

Tvergaard served as president of the International Union of Theoretical and Applied Mechanics from 2012 to 2016, and is currently vice president.

Worcester Reed Warner Medal

MICHAEL P. PAIDOUSSIS



The Worcester Reed Warner Medal was established in 1930 and is awarded for outstanding contributions to the permanent literature of engineering. Contributions may be single papers, treatises or books, or a series of papers.

Michael P. Paidoussis, Eng., Ph.D., Thomas Workman emeritus professor at McGill University in Montreal, is honored for seminal contributions to the permanent literature of engineering research through highly praised books on fluid-structure interaction in axial and cross flows, and numerous breakthrough papers over the past 50 years.

Dr. Paidoussis joined the department of mechanical engineering at McGill in 1967, was promoted to professor in 1976 and served as chairman from 1977 to 1986. He is the founding editor of the *Journal of Fluids and Structures* and is on the editorial board of the *Journal of Sound and Vibration*.

George Westinghouse Medals

The George Westinghouse Medals were established to recognize eminent achievement or distinguished service in the power field of mechanical engineering to perpetuate the value of the rich contribution to power development made by George Westinghouse, honorary member and 29th president of the Society. The Gold Medal was established in 1952 and the Silver Medal in 1971.

ALAN WILLIAMS – GOLD



Alan Williams, CEng, Ph.D., research professor in the School of Chemical and Process Engineering at the University of Leeds,

U.K., is honored for novel research contributions to the fundamental understanding of the formation and reduction of pollutants in fossil fuel flames, which has resulted in cleaner burning with enhanced efficiency; and for providing enriched training and education to engineers, and outstanding service to industry and government.

Prior to his current position at Leeds, Dr. Williams was the Livesey professor in the department of fuel and energy from 1973 to 2000. His research into the fundamental aspects of combustion of gases, liquid and solid fuels has resulted in 650 journal and conference papers, and three co-authored books.

FREDERIC VILLENEUVE – SILVER



Frederic Villeneuve, Ph.D., a manager at Siemens in Orlando, Fla., is recognized for outstanding contributions to the development and application of advanced design methods for gas turbines.

With Siemens since 2007, Dr. Villeneuve is currently leading the development of a global team aimed at improving gas turbine efficiency and design cycle time via the development of system gas turbine design environments. He also serves as the liaison between the Georgia Institute of Technology in Atlanta and Siemens Power and Gas, where he strives to develop the power generation technologies and engineers of tomorrow.

Arthur L. Williston Medal

AUSTIN PATRICK KRAUS



The Arthur L. Williston Medal, established in 1954, recognizes the best paper submitted on a subject chosen to challenge the abilities of engineering students. The annual competition is open to any ASME student member or member who received a baccalaureate degree within two years of the submission deadline.

Austin Patrick Kraus, a graduate student at The University of Kansas, is recognized for the paper titled “Safe Growth of Autonomous Systems

Through International Regulation.”

Mr. Austin earned his bachelor's degree in mechanical engineering, honors program, from the University of Evansville in Indiana in May 2017. He is currently pursuing a master's degree in homeland security: law and policy, which is offered through the KU Edwards Campus in Overland Park.

Savio L-Y. Woo Translational Biomechanics Medal

ARTHUR ERDMAN



The Savio L-Y. Woo Translational Biomechanics Medal, established in 2015, recognizes an individual who has translated meritorious bioengineering science to clinical practice through research, education, professional development, and with service to the bioengineering community.

Arthur Erdman, P.E., Ph.D., the Richard C. Jordan professor and a Morse alumni distinguished teaching professor of mechanical engineering, and director of the Medical Devices Center at the University of Minnesota in Minneapolis, is recognized for four decades of leadership in medical device design, translating biomechanical engineering concepts to devices that improve the lives of patients in a wide range of medical fields; and for outstanding service to the bioengineering community through the training of students, through the initiation and chairing of meetings, and as a founding editor of the *Journal of Medical Devices*.

Dr. Erdman has published over 370 technical papers and three books; and shares nine Best Paper awards with his former students. He is co-inventor of more than 45 patents.

Henry R. Worthington Medal

YU-TAI LEE



The Henry R. Worthington Medal, established in 1980, is bestowed for eminent achievement in the field of pumping machinery.

Yu-Tai Lee, P.E., Ph.D., is honored for seminal contributions to the development of computational methods for the analysis and innovative design of U.S. Navy submarine propulsion pumps and shipboard turbomachinery; and for distinguished service to ASME including the mentoring of future naval engineers and conference newcomers.

Throughout his 42-year career, Dr. Lee has focused his research and development efforts on the flow analyses and designs of turbomachinery and pumping systems. He recently retired from the Naval Surface Warfare Center, Carderock Division in West Bethesda, Md., and is focusing on his ASME volunteer work, which includes serving as an associate editor for the *Journal of Mechanical Design*.

S.Y. Zamrik PVP Medal

MAHENDRA D. RANA



The Pressure Vessel and Piping Medal was established in 1980. Renamed the S.Y. Zamrik PVP Medal in 2010, it is bestowed for outstanding contributions in the field of pressure vessel and piping technology including, but not limited to, research, development, teaching, and significant advancements of the state of the art.

Mahendra D. Rana, P.E., emeritus Praxair engineering fellow, is honored for significant contributions to the state of the art of cryogenic storage vessels and fracture control for pressure vessels; and for substantial service to ASME's Pressure Vessels and Piping Division as session developer, technical program representative, and vice chair and chair of the Codes and Standards Technical Committee.

Mr. Rana retired from Praxair, Inc. in Tonawanda, N.Y., after 42 years of service in the research and development, and engineering departments. He is involved in the areas of fracture mechanics, pressure vessel design and development, and materials testing as well as the structural integrity assessment and fracture control programs of pressure vessels. Mr. Rana has his own consulting business.