

International Pump Users Advisory Committee



Dara W. Childs has been Director of the Turbomachinery Laboratory since 1984 and holds the Leland T. Jordan Chair in Mechanical Engineering at Texas A&M University. He received B.S. and M.S. degrees (Civil Engineering, 1961, 1962) from Oklahoma State University, and his Ph.D. (Engineering Mechanics, 1968) from the University of Texas. He was named ASME Fellow Member in 1990, and received ASME's Henry R. Worthington Medal in 1991.

Dr. Childs' expertise is in dynamics and vibrations, with an emphasis in rotordynamics. He has conducted research and engineering projects for NASA, DOD, and private firms. Current research includes: high-pressure testing honeycomb and hole-pattern gas damper seals; testing high-pressure laminar oil seals; force measurements in magnetic bearings using fiber-optic strain gauges.

Dr. Childs has authored numerous reviewed publications related to rotordynamics and vibrations, and the book, *Turbomachinery Rotordynamics*. He is presently completing a new dynamics book entitled, *Dynamics in Engineering Practice*.



J.M. (Jim) Blanding is a Senior Consultant in the Rotating Machinery Group in the DuPont Company, in Houston, Texas. His consulting primarily involves plunger and hydraulic-diaphragm pumps and reciprocating compressors. In these and related process systems, Dr. Blanding specializes in diagnostic measurements, online remote condition monitoring, and performance analysis. To complement this experimental work, he also performs detailed computational modeling of pump and compressor performance, rapid transients in process gas and control systems, and pressure pulsation.

Dr. Blanding received B.S. and M.S. degrees (Mechanical Engineering) from Virginia Tech before joining Union Carbide in 1976 as a Consultant in acoustics. He returned to Virginia Tech in 1978 for a Ph.D., serving three years as Instructor on the Faculty of Mechanical Engineering teaching Mechanical Vibrations and other undergraduate courses. Dr. Blanding joined DuPont in 1981.



William A. (Alan) Evans is Manager of Engineering for the Mechanical Seal Division of A.W. Chesterton Company, in Groveland, Massachusetts. During his eight years with the company, he has held several positions. He has spent 20 years in the field of rotating equipment, focusing primarily on pumps and turbomachinery. He gained broad experience as an end-user of rotating equipment during his 14 years as maintenance/reliability engineer in process industries. Mr. Evans' technological background and experience cover a wide range of topics, including tribology, machine design, predictive maintenance, and reliability engineering. He has conducted lectures, seminars, and presentations on improving reliability as it relates to pumps/seals and pumping systems. He has published articles for STLE, of which he is a member.

Mr. Evans received his MBA from Northeastern University and his BSME from Rochester Institute of Technology. He also has an Associates degree in Applied Science from Pennsylvania State University.



Gary E. Glidden is a Specialist at Reliant Energy Generation, in Houston, Texas. He has been with REI for more than 30 years. Before his current position, he was Crew Leader in the Maintenance Division for more than 17 years. Twelve of those years were spent in Field Maintenance with responsibilities of performance monitoring, vibration analysis, troubleshooting, field inspections, and repair of all types of rotating equipment. The last five years as Crew Leader, Mr. Glidden was in charge of rotating equipment repairs in the Central Repair Shop.

Mr. Glidden has written several articles for *Pumps & Systems* magazine and for the past six years served on their User Advisory Team. He is a member of the International Pump Users Advisory Committee and is a certified Mechanical Inspector with the American Society for Quality.



Herman A.J. Greutink, formerly Vice President and Technical Director, is now Consultant to Johnston Pump Company, in Brookshire, Texas. Mr. Greutink has demonstrated his engineering expertise on large vertical pump projects worldwide, and he is internationally acknowledged as one of the pump industry's long standing experts on vertical pump design, testing, and application. He frequently conducts pump seminars for the engineering personnel of customers and for consulting and construction firms throughout the world.

He was educated at the Mechanical Engineering College in Enschede, The Netherlands. From 1951-58, Mr. Greutink was Project Engineer for Aramco, Oil Handling Facilities, Dhahran, Saudi Arabia. Since 1958, he has been in engineering management at Johnston Pump Company. He is a member of the Hydraulic Institute and ASME.



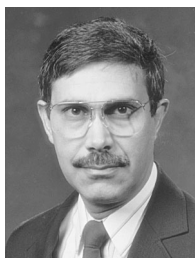
Kerry F. Gunn is currently a Rotating Equipment Technologist at Sterling Chemicals, Inc., in Texas City, Texas. He is involved in technical support for machinery repair; troubleshooting of rotating equipment; and design, selection, and installation of new machinery. Prior to his current position, Mr. Gunn worked for five years at Quantum Chemicals Houston Plant as an Area Maintenance Engineer and Project Engineer. Previously, Mr. Gunn was a Senior Research Engineer at Exxon Research and Engineering for nine years. He participated in design, construction, and operation of synthetic fuels pilot plants.

Mr. Gunn received a B.S. degree (Mechanical Engineering, 1975) from Oklahoma University and an M.S. degree (Mechanical Engineering, 1977) from Purdue University. He is a member of the Vibration Institute and ASME.



Michael Huebner is a Staff Engineer at Flowserve Corporation, Flow Solutions Division, in Deer Park, Texas. He has more than 20 years experience in the design of mechanical seals, centrifugal and positive displacement pumps, and fluid conditioning equipment. For Flowserve, he has served in design, testing, and application functions in both the U.S. and Europe.

Mr. Huebner is a member of the International Pump Users Symposium Advisory Committee and the API 682 Task Force. He received his B.S. degree (Engineering Technology) from Texas A&M University.



John P. Joseph II is an independent consultant with Rotating Equipment Systems Technical Associates, in Houston, Texas. He was previously with BP Amoco where he provided technical and maintenance support for rotating equipment systems to existing asset organizations in BP Amoco, and to Project Management on new projects. Prior to that, Mr. Joseph was with the Amoco Petroleum Products Refinery, in Texas City, Texas. He supervised the rotating equipment engineers and the rotating equipment specialists for the refinery. Mr. Joseph spent six and one half years as Superintendent of Central Shops and three years in Amoco's Refining and Transportation Engineering Department, in Chicago, Illinois. Previous assignments at the Amoco Texas City refinery also included the Rotating Equipment Consulting Group, the Project Engineering Group, and as a Maintenance Engineer on the Hydrocracking Unit.

Mr. Joseph received his B.S. degree (Mechanical Engineering, 1972) from the University of Texas at El Paso.



Gary A. Krafft is a Technical Representative with HydroTex Dynamics, Inc. and BFI Pump Company, in Houston, Texas. He began this role in January 1998. His current responsibilities include utility and industrial accounts for pump repairs/improvements, along with engineering support for systems. Previously, Mr. Krafft was an Engineering Specialist at TU Electric. He worked in power plant maintenance functions for 22 years and was heavily involved with the troubleshooting and problem resolution of large rotating equipment. This type of equipment not only included pumps, but also steam turbines, generators, fans, and electric motors.

Mr. Krafft received his B.S. degree (Mechanical Engineering) from Texas A&M University. He was the originator of TU Electric's Equipment Repair Group (1982), which was formed to improve reliability. He has worked with fossil and nuclear plants, and the gas pipeline and mining divisions. Mr. Krafft is a registered Professional Engineer in the State of Texas.



Alan O. Lebeck started Mechanical Seal Technology, Inc. (MSTI) in 1987, in Albuquerque, New Mexico. MSTI performs research and product development, designs software, and consults, all in relation to mechanical seals.

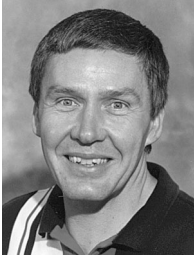
Dr. Lebeck served on the faculty of the University of Illinois, then worked for Shell Development. From 1971 to 1987, he served as Professor and Director of the Mechanical Engineering Department at the University of New Mexico, and as Director of the Bureau of Engineering Research. During this time, he started a mechanical seal research program under the sponsorship of the National Science Foundation and the U.S. Navy. This work served as the basis for numerous papers, reports, and inventions. A seal test program was started in 1978 and has continued. His book, *Principles and Design of Mechanical Face Seals*, was published by John Wiley (1991).

Dr. Lebeck received his B.S. (1964), M.S. (1965), and Ph.D. (1968) degrees (Mechanical Engineering) from the University of Illinois.



Julien LeBleu, Jr., is the Principal Engineer for Rotating Equipment for Lyondell Chemical, in Lake Charles, Louisiana. He is responsible for all rotating equipment in the Lake Charles facility and has more than 25 years of experience in the field of rotating equipment. He has worked for General Electric Company as a technical director for the installation and maintenance of large steam turbine and generator sets. Mr. LeBleu is a licensed aircraft mechanic and has worked on both reciprocating and jet aircraft engines. He is a member of the International Pump Users Advisory Committee, has authored several articles, and has lectured at Pump Symposia.

Mr. LeBleu received his B.S. degree from the University of Florida (1974).



William R. (Bill) Litton is an Initiative Manager (pumps) Williams Company, in Tulsa, Oklahoma. He has more than 20 years of experience in the petroleum industry. He has ability and experience in mechanical equipment, prime mover economics, power optimization, and pipeline system capacities. Mr. Litton also has project engineering ability and experience in handling pipeline expansions, pipeline pump stations, refineries, fractionators, gas and processing facilities, crude oil, refined products, NH₃, and propane terminals (brine cavern and excavated caverns). He also has experience in maintaining mechanical equipment company-wide to provide reliable and economical service. This includes rerating of pumps and pump modifications to reduce resonant and nonresonant vibration levels.

Mr. Litton has a B.S. degree (Mechanical Engineering, 1979) from Kansas State University and a B.S. degree (Mathematics, 1978) from Emporia State University. He is a registered Professional Engineer in the State of Oklahoma and participated in the API 610 Task Force.



William J. (Bill) Mabe is the Director of Technology Development and Quality Assurance for Sundyne Corporation, in Arvada, Colorado. He is primarily responsible for coordinating technology and product development for Sundyne's business units. Mr. Mabe joined Sundyne in 1974 as a Senior Engineer involved in high speed centrifugal pump design. Previous turbomachinery experience includes six years at Rocketdyne, Liquid Rocket Division of Rockwell International, where he was a member of the technical staff responsible for the analysis and design of the space shuttle turbo pumps. He has several patents related to pumping equipment.

Mr. Mabe holds a B.S. degree (Mechanical Engineering) from the University of Missouri at Rolla and a Masters of Business Administration and Technology Management from the University of Phoenix. He also serves on the corporate advisory board for the Colorado School of Mines.



Vernon L. (Vern) Maddox is Senior Engineering Advisor with Equistar Chemicals LP, Channelview, Texas. In this capacity, he serves as a consultant to all Equistar facilities on machinery engineering, condition monitoring, and vibration analysis for new and existing equipment. Mr. Maddox also provides services to new projects in the area of equipment selection, specifications, and installation and startup of rotating and reciprocation equipment. He has more than 35 years of experience in machinery engineering, troubleshooting, and condition monitoring. Prior to his current assignment, he was in charge of reliability engineering and condition monitoring operations at the Equistar facilities at Clinton, Iowa, and LaPorte, Texas.

Mr. Maddox has a B.S. degree (Mechanical Engineering) from the University of Texas, Austin. He is a member and former Director of the Vibration Institute and is a registered Professional Engineer in the State of Texas.



Thomas H. (Tom) McCloskey is with APTECH Engineering Services, in Sunnyvale, California. He was previously the Manager for Turbomachinery, Generation Division, for the Electric Power Research Institute (EPRI). Mr. McCloskey's responsibilities included the planning, management, and technology transfer of research and development projects relating to the thermal performance, availability, and life assessment of steam turbines, pumps, and related auxiliaries.

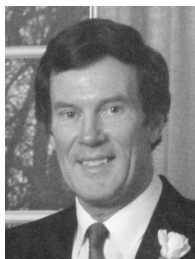
Mr. McCloskey has more than 30 years of experience in the design, operation, maintenance, and troubleshooting of steam turbines, pumps, and related auxiliaries and holds seven patents in mechanical engineering. He was the recipient of the ASME/EEI Prime Movers Award for best technical paper in 1984 and 1997, and the ASME George Westinghouse Gold Medal in 1995. He is an author of more than 70 technical papers on power plant equipment and in particular steam turbine generator and pump availability, life assessment, and thermal performance improvements.



Gerald L. (Jerry) Morrison is the Nelson-Jackson Professor of Mechanical Engineering at Texas A&M University. He received his Ph.D. degree from Oklahoma State University (1977). He is a member of various societies including: ASEE, Associate Fellow in AIAA, Fellow in ASME, Pi Tau Sigma, and Tau Beta Pi.

Dr. Morrison's research interests are in turbulent fluid flow and instrumentation. His research in coherent structures in turbulent flows has enabled him to develop expertise in hot wire anemometry, laser Doppler anemometry, acoustic measurements, and spectral analysis, and in other conditional sampling techniques.

Dr. Morrison manages a program to study labyrinth seals. This includes empirical and analytical schemes to predict leakage rates with experimental verification of the two schemes, and the use of a 3-D laser Doppler anemometer to measure the flowfield inside an actual seal. He is also active in the research area of flow fields inside centrifugal pumps and turbochargers.



Thomas R. (Tom) Morton is Vice President for Engineering for Sulzer Pumps (U.S.) Inc., in Portland, Oregon. His current responsibilities include direction of Design, Order Related Engineering, Field Engineering, Hydraulics Department, and CAD. He has been with Sulzer Bingham (formerly Bingham Willamette Company) since 1969, serving in managerial/leadership positions.

Mr. Morton was born, raised, and educated in Scotland at Stow College, Glasgow. Before leaving Scotland, he was employed at G&J Weir Pump Company, Glasgow.

Mr. Morton is a member of ASME and the International Pump Users Symposium Advisory Committee.



Lev Nelik is President of Liquiflo Equipment Company, in Garwood, New Jersey. He has over 20 years of engineering, manufacturing, sales, field, and management experience in the pump industry. Previously, he worked at Roper Pump, IDP (Ingersoll-Rand), and ITT (Goulds Pumps).

Dr. Nelik is a registered Professional Engineer and has published over 50 documents, including a "Pumps" section for the *Encyclopedia of Chemical Technology*, a section for the *Handbook of Fluids Dynamics*, and a book *Centrifugal and Rotary Pumps: Fundamentals with Applications*.

Dr. Nelik is a member of the International Pump Users Symposium Advisory Committee, an Advisory Board Member of *Pumps & Systems* and *Pumping Technology* magazines, and a former Associate Technical Editor of the *Journal of Fluids Engineering*. He is a full member of ASME, and a Certified APICS (CIRM). He is a graduate of Lehigh University with an M.S. degree (Manufacturing Systems) and a Ph.D. degree (Mechanical Engineering).



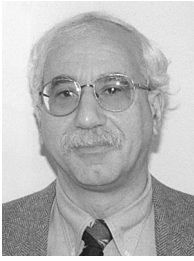
Vinod P. Patel is a Senior Principal Machinery Engineer, Machinery Technology, for Kellogg-Brown & Root (KBR), in Houston, Texas. He has been with KBR for 27 years. In his current assignment, he is responsible in the preparation and auditing of specifications, equipment evaluation, engineering coordination, and testing and installation startup of rotating and special equipment. He has worked in the various application of rotating machinery in the petrochemical and refinery processes including ammonia, LNG, olefins, cat-cracking, and hydrotreating for domestic and international projects.

Mr. Patel received B.S. and M.S. degrees (Mechanical and Metallurgical Engineering) from Maharaja Sayajirao University of Baroda, India, and Youngstown University, respectively. He is a registered Professional Engineer in the State of Texas.



David Redpath is a Senior Rotating Machinery Engineer for BP Amoco Oil, Refining Technology Group, at Sunbury on Thames, Middlesex, England. He provides technical and reliability improvement support for BP Amoco refineries worldwide. Mr. Redpath has 32 years' experience in the specification, selection, testing, operation, and troubleshooting of rotating equipment in refining and oil production. He has worked for BP Oil for 22 years. Prior to that, he worked in refining and petrochemical contracting.

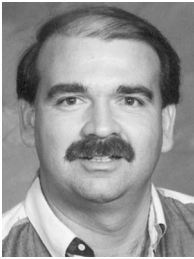
Mr. Redpath graduated from the University of Liverpool with an Honors degree (Mechanical Engineering, 1967). He is a Chartered Engineer and a member of the Institution of Mechanical Engineers, where he has served as a member of the Fluid Machinery Committee. He is also a member of the International Pump Users Symposium Advisory Committee.



Eugene P. (Gene) Sabini is the Director of Technology for ITT Industries, Fluid Sealing Technology Group, in Seneca Falls, New York. He is responsible for applied research and hydraulic design of all new products and field rerates. Other responsibilities include testing, FEA, CFD, rotordynamics, rapid prototyping, and condition monitoring. Mr. Sabini was previously Manager of Energy Engineering Design with Goulds. He was responsible for both the product engineering and the mechanical/hydraulic design and testing of the energy related double suction and multistage API pumps.

Mr. Sabini has 32 years of experience in the pumping industry including design and development of many centrifugal pumps for the chemical, API, power utilities, and municipal industries. He spent 25 years with Worthington Pump designing, engineering, and testing custom centrifugal pumps from both a mechanical and hydraulic standpoint.

Mr. Sabini received a BSME (1968) and M.S. (1975) degree from Stevens Institute of Technology.



Kenneth J. (Ken) Savoie is a Senior Staff Engineer with Equilon Enterprises LLC. He is currently assigned as a Rotating Machinery Specialist at the Shell Deer Park Refinery, in Deer Park, Texas. He began his career with Shell Oil Company and spent five years working as a Project and Maintenance Engineer in various areas of the refining and chemical facilities until moving into the Rotating Equipment group in 1985. Since then, Mr. Savoie has worked as a Machinery Engineer throughout the 290K B/D Refinery. In this capacity, he was responsible for providing technical support for rotating and reciprocating machinery systems. This included implementation of strategies and programs to improve the reliability of pump and compressor systems. He also specializes in solving multidiscipline engineering and maintenance problems in refineries.

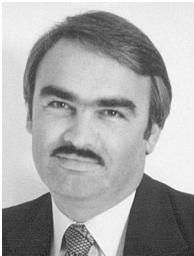
Mr. Savoie has a B.S. degree (Civil Engineering, 1980) from the University of Southwestern Louisiana. He is a member of ASME.



Bruno Schiavello has been Director for Fluid Dynamics at Flowserve Pump Division, Technology Department, in Phillipsburg, New Jersey, since 2000, and previously served in the same position with Ingersoll Dresser Pump Company. He started in the R&D Department of Worthington Nord (Italy), joined Central R&D of Worthington, McGraw Edison Company, and then Dresser Pump Division.

Mr. Schiavello was co-winner of the H. Worthington European Technical Award in 1979. He has written several papers and lectured at seminars in the area of pump recirculation, cavitation, and two-phase flow. He is a member of ASME, AIAA, Societe Hydrotechnique de France, and the International Association for Hydraulic Research. He has served on the International Pump Users Symposium Advisory Committee since 1983.

Mr. Schiavello received a B.S. degree (Mechanical Engineering, 1974) from the University of Rome, and an M.S. degree (Fluid Dynamics, 1975) from Von Karman Institute for Fluid Dynamics, Rhode St. Genese, Belgium.



John W. Silcott is Maintenance Engineering Section Leader for Celanese Chemical Group at its Clear Lake plant near Houston, Texas. His responsibilities are in the area of maintenance engineering/reliability for rotating equipment and fabricated equipment. These responsibilities include improving maintenance technology, project review and support, materials technology, predictive/preventive maintenance, and mechanical integrity.

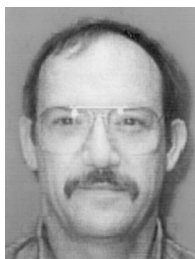
Mr. Silcott received a B.S. degree (Mechanical Engineering, 1970) from New Mexico State University. He is a member of: ASME, the Board of Directors of the International Maintenance Institute in Houston, an Advisory Committee at Texas State Technical College for the Industrial Maintenance Mechanic Program, the Inspection and Maintenance Task Group with the Chemical Manufacturers Association, and of Texas A&M University's International Pump Users Advisory Committee.



Joseph A. (Joe) Silvaggio, Jr. is Manager, Pump Projects and Engineering at Demag Delaval Turbomachinery Corporation, Trenton, New Jersey, and has been with them since 1968. His past experience at Demag Delaval includes the areas of aerodynamics, flow analysis, seal development, design of centrifugal compressor stage elements, centrifugal pump design and flow analysis, boiler feedpump design and analysis, and testing of steam turbines.

Mr. Silvaggio is a member of Sigma Tau and Pi Tau Sigma. He is also an active member of ASME and has held several offices in the Trenton, New Jersey, section. At present, he is on two ASME Performance Test Code Committees and is a member of the Board on Performance Test Codes.

Mr. Silvaggio holds both B.S. and M.S. degrees (Mechanical Engineering) from the University of Pennsylvania. He has written and coauthored numerous technical publications, and is a member of the International Pump Users Symposium Advisory Committee.



Dewey W. Stump is employed with Duke Power Company, in Charlotte, North Carolina, as a Senior Production Specialist. He is presently assigned to the McGuire Nuclear Station in the Maintenance Execution Support group.

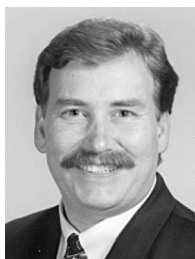
His present duties include technical oversight, parts specification, and repair for rotating equipment maintenance activities. He is responsible for reactor coolant pumps and motors, multistage pumps, compressors, and general pump and motor maintenance. He is responsible for root-cause analysis, mechanical seal specifications, and failure analysis. His previous duties include eight years in Maintenance Engineering Services Group and five years as Maintenance Crew Supervisor.

Prior to joining Duke Power Company, Mr. Stump worked as an assistant to the plant Maintenance Manager at a large brewing company. He developed and set up the preventive maintenance program and initiated the company's lubrication and spare parts program. He is a member of the Pumps and Systems Magazine User Advisory Team.



Joseph M. Thorp is an Engineering Specialist within the Technical Services Department of Aramco Services Company (ASC), in Houston, Texas. He has provided technical support for Saudi Arabian Oil Company (Saudi Aramco) projects in Europe and North America, along with supporting field activities during interim assignments in Saudi Arabia as part of the Consulting Services Department. Mr. Thorp is Saudi Aramco's designated representative to the American Petroleum Institute Subcommittee on Mechanical Equipment that includes Vice Chairmanship of API 610 (Centrifugal Pump) and Chairmanship of API 682 (Seals). He is the API mechanical equipment representative to the International Standards Coordinating Committee who interfaces with ISO, headquartered in Europe.

Prior to joining ASC, Mr. Thorp worked with Phillips Petroleum Company. He holds a B.S. (Mechanical Engineering) from Michigan State University and an MBA from the University of St. Thomas. Mr. Thorp is a registered Professional Engineer in the State of Texas.



Roger S. Turley is the Director of Engineering at Flowserve Corporation, Rotating Equipment Division, in Dayton, Ohio. He has 14 years experience in the pump industry.

Mr. Turley received B.S. and M.S. degrees from Brigham Young University. He has received patents for innovations in pump design and has published several articles in leading industry publications.



Bruce Weber is the Operations Manager for Best Equipment, in Houston, Texas. As Operations Manager, his duties include supervision of the pump repair facility, consulting with clients concerning pumping systems, and pump troubleshooting. Other areas include failure analysis, pump modifications, bearings, high pressure mechanical seals, and lubrication systems. Prior to joining Best Equipment, Mr. Weber was associated with Koch Hydrocarbon, in Medford, Oklahoma, for 18 years. His responsibility as Maintenance Supervisor included 10,000 miles of pipelines that employed 2300 pumps. He also served as a consultant for Koch's four light hydrocarbon processing plants.

Mr. Weber is currently enrolled at the University of Oklahoma, working toward a B.S. degree.

Corresponding Members

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