

RESUME Dr. Walter L. Kuehnlein

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Born 1959	<ul style="list-style-type: none"> Nationality: German Languages: German, English
Involvement	<ul style="list-style-type: none"> Past Chairman of ATC 2018, www.arctictechnologyconference.org Chairman of the Board of Directors of the German Association for Marine Technology (GMT), www.marine-technology.eu (since 2008) Chair of Polar and Arctic Sciences and Technology Symposium of OMAE-Conferences, www.omae.org since 2002) Advisor Offshore for international magazine Ship&Offshore, www.shipandoffshore.net (since 2009) Member of the German Offshore Committee of DNV-GL, www.dnvgl.com (since 2005) Lectureship: "Ice Engineering" at Hamburg University of Technology, www.tuhh.de (since 2013)
Offshore Certificates	<ul style="list-style-type: none"> BOSIET / CA-EBS MIST / Vantage H2S
2008 till present	<p>Managing Director</p> <p>sea2ice offshore and arctic solutions</p> <p>sea2ice Ltd. & Co. KG Am Kaiserkai 69, 20457 Hamburg, Germany - www.sea2ice.com</p>
2017	<ul style="list-style-type: none"> Consulting: Exploration concept for ice covered waters Workshop Facilitator: Ice engineering Marine Warranty Surveyor: Rig move Consulting: Offshore wind parks in part-time ice-covered waters Workshop Facilitator: Advanced offshore rig moving Workshop Facilitator: Design philosophies for Arctic approach Installation Manager for jacket installation
2016	<ul style="list-style-type: none"> Workshop Facilitator: Advanced offshore rig moving Chairman Arctic Technology Conference ATC 2016, in St. John's, Newfoundland, Canada Consulting: Offshore wind parks in part-time ice-covered waters Marine Warranty Surveyor: Rig move in North Sea Consulting: Structure in ice covered waters Workshop Facilitator: Advanced approach to the Arctic Workshop Facilitator: Design philosophies for Arctic approach Consulting: Arctic loading terminal Workshop Facilitator: Future (of) Arctic gas projects
2015	<ul style="list-style-type: none"> Workshop Facilitator: Advanced offshore rig moving Consulting: Arctic loading terminal Consulting: Design philosophy for Arctic approach Marine Warranty Surveyor: Rig move in North Sea Review of evacuation / rescue concept Chair of Ian Jordaan Honoring Symposium on Ice Engineering @ OMAE 2015 Review of Arctic operations concept Consulting: Mooring analysis for drilling rig Rig Move with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea Vice Chairman of ATC 2015 (Arctic Technology Conference)

	<ul style="list-style-type: none"> • Consulting: Rig Move Procedure, North Caspian Sea • Co-organizer of 3rd Business Offshore Conference in Hamburg • Consulting: General approach to arctic waters • Consulting: Offshore wind park in part-time ice covered waters • Consulting: Project approach for arctic regions
2014	<ul style="list-style-type: none"> • Chairman at 10th Arctic Oil&Gas Conference in Oslo • Consulting: Offshore wind project in part-time ice covered waters • Consulting: Arctic drilling rig • Installation Manager for jacket installation • Consulting: Arctic loading terminal • Consulting: Ice Management - philosophies and strategies • Workshop Facilitator: Concepts and philosophies for ice covered waters • Workshop Facilitator: Arctic operational concept for an arctic offshore installation • Consulting: Supervision of ice model tests • Consulting: Offshore installation concept • Member of ATC 2014 Committee (Arctic Technology Conference) • Consulting: Arctic offshore operation concept • Marine Warranty Surveyor: Rig move in North Sea
2007 - 2013	Associate Editor for Journal of Offshore Mechanics and Arctic Engineering, an ASME Journal (limited to 2 x 3 years)
2013	<ul style="list-style-type: none"> • Consulting: Supervision of ice model tests • Chairman at 9th Arctic Oil&Gas Conference in Oslo • Rig Move with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea • Installation Coordinator for relocation of an offshore gas production platform (North Sea) • Installation Manager for offshore wind (MOAB) transformer substation (North Sea) • Study: Exploration concept in arctic waters • Chair at 2nd Business Offshore Conference in Hamburg • Consulting: Ocean renewable energy converter
2012	<ul style="list-style-type: none"> • Installation Manager for offshore wind (MOAB) transformer substation • Member of ATC 2012 Committee (Arctic Technology Conference) • Technical Chair of OMAE2012 in Rio de Janeiro • Development of installation concept for offshore wind park • Consulting and design review of offshore wind park concept • Rig Move with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea • Consulting: Rig move procedure • Consulting: Drilling concept development for North Caspian
2005 - 2011	Lectureship: "Ocean Engineering" at the University of Duisburg-Essen, Institute of Ship Technology, Ocean Engineering and Transport Systems
2011	<ul style="list-style-type: none"> • Design review: Offshore wind park • Chair at 1st Business Offshore Conference in Hamburg • Chairman: 7th Arctic Oil & Gas Conference in Oslo • Marine Rep. for Jackup Rig Move, North Sea • Chairman of Ocean, Offshore and Arctic Engineering (OOAE) Division of ASME • Design review: Offshore wind installation vessel • Workshop: Design philosophies for offshore structures in ice, special tailor made, operational optimized concepts • Design review: Offshore concept for ice covered waters • ASME Short Courses: "Ice Engineering" • Rig Move with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea: responsible for de-grounding and grounding operation • Consulting: Rig move procedure • Consulting: Offshore project North Caspian Sea • Chairman: 2nd Arctic Oil & Gas North America conference in Houston, Texas

	<ul style="list-style-type: none"> • Consulting: Offshore wind energy converter in (part time) ice covered seas • Arctic Technology Conference, ATC 2011, in Houston, member of Technical Program Committee
2010	<ul style="list-style-type: none"> • Consulting: Conceptual study for an operational optimized offshore structure for ice covered waters • Company Courses: "Ice Engineering" • ASME Short Course: "Ice Engineering" (8h) • Rig Moves with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea: responsible for de-ballasting/de-grounding and ballasting/grounding operation • Consulting: Rig move procedures
2009	<ul style="list-style-type: none"> • Consulting: Offshore structures in ice – operational optimized concepts • Workshop: Design philosophies for offshore structures in ice, special tailor made concepts, operational optimized for each location –increasing safety and decreasing costs • Consulting: Offshore structures for the North Caspian Sea • Consulting: Mooring analysis and mooring layout of floating marina jetties • ASME Short Course: "Ice Engineering" (8h) • Rig Moves with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea: responsible for all de-ballasting/de-grounding and ballasting/grounding operations • Consulting: Rig move procedures • Consulting: Jack-up drilling rig for the North Caspian Sea
2008	<ul style="list-style-type: none"> • Special course: Design philosophies for offshore structures in ice –increasing safety and reduced costs • Consulting: Offshore structures in ice: • Consulting: Evaluation of ice conditions and consequences for offshore wind energy converters • Rig Moves with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea: responsible for de-ballasting/de-grounding and ballasting/grounding operation • Consulting: Rig move procedures
2006	Chairman of Ocean, Offshore and Arctic Engineering Conference (OMAE 2006) in Hamburg, Germany, www.OMAE2006.com
2001 - 2009	<p>Hamburg Ship Model Basin Director and Head of the Ice & Offshore Department</p> <ul style="list-style-type: none"> • Ice model tests • Leader of innumerable industrial projects (offshore structures, vessels and operations in ice and open waters) • Ice and sea trials • Ice barriers for shallow waters • Leader of the EU-research project STRICE (www.strice.org) • Offshore and Seakeeping Tests • Research Projects ROLL-S and SinSee: capsizing model tests with totally freely running models including optical registration of all degrees of freedom • Model tests under special sea conditions, like freak waves, etc. • Manoeuvring tests <p>Special projects Parker Drilling Company, North Caspian Project, all Rig Moves with Parker Rig 257 (<i>Sunkar</i>) in the North Caspian Sea</p> <ul style="list-style-type: none"> • Responsible for de-grounding and grounding operation during rig moves • Consulting: generation of rig move procedures
1997 - 2001	IMPaC Offshore Engineering GmbH, Hamburg Project Manager
2000	Parker Drilling Company, North Caspian Project <ul style="list-style-type: none"> • Stability analysis of Rig 257 • Statistic: environmental loads • Responsible for de-ballasting and ballasting operation during rig moves

	<ul style="list-style-type: none"> • Weight and ballast calculations • Generation of Rig Move Procedures • Modification of rescue systems <p>OKIOC, Drilling Operations in the North Caspian</p> <ul style="list-style-type: none"> • Alternative drilling concepts • Hybrid drilling concepts
1999	<p>OKIOC (Offshore Kazakhstan International Operating Company), Drilling Operations in the North Caspian</p> <ul style="list-style-type: none"> • Conceptual studies for drilling rigs to be used in the North Caspian • Ice force analysis for winter operations <p>Parker Drilling Company, North Caspian Project</p> <ul style="list-style-type: none"> • Verification and evaluation of original design philosophies • Adjustment of full-scale measurement system • Tow-out and Installation Procedures • Operation manuals • Floating stability, ballast- and weight-calculations • Dead weight survey • Motion analysis of Parker Rig 257
1998-1999	<p>Parker Drilling Company, Astrakhan, Russia, Rig Upgrade Manager, North Caspian Project</p> <p>Fully responsible for upgrade construction of Parker Rig 257 (<i>Sunkar</i>)</p>
1998	<p>Parker Drilling Company, New Iberia, USA</p> <p>Engineering Manager, North Caspian Project</p> <p>Responsible for engineering of the ice classed drilling barge rig: Parker Rig 257</p> <ul style="list-style-type: none"> • Design philosophy • Safety philosophy • Environmental protection philosophy • Detail engineering of drilling rig • Connecting procedure (connecting in floating mode) • Safety analyses • Reliability, availability and maintenance analyses (RAM) • Negotiations with client
1997	<p>OKIOC (Offshore Kazakhstan International Operating Company) Drilling Operations in the North Caspian</p> <ul style="list-style-type: none"> • Development of global drilling concept • Overall stability concept for drilling rig under special consideration of the environmental loads: waves, wind, current, and ice forces • Basic engineering of drilling barge • Development of full-scale measurement system for the determination of ice, wave, wind and current forces • Design of steel pads to be used as foundation for drilling rigs • Ice force studies for drilling rigs in the North Caspian
1986 - 1997	Berlin University of Technology
1995 - 1997	<p>Senior Research Engineer</p> <p>Project: Optimization of vertical wave absorbers</p> <ul style="list-style-type: none"> • Generation of extreme (nonlinear) transient wave packets (freak waves) • Seakeeping tests with (nonlinear) transient wave trains • Numerical modelling of vertical wave absorbers
1996	Special project: hydrodynamic investigations of submerged bodies
1995	Special project: hydrodynamic investigations of oil recovery vessels
1992 - 1995	<p>Senior Research Engineer</p> <p>Project: Optimization of seakeeping tests</p> <ul style="list-style-type: none"> • Generation of problem oriented transient wave packets • Seakeeping tests with self-propelled models (oblique waves) • Seakeeping tests with semi submersibles

1994	<ul style="list-style-type: none"> Hydrodynamic optimization of coupled systems Conception of sidewall wave absorbers for the wave tank of the University of New Orleans
1993	<ul style="list-style-type: none"> Analysis of ship wave systems (fast catamarans) Berlin and Trondheim, Norway, Supervisor of the Full Scale Tests in Norway Hydrodynamic investigations of oil recovery vessels
1992	Special project: inauguration of the wave maker system at the Technical University of Istanbul
1989 - 1991	Research Engineer Project: Wave damping of oil / chemical spill recovery vessels Patent: Wave attenuation systems
1986 - 1989	Research Project Project: Laser-Doppler-Anemometer (LDA) measurements in waves
Education:	
1997	Doctorate: Dr.-Ing. (Ph.D.) Institute of Naval Architecture, Marine and Ocean Engineering Faculty of Transport and Communications, and Applied Mechanics, Berlin University of Technology Thesis: "Seakeeping Tests with Transient Wave Packets" (Summa cum laude, Weinblum-Award, Werner-von-Siemens-Award)
1983 - 1989	Study: Civil and Hydraulic Engineer, Berlin University of Technology Master Thesis: "Hydrodynamic Optimization of a Circular Shaped Wave Breaker" (Dipl.-Ing. / Master)