



Memorial Slides of Colleagues who passed away after IHTC-14

Warren Max Rohsenow, 1921-2011



- ▣ BSME, 1941, Northwestern University
- ▣ MS, D.Eng., 1943, 1944, Yale University
- ▣ MIT faculty member, starting 1946
- ▣ Director, MIT Heat Transfer Lab, 1956-1984
- ▣ Supervised 150+ graduate theses, including 40 PhDs
- ▣ Wrote 100+ journal papers, and several hundred conference papers, book chapters, and reports
- ▣ Developed significant models correlations for nucleate and forced convective boiling; major contributions to phase change heat transfer
- ▣ Co-author, *Heat, Mass, and Momentum Transfer*; Senior editor, *Handbook of Heat Transfer*, 1973, 1986, 1998.
- ▣ Chair, ASME Heat Transfer Division, 1961-1962
- ▣ Co-founder, Dynatech Corporation
- ▣ Accomplished jazz musician on piano, drums, xylophone

Awards

- ☆ Honorary Member of ASME (1988); ASME Medal (2001)
- ☆ US National Academy of Engineering (1975)
- ☆ AIChE and ASME Max Jakob Award (1970)
- ☆ ASME Heat Transfer Memorial Award (1967)
- ☆ American Academy of Arts and Sciences (1956)
- ☆ ASME Junior Award (1952)
- ☆ Pi Tau Sigma Gold Medal (1951)

Kaneyasu Nishikawa, 1921-2014



- ▣ Born, Fukuoka, 1921
- ▣ BE 1943, Dr. Eng. 1956, Kyushu Univ.
- ▣ Lieutenant, Japan Navy, 1943-1945
- ▣ Lecturer, Mech. Eng., Kyushu Univ. 1946
- ▣ Associate Professor, Mech. Eng., Kyushu Univ., 1947
- ▣ Professor, Mech. Eng., Kyushu Univ., 1962
- ▣ President, HTSJ, 1976
- ▣ Dean, School of Eng, Kyushu Univ., 1978-1980
- ▣ Member, Science Council of Japan, 1981
- ▣ President, Kurume College of Technology, 1984-1989
- ▣ Professor, Kurume Institute of Technology, 1989-1991
- ▣ Published more than 310 papers

Awards

☆ JSME Outstanding Paper, 1962, 1969 & 1973

☆ Nishi-Nippon Cultural Award, 1967

☆ Medal with Purple Ribbon, 1985

☆ JSME Thermal Engineering Division Award, 1988

☆ Government of Japan, The Order of the Rising Sun, Gold and Silver Star , 1991

Novak Zuber, 1922-2013



- ▣ BS Engineering, 1951, UCLA
- ▣ MS, PhD, 1954, 1959, UCLA
- ▣ Thompson Ramo Woolridge (1958-1960)
- ▣ General Electric, Schenectady (1960-1967)
- ▣ Professor, New York University (1967-1969)
- ▣ Professor, Georgia Institute of Technology (1969-1974)
- ▣ US Nuclear Regulatory Commission (1974-1991)
- ▣ Pioneering and lasting contributions to the engineering of two-phase flow and boiling heat transfer:
 - Boiling heat transfer and critical heat flux
 - Drift flux model and two fluid model
 - Density wave instabilities
 - Scaling methodology applied to the thermal-hydraulics of nuclear reactors
 - ...

Awards

- ☆ Lifetime Achievement Award, UCLA (2008)
- ☆ Classical Heat Transfer Award, ASME (2008)
- ☆ Medal of the French Nuclear Energy Society (2005)
- ☆ Life Member, ASME (2002)
- ☆ Fellow, American Nuclear Society (2002)
- ☆ Technical Achievements Award, ANS, THD (1990)
- ☆ Memorial Award, ASME, HTD (1961)

Naotsugu Isshiki, 1922-2013



- ▣ BE, 1945, Tokyo Imperial University
- ▣ Railway Technical Research Institute, 1948-1950
- ▣ Transportation Technical Research Institute, 1950-1963
- ▣ DE, 1960, The University of Tokyo
- ▣ Ship Research Institute, 1963-1968
- ▣ Professor, Tokyo Institute of Technology, 1966-1983
- ▣ Vice President, The Heat Transfer Society of Japan, 1970
- ▣ President, JSME, 1982
- ▣ Professor, Nihon University, 1984-1998
- ▣ Published more than 100 papers and 20 books, and 30 patents

Awards

- ☆The Society of Naval Architects of Japan Award (1956)
- ☆JSME best paper award (1961)
- ☆Ministry of Transportation Award (1961)
- ☆Tanigawa Thermal Engineering Award (1981)
- ☆JSME Heat Transfer Division Contribution Award (1990)

Yasuo Mori, 1923-2012



- ▣ BE, 1945, Tokyo Imperial University
- ▣ The Institute of Physical and Chemical Research, 1947-1953
- ▣ Associate Professor, Tokyo Institute of Technology, 1953
- ▣ DE, 1956, The University of Tokyo
- ▣ Professor, Tokyo Institute of Technology, 1961
- ▣ Editor, Int. Journal of Heat and Mass Transfer, 1973-1986
- ▣ President, The Heat Transfer Society of Japan, 1978
- ▣ Vice President, JSME, 1978
- ▣ Professor, the Univ. of Electro-Communications, 1983-1988
- ▣ Springer Dist. Professor, the Univ. of California, Berkeley, 1984.
- ▣ President of ICHMT, 1990-1994

Awards

- ☆ JSME best paper award four times (1963, 1973, 1980, 1984)
- ☆ The Award for Person of Distinguished Services to the Promotion of Science and Technology (Tokyo municipal office, 1982)
- ☆ The Award for Significant Contributions to the Development of Large-Scale Technology (MITI Japan, 1986)
- ☆ JSME Thermal Engineering Division Award (1989)
- ☆ The Order of the Rising Sun, Gold Rays with Neck Ribbon (1999)
- ☆ ASME The Heat Transfer Memorial Award (1982)
- ☆ ASME/AIChE Max Jakob Memorial Award (1988)
- ☆ ICHMT A.V. Luikov Medal in 1988
- ☆ Foreign Associate of the U.S. National Academy of Engineering in 1986

Tatsuhiro Ueda, 1924-2014



- ▣ Born, Okayama, 1924
- ▣ BS 1947, MS Eng. 1949, Dr. Eng. 1954, The University of Tokyo (UTokyo)
- ▣ Lecturer, Mech. Eng., UTokyo 1949
- ▣ Professor, Mech. Eng., UTokyo 1960
- ▣ Visiting Professor, UC Davis & MIT, 1966
- ▣ President, HTSJ, 1983
- ▣ Professor Mech. Eng., Kogakuin University, 1984
- ▣ Board, JSMF, 1987
- ▣ Published over 100 papers and 5 books.

Awards

- ☆ JSME Outstanding Paper, 1973
- ☆ JSME TED, Outstanding Contribution, 1993
- ☆ JSME PESD, Outstanding Contribution, 1994
- ☆ MHLW Outstanding Contribution, 1996
- ☆ Tokyo Metropolitan Science & Technology, 1983
- ☆ JSMF, Outstanding Achievements, 1995

Charles J. Hoogendoorn, 1930-2012



- ▣ M.Sc. in Applied Physics, Delft University of Technology, the Netherlands.
- ▣ Career at Royal Dutch Shell till 1970.
- ▣ Professor in Heat Transfer of Applied Physics, Delft University of Technology, the Netherlands, 1970-1995.
- ▣ Co-founder of Eurotherm
- ▣ President of Eurotherm, 1990-1993
- ▣ Chairmen of the executive committee of the ICHMT
- ▣ Founder of the J.M. Burgers Centre for Fluid Mechanics and its first president
- ▣ Received a Royal Dutch Extinction in 1994
- ▣ Guided 34 PhD students and more than 200 Master students.
- ▣ Main research interests:
 - Turbulent combustion
 - Natural convection
 - Thermal insulation materials

Tetsu Fujii, 1931-2011



- ▣ Born, Fukuoka, Japan 1931
- ▣ BE, ME -1956, Dr. Eng. 1960, Kyushu Univ.
- ▣ CRIEPI, 1956
- ▣ Associate Prof., RIIS, Kyushu Univ. , 1961
- ▣ Professor, RIIS, Kyushu Univ., 1967
- ▣ Dieter, RIIS, Kyushu Univ., 1985-1987
- ▣ Professor, IAMS, Kyushu Univ., 1987
- ▣ Deputy Director, IAMS, Kyushu Univ., 1987
- ▣ President, HTSJ, 1989
- ▣ President, JSTP, 1989
- ▣ Councilor, Kyushu Univ., 1987-1992
- ▣ Director, IAMS, 1991-1992
- ▣ Chair of Kyushu Branch, JSME, 1993
- ▣ Professor, Univ. of East Asia, 1994-2002
- ▣ Published more than 350 papers and 15 books
- ▣ Supervised 46 Dr. Eng. and graduated 110 ME & BE students

Awards

- ☆JSME Outstanding Paper, 1971 & 1973
- ☆JAR(JSRAE) Outstanding Paper, 1978
- ☆JSME TED, Outstanding Academic/Technical Contribution, 1993
- ☆JSME PESD, Outstanding Contribution, 2003
- ☆Government of Japan, The Order of the Sacred Treasure, 2011

Arthur E. Bergles, 1935-2014



- ▣ Born, NYC 1935
- ▣ SB, SM -1958, PhD 1962, MIT
- ▣ Married Priscilla, “Penny,” Maule 1960
- ▣ Ford Asst Prof, Mech Eng, MIT 1963
- ▣ Professor, Mech Eng, Ga Tech, 1969
- ▣ Chair, Mech Eng, Iowa State, 1972
- ▣ Professor, Mech Eng, RPI, 1986
- ▣ Dean, College of Eng, RPI, 1989-1992
- ▣ President, ASME, 1990-1991
- ▣ NAE member, 1992
- ▣ Published 400 papers, 26 books
- ▣ Graduated 82 PhD and MS students
- ▣ Survived by wife Penny, sons Eric and Dwight, and 5 grandchildren

AEB: “Two are better than one...”
Ecclesiastes, 4:9

José J. D. Domingos, 1935-2014



- ▣ B.Sc. in Mechanical Engineering, 1959, Instituto Superior Técnico, Tech. Univ. Lisbon, Portugal.
- ▣ Senior Research Fellow, Imperial College, 1978-80.
- ▣ Full Professor of Mechanical Engineering at Instituto Superior Técnico, Tech. Univ. Lisbon, from 1965 to 2005.
- ▣ Founder and first director of the Computing Centre of Tech. University Lisbon.
- ▣ Founder of Applied Thermodynamics Section at Mech. Eng. Dep., Instituto Superior Técnico, Tech. Univ. Lisbon.
- ▣ Founder and first General Secretary of Portuguese Research Centre for Applied Thermodynamics and Fluid Mechanics.

- ▣ Founder Member of the International Center of Heat and Mass Transfer.
- ▣ Member of the Scientific Committee of the International Center of Heat and Mass Transfer.
- ▣ Member of the Honorary Advisory Board of the Int. J. of Heat and Mass Transfer since 1968.

Ichiro Tanasawa, 1936-2014



- ▣ Born, Sendai, Japan 1936
- ▣ BS, MS -1960, PhD 1963, The University of Tokyo (UTokyo)
- ▣ Asst Prof, The Institute of Industrial Science (IIS), UTokyo, 1963
- ▣ Professor, IIS, UTokyo, 1976
- ▣ Professor, Mech Eng, Tokyo University of Agriculture and Technology, 1996
- ▣ Professor, Mech Eng, Nihon University, 1999
- ▣ President, HTSJ, 1993-1994
- ▣ President, JSTP, 1992-1993
- ▣ President, JSME, 2000-2001
- ▣ Thermal Engineering Committee, Science Council of Japan, 1980-1989
- ▣ Published over 100 papers, 17 books, 60 reviews

Awards

- ★ ASME/JSME Thermal Engineering Joint Conference, Outstanding International Contribution, 1987
- ★ JSME Outstanding Paper, 1989 & 2001
- ★ Distinguished Research Award, JSME Bioengineering Division, 1998.
- ★ JSME TED, Outstanding International Contribution, 1995

Detlev Gustav Kröger, 1939-2014



- ▣ Born, Cape Town
- ▣ BScEng, 1962, Stellenbosch University
- ▣ SM -1965, PhD 1967, MIT
- ▣ MIT Supervisor, Prof Warren Rohsenow
- ▣ Professor, Stellenbosch University, 1971
- ▣ Extraordinary Professor, University Pretoria, 2003
- ▣ Rated by the NRF as a world leader in his research field
- ▣ Two honorary doctorates (UJ and US)
- ▣ A friend of China for 10 000 years
- ▣ In his honour: 12th Int Association of Hydraulics Research Symposium, Sydney, 2001
- ▣ Published 200 papers, 2 books
- ▣ Graduated 75 PhD and MS students
- ▣ Survived by wife Regine, and children Anja, Alfred and Gregor and 5 grandchildren

Yoram Zvirin, 1942 – 2013

Mechanical Engineering, Technion- Israel Institute of Technology



Academic and public service

Head, Technion Transportation Research Institute

Head, Internal combustion engines lab

Director, Israel National Museum of Science

Chairman, Solar World Congress 1999

(Jerusalem)

Secretary, Assembly of IHTC 9, Jerusalem, Israel
1990

ICHMT Scientific Council

Interest areas and contributions

Combustion, fuel efficiency, alternative fuels, emissions

Transportation systems, autonomous vehicles, environmental impacts

Radiative heat transfer, conjugate heat transfer

Solar collectors, Natural convection in thermosyphons

Motoo Fujii, 1943-2013

- ▣ Born, Oita, Japan 1943
- ▣ BS, 1966, Dr. Eng. 1976, Kyushu Univ.
- ▣ Research Assistant , RIIS, Kyushu Univ., 1966
- ▣ Technical Officer, RIIS, Kyushu Univ. , 1967
- ▣ Assistant Prof., RIIS, Kyushu Univ., 1968
- ▣ Lecturer, RIIS, Kyushu Univ., 1975
- ▣ Associate Prof., RIIS, Kyushu Univ., 1980
- ▣ Associate Prof., IAMS, Kyushu Univ., 1987
- ▣ Professor, IAMS, Kyushu Univ., 1988
- ▣ Professor, IMChE, Kyushu Univ., 2003
- ▣ Leader, HYDROGENIUS, AIST, 2006-2008
- ▣ Invited Researcher, HYDROGENIUS, AIST, 2008-2012
- ▣ President, JSTP, 2005
- ▣ Published more than 250 papers and 5 books
- ▣ Supervised 15 Dr. Eng. and graduated 120 ME & BE students



Awards

- ☆JSME Outstanding Paper, 1971
- ☆HTSJ Outstanding Paper, 2007
- ☆JSTP Outstanding Contribution, 2010
- ☆Government of Japan, The Order of the Sacred Treasure, 2013
- ☆JSTP Outstanding Paper, 2001 & 2010

Yaman Yener, 1946-2013



- ▣ Born, Ankara, Turkey, 1946
- ▣ BS & MSc degree at Middle East Tech. U.
- ▣ PhD at North Carolina State Univ., 1976
- ▣ Visiting Prof. at Univ. of Delaware, 1980
- ▣ Assoc. Prof. at Northeastern Univ. 1982
- ▣ Chair, ME Dept. NU, 1989-1992
- ▣ Assoc. Dean, NU, 1992-2010
- ▣ Assoc. Dean of Fac. Affairs, NU, 2010
- ▣ Fellow of ASME
- ▣ Published extensively in journals
- ▣ Published 2 popular grad. level text books
- ▣ Graduated many PhD and MSc students
- ▣ Chaired the American Society for Engineering Education and Engineering Research Council
- ▣ Survived by wife Demet and daughter Zeynep

José M. M. Lopes, 1954-2013



- ▣ B.Sc. in Mechanical Engineering, 1977, Instituto Superior Técnico, Tech. Univ. Lisbon, Portugal.
- ▣ Ph.D. In Mechanical Engineering, 1984, University of Cambridge, U.K.
- ▣ Professor of Mechanical Engineering at Instituto Superior Técnico, Tech. Univ. Lisbon, from 1984.
- ▣ Arch T Colwell Merit Award (1986) awarded by the Society of Automotive Engineers.
- ▣ Main research interests:
 - Internal combustion engines
 - Forest fires

João L. T. Azevedo, 1963-2014



- ▣ B.Sc. in Mechanical Engineering, 1986, Instituto Superior Técnico, Tech. Univ. Lisbon, Portugal.
- ▣ Ph.D. In Mechanical Engineering, 1994, Instituto Superior Técnico, Tech. Univ. Lisbon, Portugal.
- ▣ Professor of Mechanical Engineering at Instituto Superior Técnico, Tech. Univ. Lisbon, from 1994.
- ▣ Main research interests:
 - Coal combustion
 - Numerical simulation of furnaces and boilers
 - Heat transfer in fuel cells