

Naoki Nakazawa, President, Dr. Eng.**Systems Engineering Associates, Inc.**

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Work Experience

2021 to 2022	Senior Researcher National Museum of Nature and Science, Center of the History of Japanese Industrial Technology
2014 to 2020	Research Associate The University of Tokyo Graduate School of Frontier Sciences, Dept. of Ocean Technology, Policy and Environment, Tokyo, Japan. Research on carbon dioxide capture and storage, and subsea engineering.
2007 to 2023	Advanced Construction Technology Center, Tokyo, Japan, Technology assessment and evaluation of new construction technology.
1997 to present.	President Systems Engineering Associates, Inc., Tokyo, Japan. Consulting works for ocean engineering, e.g. offshore structure designs in cold and sea ice environment, offshore energy development, seabed resources.
1979-1997	Pacific Consultants Co., Ltd. <ul style="list-style-type: none"> - Structural design of railroads and subways, and port and harbor facilities. - Research on mechanical properties of ice and ice-material interaction. - Planning of flood plain management and analysis of fluid dynamics in river/ocean flow. Planning and design of port and harbor facilities.

Education and Research

2017, October	Executive Program: Climate Change and Energy -Policymaking for the Long Term- Harvard Kennedy School, Cambridge, MA, USA.
1991	Doctor of Engineering Hokkaido University, Sapporo, Japan. Doctor thesis: "Studies on factors influencing the ice forces on structures."
1987-1989	Visiting Researcher (CRREL and UAF Joint Program) U.S.Army Cold Regions Research and Engineering Laboratory (CRREL), Ice Engineering Research Branch, Hanover, New Hampshire, USA. Research on ice forces on structures.
1986-1989	Master of Science University of Alaska Fairbanks, Dept. of Arctic Engineering, Fairbanks, AK, USA. Master thesis: "Ice Forces on Flat, Vertical Indentors Pushed through Floating Ice Sheets"
1974-1979	Bachelor of Engineering Hokkaido University, Dept. of Civil Engineering, Sapporo, Japan

Award

2002	ISOPE2002 Best Paper Award, Co-author. International Society of Offshore and Polar Engineers Paper title "Ice Load Equation by Medium Scale Field Indentation Test Data,"
1984	Arthur Lubinski Outstanding Paper Award, Co-author. American Society of Mechanical Engineers (ASME) Offshore Technology Conference (OTC84) Paper title "The Coefficients of Friction Between Sea Ice and Various Materials Used in Offshore Structures,"

Qualifications

2003	Registered Consulting Engineer (PE, Professional Engineer in Japan) Specialty: Construction Management
2003	Registered Consulting Engineer (PE, Professional Engineer in Japan) Specialty: Port and Harbor Facilities
2002	Engineering Intern, State of Oregon, #66671EIT, USA Specialty: Civil Engineering
1992	Registered Consulting Engineer (PE, Professional Engineer in Japan) Specialty: Applied Science - Geophysics, Snow and Ice

Teaching

2003 to 2023	Visiting lecturer on Cold Region Engineering, Hokkaido University, Sapporo, Japan.
2005, June	Visiting lecturer on Offshore Resources, Kanagawa Institute of Technology

Committee Members

2020 to present	Vice President, American Society of Civil Engineers (ASCE), Japan Section.
2011-2019	Secretary, American Society of Civil Engineers (ASCE), Japan Section.
2004 to present	ISO/TC67/SC7/WG8- International Organization for Standardization, Offshore Structures for Petroleum and Natural Gas Industries in Arctic Offshore Conditions.

Membership

American Society of Civil Engineers (ASCE)

Publications

2022	“Research and Engineering Development on Sea Ice,” published by National Museum of Nature and Science, Japan. March 31, 2022.
2022	“Study on Arctic Marine Plastic Pollution,” Proc. of the International Symposium on the Okhotsk Sea & Polar Oceans, Mombetsu, Japan.
2020	“ISO 19906 and Frozen-soil/Permafrost Engineering,” Proc. of the International Symposium on the Okhotsk Sea & Polar Oceans, Mombetsu, Japan.
2019	“Study on Oil Spill Response Technology in Cold Water Condition,” Proc. of the International Symposium on the Okhotsk Sea & Polar Oceans, Mombetsu, Japan.
2015	“Ship-based Carbon Dioxide Capture and Storage for Enhanced Oil Recovery,” OTC25861-MS, Offshore Technology Conference, Houston, Texas, 4-7 May 2015.
2014	“Ice Load Estimation Methods for LNG Jetty Design in Various Ice-Structure Interactive Conditions,” OTC24626, Arctic Technology Conference, Houston, Texas, 10-12 February 2014.
2012	“Numerical Prediction of Spilled Oil Behavior under Sea Ice Conditions: Modification of the 2011 Model,” OTC23801, Arctic Technology Conference, Houston, Texas, 3-5 December 2012.
2012	“Ship-based CO ₂ Injection into Subseabed Geological Formations using a Flexible Riser Pipe Pickup System,” GHGT-11: 11th International Conference on Greenhouse Gas Control Technologies, Kyoto, Japan, 18-22 November 2012. Energy Procedia 37(2013)3176-3183, ELSEVIER.
2011	“Experimental Studies on Rare Metal Collection from Seawater,” International Offshore and Polar Engineering Conference (ISOPE2011), Hawaii, 19-24 June 2011.
2011	“Numerical Prediction of Spilled Oil Behavior in the Sea of Okhotsk Under Sea Ice Conditions,” OTC22123, Arctic Technology Conference, Houston, Texas, 7-9 February 2011.
2004	“Local Ice Pressure Distribution Acting on Offshore Structure.” 17th International Symposium on Ice. St.Petersburg, Russia.
2002	“Marine Data Processing for Marine Activities.” PACON 2002, Makuhari, Chiba, Japan.
2001	“Proposal for Formation of a Marine Information Technology Industry.” OCEANS 2001, Honolulu, Hawaii.

Almost one hundred papers and reports for domestic and international conferences and journals on cold regions and ocean technology/engineering.
