



SHORT COURSE 1
on
COATING PROCESSES AND APPLICATIONS FOR TURBOMACHINERY



Bruce G. McMordie is responsible for development of coating systems to prevent environmental deterioration of metal parts up to 1100°C (2100°F) at Sermatech International Inc., in Limerick, Pennsylvania. He has 20 years of experience in the coatings industry and holds more than a dozen patents on the structure of and means to apply coatings to resist aqueous corrosion, polymeric, and mineral fouling and hot corrosion.

Mr. McMordie has B.S. and M.S. degrees (Metallurgy and Materials Science) from Carnegie-Mellon University. He is a member of SAE, ASM, ASME, and AIChE.



Larry Ross is Vice President of Fusion Inc., a Praxair Surface Technologies company. He has 34 years of mechanical, professional sales, and marketing experience. His background includes 15 years with Diamond Shamrock Deer Park Chemical plant, now Oxy Vinyls, working with the mechanical maintenance department for repair of centrifugal compressors, steam turbines, pumps, etc. Since 1981, Mr. Ross has worked in the machine, coating, and grinding service industry. His background in mechanical component repair includes working with OEMs in developing HVOF coating repair standards for their high-speed equipment. These standards are now part of the new API 687 repair guidelines.

Mr. Ross is a member of ASM, ASME, and the Vibration Institute.



Ron Shaver is currently employed as the International Sales Manager by Hickham Industries, in LaPorte, Texas. He has 16 years of experience in the coating industry. Before moving to Hickham, he was employed by Sermatech International for 13 years, from 1983 to 1996, in capacities including Production Supervisor, Production Manager, Operations Manager, Sales Engineer, Business Unit Manager, and employed by Fusion Inc. for three years, from 1996 to 1999, in the capacity of President and General Manger. Mr. Shaver's coating experience includes the application as well as the sales and marketing of compressor, combustor, and turbine coatings in the gas turbine, steam turbine, and compressor markets, and covers slurry as well as thermal sprayed coatings.

Mr. Shaver has a B.B.A. degree from the University of Houston, and an M.B.A. degree from Our Lady of the Lake University.

SHORT COURSE 2
on
HEAVY MACHINERY FOUNDATIONS,
FOUNDATION REPAIR, AND EQUIPMENT GROUTING



Eric J. Irick, Manager of Engineering, came to Adhesive Services Company (ASC), in Houston, Texas, in 1995. During his university studies, he served as an instructor of Thermodynamics, Material Science, and Engineering Analysis. He also published two papers on materials relating to adiabatic shear bands in titanium. In addition to providing valuable engineering expertise, he has helped bring ASC's computer systems up to the latest generation and updated their estimating and project coordination abilities.

Mr. Irick received an M.S. degree (Mechanical Engineering, 1995) from Texas Tech University.



Joel M. Piefer, President and Chief Operating Officer, joined Adhesive Services Company (ASC), in Houston, Texas, more than 20 years ago. He handles complicated projects where negotiations and logistics are critical and has the hands-on background to successfully communicate with craft level personnel. ASC has used his experience in refinery and petrochemical plant turnarounds to develop many unusual and unique foundation repair techniques that have become industry standards.



E.M. (Gene) Renfro is the CEO and Chief Engineer of Adhesive Services Company, a company he founded in 1975, in Houston, Texas. Since that time, he has worked extensively on both domestic and foreign projects. Previously, he spent a number of years specializing in epoxy adhesives with a multinational chemical company. He is the author of many publications of manufacturer's technical literature and the author of several technical papers.

Mr. Renfro received a B.S. degree (Chemical Engineering, 1958) from Texas Tech University and is a registered Professional Engineer in the State of Texas.

SHORT COURSE 3
on
GAS TURBINE TECHNOLOGY



Meherwan P. Boyce is Managing Partner of The Boyce Consultancy, in Houston, Texas. He has 40 years of experience in the turbomachinery field. His industrial experience covers 25 years from design of compressors and turbines to Chairman and CEO of Boyce Engineering International. His 15 years in academia include being Professor of Mechanical Engineering at Texas A&M University, and Founder of the Turbomachinery Laboratories and the Turbomachinery Symposium. Dr. Boyce has authored more than 100 technical publications and several books, including *Gas Turbine Engineering Handbook*. He has taught over 100 short courses globally attended by over 3000 students representing over 400 companies, and is a Consultant to the aerospace, petrochemical, and utility industries.

Dr. Boyce received a B.S. and M.S. degree (Mechanical Engineering) from the South Dakota School of Mines and Technology and the State University of New York, respectively, and a Ph.D. degree (1969) from the University of Oklahoma.

SHORT COURSE 4
on
DRY GAS SEALS



Josef (Joe) Sedy is a Consultant with Envitech, Inc., in Mount Prospect, Illinois. He has spent over 30 years improving mechanical and gas seals. Early years were spent as a Research Engineer at Crane Packing Company (John Crane Inc.). His work with spiral groove gas seals resulted in a patented gas seal design that revolutionized sealing of centrifugal compressors. Then as Technical Director, Mr. Sedy helped promote acceptance of this product through conversions of problem compressors in gas transmission, chemical, and petrochemical plants. Since becoming an independent consultant in the early 90s, he worked with Durametallic, now Flowserve Corporation, to further improve the dry gas seal, concentrating on field problems. He has authored several technical papers and was granted 14 US patents and their foreign equivalents.

Mr. Sedy received his M.S. degree (Mechanical Engineering) from Charles University, in Prague, and is a registered Professional Engineer in the State of Illinois.

SHORT COURSE 5
on
API 687 REPAIR OF SPECIAL PURPOSE ROTORS



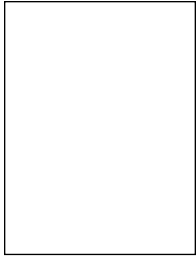
Kenneth O. (Ken) Beckman is Chief Engineer of the Power Transmission Division of Lufkin Industries, Inc., in Lufkin, Texas. Since college graduation he has been in gear engineering with Lufkin Industries. He previously served as a Design Engineer in high-speed gearing, and in 1985 he was promoted to Chief Engineer responsible for the engineering on all gears including low-speed through high-speed, marine, and repair. Mr. Beckman has spent a considerable portion of his time working with users and service departments to solve gearing problems. The Quality Assurance Department and the Test Stand area were added to his responsibilities in 1998.

Mr. Beckman received a B.S. degree (Mechanical Engineering, 1972) from Montana State University. He is an active member of AGMA and API. He is currently on the Advisory Board for the University of Louisiana at Lafayette.



Clifford P. (Cliff) Cook is with Texaco, Inc., in Bellaire, Texas. He is Chairman of the API RP 687 Task Force on Repair of Special Purpose Rotors. He is a Texaco Fellow, registered Professional Engineer in the State of Texas, Chairman of the API Subcommittee on Mechanical Equipment, and a member of the Texas A&M Turbomachinery Symposium Advisory Committee. Mr. Cook is a member of API 617 (compressors), 613 (SP gears), 677 (GP gears), 616 (gas turbines), and past member of API 684 (rotordynamics tutorial), 610 (pumps), 618 (reciprocating compressors) task forces.

Mr. Cook has a B.S. degree from the U.S. Merchant Marine Academy, Kings Point, and an M.S. degree (Mechanical Engineering) from Lehigh University.



William T. Kilty is an Applications Engineer at John Crane Flexibox, in Houston, Texas. He has been with them since 1999, and selects power transmission couplings for applications and works on new product development. Mr. Kilty previously worked as Engineering Supervisor at TurboCare, Principal Engineer at Lucas Aerospace, and Engineering Supervisor at Zurn Industries.

Mr. Kilty received B.S. degrees (Mechanical Engineering and Business Administration, 1980) from the State University of New York at Buffalo.



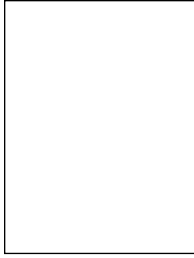
David H. Linden is the founder and President of the independent consulting company, D.H.Linden Associates, Inc. He has 27 years of turbomachinery experience having worked at Westinghouse Electric Corporation, Ingersoll Rand Company, Dresser Rand Company, and Conmecc, Inc. Mr. Linden specializes in the area of turbomachinery design and reliability.

Mr. Linden has a BSME from Rutgers University and did graduate work at Widener College. He is a previous author of several papers for various ASME and Turbomachinery Symposia. Mr. Linden is a member of ASME, ASTM, NACE, and the API 687 Rotor Repair Subcommittee.



Steven C. Merrill is an Engineering Specialist with Dow Corning Corporation, in Midland, Michigan. He has extensive employment background with rotating equipment manufacturers including Allis-Chalmers, General Electric, Atlas-Copco, and A-C Compressor. One of his responsibilities within Dow Corning is to lead the Compressor Technology Team and coordinate compressor issues worldwide.

Mr. Merrill received a B.S. degree (Industrial Engineering) from Rochester Institute of Technology and an MBA degree from Central Michigan University. He is a registered Professional Engineer in the State of Wisconsin.



Richard A. (Dick) Pfeil is a Technical Specialist in steam turbines for Dresser-Rand, in Houston, Texas. He has been with Dresser-Rand for more than 29 years, starting with the Terry Steam Turbine Company (now a part of the Steam Turbine Division of Dresser-Rand). He has extensive experience in service, repair shop supervision, and sales. Mr. Pfeil has had a major role in developing repair standards and techniques in the various repair shops within Dresser-Rand.



Terry L. Roehm is a Reliability Engineer for Marathon Ashland Petroleum Company's Catlettsburg, Kentucky Refinery. He specializes in rotating equipment and his responsibilities focus on improvement of the reliability of rotating equipment. In addition, he is involved with the specification, selection, procurement, installation, startups, troubleshooting, and turnaround planning for the rotating equipment. He has had various positions in Maintenance Engineering and Central Engineering. He has provided assistance for more than 25 years in the refining business within Ashland refineries in the U.S. and overseas.

Mr. Roehm has a B.S. degree (Mechanical Engineering) from Purdue University. He is a registered Professional Engineer in the State of Kentucky, a member of the API Subcommittee on Mechanical Equipment, and a member of ASME.



Herb Sirois formed an independent turbomachinery engineering company, Foster Cove Engineering, Inc., in 1992, in Charlestown, Rhode Island. He has concentrated on failure investigation, project management, and redesign for efficiency and reliability upgrades of turbomachinery, primarily steam turbines. Mr. Sirois' career has been dedicated to the design, manufacturing, and operation of turbomachinery used by the marine, electric utility, and process industries. He engineered steam turbine product lines and components while an engineer at Westinghouse Electric (Lester, Pennsylvania), Terry Corporation (Windsor and Niantic, Connecticut), and Conmec, Inc., (Bethlehem, Pennsylvania).

Mr. Sirois has BSME (1971) and MBA (1988) degrees from the University of Rhode Island, and has done graduate work at the University of Pennsylvania. He is a registered Professional Engineer in the State of Rhode Island, and is an active member of ASTM and ASME.

SHORT COURSE 6
on
RECIPROCATING COMPRESSOR FUNDAMENTALS



Leon C. (Lee) Golder is Manager, Client Training, with Dresser-Rand Company, in Painted Post, New York. In this position, he has responsibility for directing client training for all product lines at the various U.S. manufacturing plants. His responsibilities encompass assessing client product training needs, advancing training technology, along with marketing and selling Dresser-Rand product training services. Mr. Golder has 14 years experience in reciprocating compressor instruction and program development on maintenance and operation of reciprocating compressors and gas engines. Prior to his present position, he was Manager, Product Training, Reciprocating Products; Product Engineer; and Senior Technical Engineer.

Mr. Golder has an Associates degree (Mechanical Technology, 1970), a B.S. degree (Mathematics/Physics, 1977), and an M.S. degree (Adult Education, 1997).
