

Adkins, William

Guo, Yuebin

Bunce, Richard (Bio N/A)

Jones, Gerald

Crawford, Lee

Kaw, Autar

Durbetaki, Lee

Liu, Zhanke

Eldridge, Bryan

Long, William

Feng, Ming

Mann, Richa

Goel, Ram A.

Mantena, P. Raju

Gray, Brian C.

Mulvihill, John

**Adkins, William P. (Jr.) PE**



William Adkins retired as Sr. Project Staff Engineer from Honeywell Space/Avionics. After receiving his BSME from Auburn University, Mr. Adkins served briefly in the USAF as a Ground Electronics Officer. He was then employed by the Honeywell Space/Avionics as a Evaluation and Test Engineer. He transferred to the Hardware Design and Development department where he was responsible for the design and Electronic Packaging of Airborne and Space "Inertial Guidance and Control Systems".

Mr. Adkins was responsible for the mechanical design and test of airborne electronic equipment that employed the use of Electrically Suspended Gyros (ESG) and Laser Gyros applied in both "Gimballed" and "Strapped-down" systems. These systems use delicate inertial instruments that require complex thermal and dynamic environment management to meet various military and space application environments that will ensure a required service life of greater than twenty years. These inertial guidance systems were used in NASA Space programs and in High Performance USAF Aircraft/Missiles.

Mr. William Adkins was awarded a patent for an enhanced dynamic isolation system used to protect the delicate inertial instruments for severe vibration and dynamic shock environments. He has served in various positions on ASME committees and boards at the local, regional and national levels. Mr. Adkins is a Life Member of ASME and his continued service has been recognized with the "Dedicated Service" award and the Regional "Meritorious Service" award.

## **Crawford, Lee E. P.E.**

---



Lee Crawford is a registered Professional Engineer with 35 years engineering and maintenance experience with INTERNATIONAL PAPER COMPANY, in all areas of this major Pulp & Paper Company at Prattville, AL. Since 1993, he has been a Manager with this integrated Pulp and Paper Mill. Currently Lee is a Maintenance Manager managing up to 200 personnel in the Mill Maintenance Department including 160 plus Multi-craft maintenance mechanics and five (5) maintenance supervisors.

Mr. Lee Crawford has various responsibilities that include Project Management, maintenance Area Management of Paper Machines and Reliability. Previously Lee Crawford held the positions of Maintenance Engineer and Senior Project Engineer with this Paper Company since 1979 to 1993.

From 1974 to 1979 Lee was with AMAX Nickel Corporation, Braithwaite, LA as a Project Engineer and Maintenance Supervisor and as a Maintenance and Construction Engineer with Gulf Oil Corporation.

Mr. Lee Crawford's education includes BS, Mechanical Engineering from Memphis TN. and MBA in Business Management from Auburn University, Montgomery, Al. Lee is a Registered Professional Engineer in the State of Alabama since 1982.

Professional Affiliations of Lee include Member of ASME International in which he served as Regional Vice President, District Leader and several positions on ASME Boards and Committees at the local, regional and national levels. Lee Crawford received the ASME Society Level "Dedicated Service" award.

## Durbetaki, Pandeli, PhD



Dr. Pandeli Durbetaki is a Professor Emeritus of The George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, Georgia.

Pandeli "Lee" Durbetaki received a B.S.M.E. from Robert College Engineering School, Istanbul, Turkey in 1951, and his M.S. (ME) from the University of Rochester in 1954 and his Ph.D. (ME) from Michigan State University in 1964. He served on the faculty of the University of Rochester (1954-1960) and Michigan State University (1960-1964) before joining the faculty at Georgia Institute of Technology.

Professor Durbetaki has conducted research in stratified charge operation of spark ignition engines, irreversible thermodynamics, and homogeneous and heterogeneous ignition of fuels. He has consulted on problems related to the flammability of carpets, injury from tar explosion, fire hazard criteria for noise control products in underground coal mines, manufacture of roofing material and design and testing of traction type transmission. He has directed several projects funded by grants from the National Science Foundation, the National Bureau of Standards, the Department of Energy, Georgia Institute of Technology and the Georgia Tech Foundation. Professor Durbetaki was awarded National Science Foundation Science Faculty Fellowships and received the Monie A. Ferst Memorial Sigma Xi Research Award as Graduate Student Thesis Advisor. Dr. Durbetaki was one of the **Top Ten Profs** (1981) and received recognition **For Outstanding Service** (1984) by the student section of ASME at Georgia Tech. He was named **Engineer of the Year in Education** (1985) by the Atlanta Section of ASME. Professor Durbetaki was also awarded the **ASEE / AT&T Foundation Award** (1987) for excellence in instruction of engineering students and the **SAE Ralph R. Teetor Educational Award** (1987). He was named **Engineer of the Year in Education** (1991) by Metro Atlanta Engineers' Week. He was elected **Fellow of ASME** in 1987 and presently is **Life Fellow of ASME**.

As research and faculty advisor Dr. Durbetaki directed the research of fifty four M.S. and Ph.D. students. He has authored and coauthored more than one-hundred journal publications, conference papers and research reports. Dr. Durbetaki was a member of the team at Georgia Tech that engineered the 1996 Olympic relay torch.

Dr. Durbetaki has been a Member of The American Society of Mechanical Engineers (ASME) since 1953. He is a Life Fellow since 1993 and was elected Fellow in 1987. He has been a Faculty Advisor of University of Rochester Section and Georgia Institute of Technology Section. He held various positions with Atlanta Section that include Member of the Board of Directors, Treasurer, Program Chair and Chair.

Dr. Lee Durbetaki has been Vice President of ASME Region XI and held several positions that include Member of the Regional Operating Board. Dr. Durbetaki was Chair of the Professional Development Board of ASME. Dr. Durbetaki held ASME Society Level Membership and Chairman Positions of Committees and Boards relating to Member Affairs and Student Affairs. Dr. Durbetaki organized and chaired the ASME Joint Region IV and XI Graduate Student Technical Conference at Georgia Institute of Technology, Atlanta, GA in 1992.

Dr. Durbetaki has been active since 1980 to now in Civic and Cultural Associations such as *AHEPA Mother Lodge Chapter No. 1, Atlanta, GA* with responsibilities that range from Board of Governors, Treasurer, Secretary and Chairman of Educational Trust Funds.

Dr. Lee Durbetaki has been Treasurer of ASME Region XI and of Early Career Technical Conference (ECTC) since inception, nine years back to the current time.

## Bryan Eldridge



Mr. Bryan Eldridge is currently employed as a Project Engineer at McKee Foods Corp. working in the plant engineering department. McKee Foods is the largest private manufacturer of snack cakes under the brand names of Little Debbie snack cakes along with other products under the Fieldstone and Blue Planet Foods; which are located in Collegedale, TN.

Mr. Eldridge has a B.S. degree in Mechanical Mechanics and a M.S. in Engineering Management both from the University of Tennessee at Chattanooga, (UTC). Mr. Bryan Eldridge's ASME activities consist of his association with Chattanooga Section, where he held several executive positions, such as 1<sup>st</sup> & 2<sup>nd</sup> Vice Chair, Chair, Membership Chair and Director. He holds the current position as Section Treasurer from 2003 to present.

Previously Mr. Bryan held positions with ASME Region XI and is currently with District F Operating Boards as Member Initiatives Committee, Committee on Membership (COM), Board on Member Interests and Development (BMID), General Awards Committee (GAC) between 2003 and 2009, Honors & Awards Chair Region XI from 2003 to 2006. Mr. Eldridge has been Honors & Awards Group Chair District F from 2006 to 2009. He is currently the Administrative Group Chair of District F.

Mr. Bryan Eldridge has been active with Early Career Technical Conference (ECTC) for several years as Advisor & Associate Editor.

**Feng, Ming Ph.D, LEED AP.**



Dr. Ming obtained his B.S. degree in Mechanical Engineering from Beijing University of Technology, Beijing, China in 2002. He received his Ph.D degree in 2008 in Mechanical Engineering from Florida International University, Miami. Mr. Ming has published several peer-reviewed papers on solar energy application, building energy management and low entropy air conditioning system.

Dr. Ming served as the president of ASHRAE (American Society of Heating Refrigerating and Air-Conditioning Engineers) student chapter at FIU from 2007 to 2008. He has been a LEED (Leadership in Energy and Environment Design) Accredited Professional by United State Green Building Council since 2007. He has participated in the design/build of several zero energy buildings in U.S and China. He is currently working as a mechanical engineer for AECOM DESIGN in Washington DC.

**Goel, Ram A., Ph.D., P.E.**



Dr. Ram A. Goel has a B.S. in Civil Engineering (Hons) from University of Roorkee, India, M.S. from University of Nebraska, Lincoln, Nebraska; Graduate Studies in Civil Engineering in Columbia University, New York and a Ph. D., in Mechanical Engineering, from University, Albuquerque, NM. Dr. Goel has forty (40) years of experience in major professional engineering works in various Engineering Fields and Capacities.

Dr. Ram Goel is currently the President of SONEY FM LLC, Tampa, FL. His responsibilities include marketing, designing, checking of the final engineering packages for the clients such as Gulf Coast Testing Lab, Pinellas Park, FL, and North side Engineering Services Inc., Engineering Management Partnership, Applied Engineering & Science Inc., Bessolo Design Group Inc., BES Inc., and several Civil Engineering project proposals. Previously Dr. Goel held responsible positions in developing, reviewing, overseeing several Civil Engineering Projects that included Bridge inspections and highway projects. Dr. Goel was involved as a Lead Engineer in developing, and reviewing of mechanical designs, plant piping and HVAC, in addition to QA evaluations mechanical equipment. He worked in Refinery and Gas Plants, Construction of San Onofre Nuclear Power Plant, Tokai Electric Co., Japan, .Hydroelectric power plant, Kalagarh, India.

Dr. Ram A. Goel is a Professional Engineer of the states of New York, Utah, California, Georgia, South Carolina, Nevada and Florida. He is a Fellow of American Society of Civil Engineers. Dr. Goel is a Member of Structural Engineering Institute (SEI), American Society of Mechanical Engineers and ASHRAE. He is also a Member in several Codes and Standards Committees. Dr. Goel is listed in who is who in America. He has published few papers and has teaching experience at California State University, LA, California; University of South Florida and Tampa Technical Institute, Tampa, Florida. Dr. Goel is the recipient of prestigious "Hind Rattan" Award from India.

**Gray, Brian C. P.E**



Mr. Brian Gray is a Registered Professional Engineer with over thirteen (13) years experience in the design, analysis, and construction of nuclear and conventional power facilities and refineries throughout the United States.

Mr. Brian Gray worked with Energy Operations Jackson, MS at their corporate headquarters. He was engaged to resolve the problem areas of nuclear plants at Grand Gulf (MS), Russellville (ARK) and St. Franksville, (LA).

Mr. Brian Gray has worked extensively with finite element analysis, piping system modeling and analysis, fatigue analysis, and fracture mechanics of plant structures, systems and components.

Recently, Mr. Gray has directed and overseen design and construction activities on several large power and refinery projects in the western United States. Mr. Gray received both his Bachelor of Science Degree in Mechanical Engineering and Master of Business Administration with Project Management Degree from Mississippi State University. He currently resides in Corinth, Texas, and is married with three children.

**Guo, Yuebin Ph. D.**



Dr. Yuebin Guo is a professor of Mechanical Engineering and Director of Center for Surface Science and Engineering at the University of Alabama (UA). He received his PhD and MS degrees from Purdue University and University of California at Berkeley, respectively. Dr. Guo then joined the UA faculty in 2001. Dr. Guo's research has been focusing on the systematic integration of multiscale manufacturing processes, surface integrity, and functionality for various engineering applications. Dr. Guo's research has been funded by NSF, DOE, DOT, and numerous industrial companies. Dr. Guo is the author of more than 150 peer referred journal and conference papers including numerous best and keynote papers...

Dr. Yuebin Guo is a recipient of the Tau Beta Pi Outstanding Faculty Award, NSF CAREER award, SME Outstanding Young Manufacturing Engineer Award, and SAE Ralph R. Teetor Educational Award.

## Jones, Gerald PhD, P.E



Dr. Gerald L. Jones is a consulting engineer at Advance Technologies Inc., a SimuTech Group company located in Norcross, Georgia. His responsibilities include application of advanced engineering simulation techniques to design and failure analysis problems in a wide range of industries. Gerald's extensive mechanical engineering experience includes analysis of numerous components and systems are listed below.

Dr. Jones was responsible for design and qualification of Navy Nuclear components such as reactor vessels, heads, bolted joints and valves; Analysis of insulation and supports for high temperature piping at Westinghouse for Clinch River Breeder Reactor project; Thermal and structural qualification in many industries such as aerospace, NASA, electronics, plastics, off shore-oil platforms, building construction, earth moving equipment, etc.

Dr. Gerald Jones extensive experience includes ASME Section VIII qualification of pressure vessels, air filtration and air handling equipment for chemical plants and power plants; ASME Section III qualification of many nuclear components such as piping supports, steam generator supports, valves, cable trays, spent fuel pool modifications for various utilities. This included writing reports to support Justification of Continued Operation (JCO) and modifications of Final Safety Analysis Reports (FSARs); Thermal and structural analysis of storage and transportation canisters for spent nuclear fuel; Seismic qualification of vessels and steel support structures for hazardous waste cleanup equipment at various government laboratories; Training, hot line support and presales support for the ANSYS software suite.

The chronological sequence of Dr. Jones work experience includes:

- 2003 - 2008 Advanced Engineering Technologies, Norcross, GA
- 2002 - 2003 NAC International, Norcross, GA
- 1994 - 2002 Advanced Engineering Technologies, Norcross, GA
- 1994 - 1994 Engineering Cybernetics, Inc., Houston Texas
- 1993 - 1994 Centric Engineering Systems, Inc., Palo Alto, CA
- 1988 - 1993 Impell Corporation, Norcross, GA
- 1985 - 1988 O'Donnell and Associates, Inc. Pittsburgh, PA
- 1978 - 1985 Swanson Engineering Associates Corp., McMurray, PA
- 1974 - 1978 Bettis Atomic Power Laboratory, West Mifflin, PA

Education of Dr. Jones includes PhD in Engineering Science and Mechanics, Virginia Polytechnic Institute, M.S. in Engineering Science, Florida State University and B.S. in Engineering Science, Florida State University.

Dr. Gerald Jones is a licensed professional engineer in the states of Virginia and Georgia. Gerald is a member of ASME International, ASM International and Phi Kappa Phi Honors Society. Gerald is a past chairman and is currently on the Executive Board of the Atlanta Section of ASME International.

**Kaw, Autar Ph. D.**



Dr. Autar K. Kaw is a Professor of Mechanical Engineering at the University of South Florida, Tampa. Professor Kaw obtained his B.E. (Hons.) degree in Mechanical Engineering from Birla Institute of Technology and Science, India in 1981. He received his Ph.D. degree in 1987 and M.S. degree in 1984, both in Engineering Mechanics from Clemson University, SC. He joined the faculty of University of South Florida, Tampa in 1987.

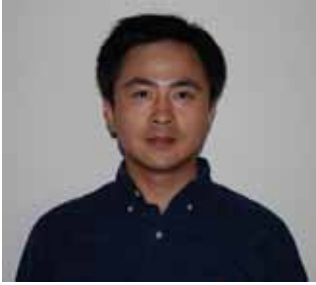
Dr. Autar K. Kaw has also been a Maintenance Engineer (1982) for Ford-Escorts Tractors, India, and a Summer Faculty Fellow (1992) and Visiting Scientist (1991) at Wright Patterson Air Force Base.

Professor Kaw's main scholarly interests are in engineering education research, bridge design, thermal stresses, engineering software, computational nanomechanics, and fracture. His research has been funded by National Science Foundation, Air Force Office of Scientific Research, Florida Department of Transportation, Research and Development Laboratories, Systran Co, Wright Patterson Air Force Base, and Montgomery Tank Lines.

Dr. Autar Kaw is a Fellow of the American Society of Mechanical Engineers (ASME) and a member of the American Society of Engineering Education (ASEE). He has written more than forty journal papers and developed several software instructional programs for courses such as Mechanics of Composites and Numerical Methods.

Professor Kaw received the Florida Professor of the Year Award from the Council for Advancement and Support of Education (CASE) and Carnegie Foundation for Advancement of Teaching (CFAT) in 2004, American Society of Mechanical Engineers (ASME) Curriculum Innovation Award in 2004, Archie Higdon Mechanics Educator Award from the American Society of Engineering Education (ASEE) in 2003, State of Florida Teaching Incentive Program Award in 1994 and 1997, American Society of Engineering Education (ASEE) New Mechanics Educator Award in 1992, and the Society of Automotive Engineers (SAE) Ralph Teetor Award in 1991.

**Liu, Zhanke Ph. D.**



Dr. Zhanke Liu obtained his PhD degree in 2008 from the Department of Civil and Environmental Engineering at Princeton University. Dr. Zhanke Liu has published over 20 peer reviewed journal and conference papers. His areas of interests include hydrodynamics, hydro-elasticity, structural mechanics, marine/offshore structures, flow-induced vibrations, fluid-structure interactions, impact/explosive modeling, self-adaptive structures and design optimization, and bio-mechanics.

Dr. Zhanke Liu's previous work has focused on transient analysis and design of self-twisting composite marine propellers, which feature much improved efficiency among other advantages over conventional propellers, operating in unsteady and cavitating flow. He has also intensively studied the shock-bubble-structure interactions during underwater explosions near composite structures and efficient blast mitigation schemes. Moreover, he has investigated the technical feasibility of using bio-MEMS sensors to monitor blood flow and high-rise chimney structures to harvest solar energies during his pursuit for advanced degrees. His work has been widely presented in many universities, international conferences, and scientific journals.

Dr. Zhanke Liu is an active member of American Society of Mechanical Engineer and the Sigma Xi, the Scientific Research Society. He is currently working in Schlumberger Tech Corp as a mechanical engineer.

**Long, William E. Jr., P. E.**



William E. Long Jr. is a Senior Engineer with Entergy Operations based in Jackson, Mississippi. After receiving his BS in Nuclear Engineering from North Carolina State University, Mr. Long was employed as a Field Service Engineer for Westinghouse Electric Corporation, Pittsburgh in their Nuclear Service Division. In this capacity he had to oversee installation and startup of Westinghouse mechanical equipment at the Callaway Nuclear site in Missouri. He then worked as a power ascension test engineer for General Electric Co. based in San Jose, Ca. primarily at the Perry Nuclear Station in Perry, Ohio.

Mr. Long is a Registered Professional Engineer and holds a BWR-6 Senior Reactor Operator Certification. Mr. Long has worked in several capacities at Entergy operations including a significant period in the Safety Analysis section at the Grand Gulf Station. Work in this area included various deterministic and risk informed evaluations to support plant operation and resolve technical problems. Mr. Long is currently responsible for Reactor Engineering duties at the Grand Gulf Nuclear Station. These duties include review of planned core designs, management of in-core components and instrumentation, power maneuvering recommendations, spent fuel management and storage, and maintenance and operation of the core monitoring computer system.

Mr. Long has served in various capacities for the Mississippi Section of ASME since moving to Mississippi in 1988. He has been recognized by the section on numerous occasions and continues his support of fundraising and other activities sponsored by the section. Mr. William Long has been extremely helpful in the two ASME MS EXPOs that funded scholarships at MSU, MS. He is currently Treasurer for the Mississippi Section.

**Mann, Richa, Ph.D**



Dr. Richa Mann is working as a Research Scientist at Dynaflo, Inc. in Jessup, MD. At present, she works in the area of underwater explosion, bubble cavitation, material testing and hydrodynamics. Her areas of expertise are experimental analysis including PIV, LDV, erosion testing, flow measurement, finite element analysis of structures, fluid structure interaction and Computational Fluid Mechanics. She has recently conducted successful experiments on the NASA micro gravity flight which involved the separation of micro bubbles from liquid-gas mixture in space.

Prior to working as a Research Scientist Dr. Mann has worked for two years as an Aerodynamics Engineer for the Auto industry. She worked on CFD as well as wind tunnel testing of the aerodynamics of vehicles. She conducted wind tunnel testing at various wind tunnels including the FKFS wind tunnel in Stuttgart, Germany. Her work involved studying the wind tunnel interference effects on the aerodynamic design of vehicles and also conducting CFD simulations to design a more aerodynamic vehicle.

Dr. Richa Mann also worked as a Post Doctoral Research Associate at the National Center for Physical Acoustics. She worked in the area of Aero-acoustics studies for Mach 1.5 jets. She obtained her PhD in 2006 from the University of Mississippi in Aero-acoustics Engineering. Her area of research was Turbulent and Acoustic studies for transonic jets. She obtained her Masters in Mechanical Engineering in 2001, where she conducted research on impact properties of foams (experimental and finite element analysis).

Dr. Mann has many publications in various journals and is also a reviewer for AIAAJ, ASME Fluid Engineering journal and Journal of Materials in Civil Engineering. She is a member of ASME, senior member of AIAA and also a member of SigmaXi.

**Mantena, Raju P. Ph. D.**



Dr. P. Raju Mantena is a Professor in the Department of Mechanical Engineering, Composite Structures and Nano-Engineering at The University of Mississippi.

Dr. Raju Mantena's research interests are in optimizing the blast, shock and impact response of composites and grid-stiffened structures, nano-reinforced materials, structural foams, and nondestructive evaluation. Over the years, he has served as PI or Co-PI of a large number of grants totaling over eight million dollars from NSF, NASA, USDA, ONR, DHS, EPRI, AOC, Allied Signal and Dow Automotive.

Dr. Mantena is actively involved with the American Society of Mechanical Engineers (ASME) and the American Society for Composites (ASC). He has published extensively; and organized several national and international symposiums serving as *Chair of the Materials Characterization Technical Committee* for ASME-Noise Control and Acoustics Division, and *Chair of the Fastening and Joining Technical Committee* for ASME-Design Engineering Division.

At the University of Mississippi, Dr. Mantena teaches Engineering Mechanics, Kinematics and Dynamics of Machinery, Vibrations, Mechanics of Composite Materials, Experimental Stress Analysis, and Structures and Dynamics Lab. He received the School of Engineering *2008 Senior Faculty Research Award*; the *2007 Faculty Service Award*; and is also a *three-time recipient of Outstanding Mechanical Engineering Teacher*. In recognition of his leadership in mentoring and guiding the ASME Student Section, Dr. Mantena was awarded the *2000 ASME International John A. Shortall Outstanding Faculty Advisor Award*.

## Mulvihill, John



John M. Mulvihill is the American Society of Mechanical Engineers (ASME) District Leader for District F Southeast. In his professional career, he serves as the Director of Public Works & Utilities for the City of Oldsmar, Florida. He is responsible for the design, construction, operations, maintenance and repair of the municipality's complex infrastructure

Mr. Mulvihill's responsibilities include orchestrating the design, budgeting and construction management for all City capital improvement projects; the operations and maintenance of the City's water treatment plant and distribution system, an advanced wastewater treatment plant and collection system and a reclaimed water distribution system; the construction and maintenance of the City's complex roadway and stormwater system; the maintenance of all municipal facilities; operation of the City's fleet maintenance facility; and the collection and recycling of the City's solid waste.

Prior to this position, Mr. Mulvihill spent seven years as the City Manager for a Florida coastal community requiring his leadership and project management skills in dealing with diverse coastal engineering issues. He is a retired U. S. Army Corps of Engineer Officer, with twenty years of comprehensive leadership experience in orchestrating the design and construction of large scale technical projects. He is a graduate of the University of Massachusetts with a BS degree in Mechanical Engineering. He Mr. Mulvihill is also a graduate of the U.S. Army Command and General Staff College.

Prior to Mr. Mulvihill's election as District Leader, he served in a number of key leadership positions in his 41-year affiliation with ASME. Most recently he was the Administrative Group Chair with Southeast District F. He also served for 10 years on the Region XI Operating Board as the Secretary and Professional Development Coordinator, an ASME Leadership and Management Skills Instructor and a delegate on the ASME National Nominating Committee. As a 20-year active member of the Florida West Coast Section Executive Committee, he served in various positions of responsibility to include two years as the Section Chair (1993-1995) and Chair of the 1997 Region XI RAC/RSC. ASME awards include the Region XI Dick Duncan Award and the ASME Dedicated Service Award. Other professional and civic affiliations include the American Public Works Association, American Water Works Association, Water Environmental Federation, American Society of Military Engineers and the Rotary Club of Oldsmar.