

Jin S. (Soo) Chung

2014

jschung@isope.org



1982

2013

Elected First President (1999-2000) and Executive Director (1989–), ISOPE (The International Society of Offshore and Polar Engineers; IRS code 501 (c) (3); info@isope.org www.isope.org)

Technical Editor (1990–) International Journal of Offshore and Polar Engineering; editor@isope.org

Technical Editor (2014-). Journal of Ocean and Wind Energy

Education:

1969 PhD Engineering Mechanics - Fluid Mechanics University of Michigan, Ann Arbor

1964 M.S. Naval Architecture - Hydrodynamics University of California, Berkeley

1961 B.S. Naval Architecture & Aeronautical Eng. Seoul National University, Korea

PhD Thesis: Laser Doppler Anemometer Measurements of Turbulence in Non-Newtonian Pipe Flows, *The Physics of Fluids*, Vol 15, No 4, pp 546-554, 1972.

Professional Societies: Fellow ASME (1984-); Member: Tau Beta Pi, Sigma Xi, ISOPE, KSOE, JASNAOE and more

Special Training:

- Reservoir Engineering School, **Esso** (Exxon) Production Research Co., Houston, 1972.
- On-Board Supervisory Training of Floating Drilling Operations, **Esso** Production Research Co., 1972.
- Technical Writing School, **Esso** Production Research Co., 1971.
- Kepner Trigoe Problem Analysis Program, Lockheed Missiles & Space Co, 1977

Reports and Publications: Author and Editors of more than 270 books and papers.

Industries:

1980- **Expert consultant to the industry.** Initiated and promoted many professional activities in emerging ocean science and technology.

1980-2000 **Joined as full professor of engineering, Colorado School of Mines,** Golden, Colorado

1973-80 **Lockheed Missiles & Space Co., R&D Division –** Hydrodynamics Department, Sunnyvale, Calif. – staff engineer

- Engaged in special projects: developments of submarine, surface effect ship waterjet propulsion, space shuttle solid rocket booster recovery in the ocean, next-generation x-wing aircraft, wave statistics for the Atlantic, Pacific and Indian Oceans, riser design software, and oil spill recovery hardware of the Coast Guard.

1975-80 **The leader of the Advanced (Commercial) Deep-Ocean Mining Technology Development Team, Ocean Minerals Co., Lockheed Missiles & Space Co.** International consortium of Dutch Shell (Billiton), Amoco Oil, Bos Khalis, and Lockheed Consortium, Mountain View, California

- Engaged in special proprietary deep-ocean mining project..

- A 6,000-meter-commercial *integrated* deep ocean mining systems and technology of ship-pipe-buffer-link-seafloor miner — Developed the concept, modular design, component technology and integrated technology, and pioneered the integrated system control operation simulation, feasibility
- Supported the North Pacific Ocean test of full-scale integrated ocean mining system and subsystems with *Hughes Glomar Explorer* in 5,000-meter depth.

1969-73 **Esso (Exxon) Production Research Co.** – Offshore Division, Houston, TX

- Member of the industry’s first interdisciplinary offshore technology with floating drilling system and design software development — Simulate motion and loads, drilling weather downtime and created databank of the existing semisubmersibles and drill ships for the worldwide operations. Drafted evaluation criteria of worldwide model-test tanks for Esso tests.

1970-71 **Member, Exxon-USA Ocean Oil Spill Task Force**

- Developed ocean oil-spill containment concept, system and hardware (patent) for Santa Barbara Channel, later adopted for the Gulf of Mexico and Gulf of Alaska.

1964-66 **David Taylor Model Basin (DTMB)**, The Navy, Bethesda, Maryland

- Developed high-speed craft hull and wave resistance software

1961-62.1 **Korea Electric Power Corp. (KEPCO)**, Seoul, Korea

- first industry job as mechanical engineer at Seoul thermal power plant

Professional Activities & Honor:

2013- **Lead co-founder and technical editor** of *Journal of Ocean and Wind Energy*, ISOPE Transactions

2013-2015 **Honorary Chair Professor**, School of Ocean Science and Technology, Korea Maritime and Ocean University, Busan, Korea

2012- **Co-initiator, *Tsunami and Safety Symposium***

2008, 2009 **Lead initiator** of ISOPE *Renewable Energy & Environment Symposium, Sloshing Dynamics and Design Symposium and Arctic Science and Technology Symposium.*

2007 **Ultra Program** as the expert in ocean and Arctic invited by Korea Ministry of Science and Tech, Seoul and Jeju, 2007.

2002– ***Jin S Chung Award & Lecture***, named after Jin S Chung

1998 **Encarta Encyclopedia, CD-ROM: Authored *Seafloor Mining (Deep-Ocean Mining)***

1996– **Chairman, *Intl. Deep-Ocean Technology Symposium & Workshop***, National Science Foundation

1995– **Founder and Chairman, Ocean Mining Working Group and Ocean Mining Symposium**, Tsukuba, Japan

1992 ***Neptune Award***, the ISOPE’s highest award

1990– **Founder and Technical Editor, *Intl. Journal of Offshore and Polar Engineering***

1991– **Founding Chairman and Editor, *Annual Intl. Offshore and Polar Engineering Conference*** (Annually more than 1000 participants from some 50 countries)

1990 **Lead co-founder of first European Offshore Mechanics Symposium**, Trondheim, Norway

1990 **Lead co-founder of first Pacific-Asia Offshore Mechanics Symposium**, Seoul, Korea

1987 **Member, *EEZ Committee***, National Research Council, Academy of Science, Washington, DC

1987 **Chairman, *Intl Ice Mechanics Workshop***, National Science Foundation

1986-95 **Chairman, Offshore Mechanics and Arctic Engineering Council** (registered 1986 in the State of Colorado, nonprofit, tax-exempt, IRS 501(c) (3))

1985-89 **Founding Chairman, ASME Offshore Mechanics & Arctic Engineering Division**

1985 **Founded ASME *Journal of Offshore Mechanics & Arctic Engineering***

1984 **Member of Program Committee, Offshore Technology Conference, Houston, TX**

1983 **1983 Amoco Foundation Outstanding Teaching Award** at Colorado School of Mines

- 1981** Founder, chair and editor of **International Symposium** (renamed as Conference since 1988) on **Offshore Mechanics & Arctic Engineering**
- 1981** UNDP Program – IMO consultant in Hydrodynamics at Ship Research Institute, Korea.
- 1980** Introduced interdisciplinary “**Offshore Mechanics**” and “**Arctic Engineering.**”
- 1980-85** Technical Editor, ASME Transactions *Journal Energy Resources Tech.*
- 1978** *Eugene W. Jacobsen (Best Paper) Award of ASME Petroleum Division*; the first recipient
- 1967-69** Developed the first **Laser Doppler Anemometer for Turbulence Measurement in Non-Newtonian Fluids Flows**, PhD thesis at University of Michigan at Ann Arbor
- 1960-61** Designed and built with a classmate a hydrofoil boat, the first in Asia, while a college student.
- 1980-** Invited speakers at numerous international conferences, research institutes, universities and companies.

Invited and keynote speaker at:

Shanghai Society of Applied Mechanics (Shanghai, 2014); World Ocean Forum (Busan, Korea, 2007, 2010), Korea Maritime Univ (2010), China National Offshore Oil Corp (Beijing, 2009), China National Petroleum Corp (Beijing, 2008), China University of Petroleum at Beijing (2006); First European-Pacific Congress (Vladivostok, 2003), Ultra-Deep Engineering Tech (Brest, France, 2002), University of Stavanger (Norway, 2000), Technical University Berlin (Germany, 2001), Exxon Research & Engineering (New Jersey, 1999), Ministry of Ocean and Fisheries (1996), Korea Association of Deep-Ocean Resources (Seoul, 1994), Russian Academy of Sciences (Moscow, 1990), Tsinghua Univ (Beijing, 1989), Oil & Natural Gas Commission (ONGC) and Engineers India (New Delhi, 1989), Kuwait Univ (1989), University of California at Santa Barbara (1988), Ministry-MITI - Japanese Manganese Nodule Consortium and NKK (Tokyo, 1987), Osaka University (Japan, 1986), Korea Inst of Machinery and Metal (1985), China State Education Commission (Dalian Univ of Tech and Shanghai Jiao Tong Univ, China, 1982),

and many other institutes and international conferences:

- 1980-** **Consultants** to industries, research institutes, many government institutes including UNDP-IMO (Hydrodynamics), US DOE-NREL (Ocean energy and OTEC).
- 1980-** **Marquis Who’s Who in the World, in America, in the West** and more
Gates Foundation *Who’s Who Among Asian Americans (1995 premier issue –)*,
Oil & Gas Journal cover photo, Pennwell, December 1982
Offshore cover photo, Pennwell, December 1988 and more.
Honorary professor (2006-), China University of Petroleum at Beijing
- 1981-** Member of **external academic committees** for university tenure, promotion, doctoral thesis etc. at:
Massachusetts Institute of Technology, Woods Hole Oceanographic Inst, University of Wisconsin at Madison, University of Edinburgh, Memorial University of Newfoundland

And more