

Systems Engineering Associates

● Corporate Profile

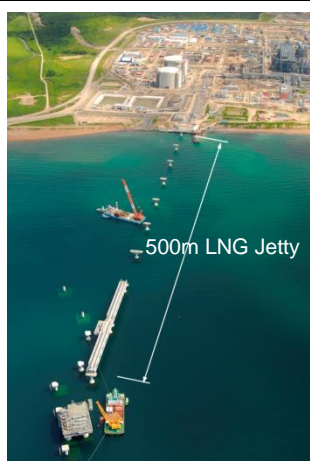
■ Company Name	Systems Engineering Associates Inc.
■ Established	October, 1997
■ Paid-in Capital	10,000,000 JPY
■ President	Naoki Nakazawa, Dr. Eng., PE., jp, nakazawa@systemseng.jp
■ Address	Toranomon La Port Bld., 1-16-6 Toranomon, Minato Tokyo105-0001, Japan, tel: +81-3-6759-8037, fax: +81-3-6759-8038
■ Associates and their specialties	Doctors (5), <ul style="list-style-type: none"> - Naoki Nakazawa, Dr. Eng. in Arctic Engineering, Hokkaido University - Hideo Suda, Dr. Eng. in Urban Management, Kyoto University - Masayuki Komatsu, Dr. Agriculture & Fisheries, University of Tokyo - Satoshi Akagawa, Ph.D in Geotechnical Engineering, Hokkaido University - Michio Higa, Ph.D in Geoenvironment Science, Hokkaido University Certified Engineers (3), <ul style="list-style-type: none"> - Port and harbor engineering - Hydropower engineering - Soil and foundation engineering Engineering Intern (1)- Civil Engineering (6667EIT, Oregon, USA)
■ Service	Planning and Engineering Design, <ul style="list-style-type: none"> - Hydroelectric generation - Ports and harbors - Structural foundation Consulting and Research Studies, <ul style="list-style-type: none"> - Geotechnical engineering and soil mechanics - Offshore technology - Renewable energy - Remote sensing - Ice and frozen ground engineering
■ Clients	Public Corporations <ul style="list-style-type: none"> - Engineering Advancement Association of Japan (ENAA) - Japan Oil, Gas and Metals National Corporation (JOGMEC) - The Japan Workvessel Association - The University of Tokyo - Hokkaido University Private-sector Corporations <ul style="list-style-type: none"> - Mitsubishi Heavy Industries LTD. - Chiyoda Corporation - NTT GP-ECO - Fukken Co., Ltd.
■ Cooperative Institutes	<ul style="list-style-type: none"> - Prof. Shunji Kanie, Laboratory of Structural Mechanics and Systems, Hokkaido University, Sapporo, Japan. - Prof. Takahiro Takeuchi, Department of Civil Engineering and Architecture, Hachinohe Institute of Technology, Hachinohe, Japan.. - U.S.Army Cold Regions Research and Engineering Laboratory, New Hampshire, USA.

● Reports & Papers

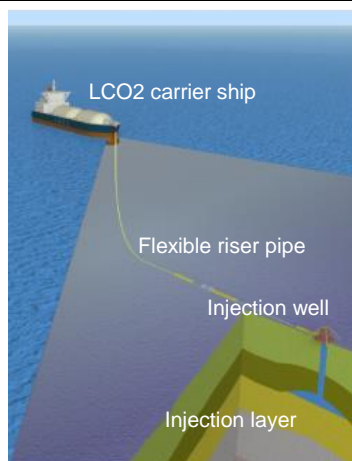
2014	Ice Load Estimation Methods for LNG Jetty Design in Various Ice-Structure Interactive Conditions, Arctic Technology Conference 2014, OTC 24626.
2013	Fisheries in Nigeria, Report to the Ministry of Agriculture, Nigeria Government
2013	Ship-based CO ₂ Injection into Subseabed Geological Formation, GHGT11, ELSEVIER
2012	Numerical Prediction of Spilled Oil Behavior under Sea Ice Conditions, OTC 23801

● Projects

Year	Projects	Clients
2014	Design of a small hydropower generation facilities	- Yamaguchi, Okayama Prefectural Government,
	Feasibility study on a small hydropower generation	- NTT GP-ECO
	Consultation for the conservation of melting frozen soil in the methane hydrate field in Canadian arctic	- Japan Oil, Gas and Metals National Corporation (JOGMEC)
	Study on the offshore CO ₂ enhanced oil recovery	- The University of Tokyo
	Research on the ocean industry development strategy	- Engineering Advancement Association of Japan (ENAA)
2013	Feasibility study on a small hydropower generation	- NTT GP-ECO
	Design of a small hydropower generation facilities	- Okayama Prefectural Government
	Communication buoy design for offshore monitoring	- Chiyoda Corporation
2012	Ship-based CO ₂ Injection into Subseabed Geological Formations using a Flexible Riser Pipe Pickup System	- Global Carbon Capture and Storage Institute - The University of Tokyo
	Studies on the Deepwater Horizon oil spill in Gulf of Mexico.	- Petroleum Association of Japan
	Study on the Sustainable Fisheries Management and International Trade in Southeast Asia and Pacific Region	- National Graduate Institute for Policy Studies
2011	Feasibility studies on the electric power productivities by ocean energy.	- Engineering Advancement Association of Japan (ENAA)
	Numerical Prediction of Spilled Oil Behavior under Sea Ice Conditions: the 2012 Model	- Petroleum Association of Japan - Engineering Advancement Association of Japan (ENAA)
	Studies on workvessel utilization in nearshore waters	- The Japan Workvessel Association
2010	Research studies on gas pipelines mechanical properties in Russian permafrost environment.	- Hokkaido University - Japan Oil, Gas and Metals National Corporation
	Experimental studies for the applicability of new materials to offshore structures in tropical offshore.	- Engineering Advancement Association of Japan (ENAA) - Ministry of Economy, Trade and Industry
	Feasibility studies on the small-scale hydroelectric generation in the City of Miyoshi.	- Fukken Co., Ltd. - The City of Miyoshi
2009	Consultation for the conservation of melting frozen soil in the methane hydrate field in Canadian arctic	- Japan Oil, Gas and Metals National Corporation (JOGMEC)
	Feasibility studies on captures CO ₂ for ship-based transport and ship mooring offshore structures.	- The University of Tokyo - Central Research Institute of Electric Power Industry
	Studies on ore refining system for sea-floor hydrothermal deposit.	- Japan Oil, Gas and Metals National Corporation (JOGMEC)
	Experimental studies on mechanical characteristics of ice adfreeze bonding to gas pipeline surface in cold atmospheric conditions.	- Hokkaido University - Japan Oil, Gas and Metals National Corporation (JOGMEC)
2008	Feasibility studies on the development of sea-floor hydrothermal deposit.	- Japan Oil, Gas and Metals National Corporation (JOGMEC)
	Numerical prediction of spilled oil behavior in the Sea of Okhotsk under sea ice conditions.	- Engineering Advancement Association of Japan (ENAA) - Ministry of Economy, Trade and Industry
2007 and before	- Experimental studies on rare metal collection from seawater. - Research on offshore structures for oil and gas operations in deep sea. - Research on prediction methods of spilled oil behavior under sea ice condition.	- Engineering Advancement Association of Japan (ENAA)
	Consultation services on sea ice forces on Aniva Bay LNG jetty design.	- Chiyotec Limited - Sakhalin Energy



Consultation services on sea ice forces on Aniva Bay LNG jetty design. Prigorodnoye, Aniva Bay, 2003-2004.



Ship-based CO₂ Injection into Subseabed Geological Formations using a Flexible Riser Pipe Pickup System, 2012.



Field survey at fishery jetty in Yangon, Myanmar, 2012.