
Patents	8

* Google Scholar, per 2019-09-18.