Robert B. Pond, Jr., Ph.D.

Ph.D., Metallurgy and Material Science, University of Pennsylvania (1970)
M. S., Metallurgy and Material Science, University of Pennsylvania (1968)
B. E. S., Mechanics, Johns Hopkins University (1965)

Dr. Pond has extensive education and experience in materials, metallurgical and mechanical engineering fields. He has worked in research laboratories, including the Ballistics Research Laboratory at Aberdeen Proving Ground. He has taught at the U. S. Naval Academy and continues to teach in universities and industrial settings. He is the past chair of the Engineering Science Department and past Associate Dean of Natural Sciences at Loyola University Maryland in Baltimore, MD. He served as Principal Metallurgist for Baltimore Gas and Electric Company for thirteen years, where he supervised and managed a materials engineering laboratory of more than 50 personnel, providing engineering and laboratory services to fossil and nuclear power, gas production, power distribution, transportation, and to the insurance and legal departments.

He has provided consultation and education in the areas of mechanics, materials and metallurgical engineering through his company, M-Structures Engineering, LLC. His clients include the Nuclear Regulatory Commission, Exelon Nuclear, Inc., Baltimore Gas and Electric Co., Exelon Corporation, The Institute for Nuclear Safety in Korea, The U. S. Navy, The U. S. Army, The U. S. Coast Guard, The National Institute for Standards Technology, Constellation Corporation, Foster-Wheeler Corporation, Ford Motor Company, Hellier NDT, Northrop Grumman Corporation, Grinnell Corporation, Rouse Corporation, Henny Penny Corporation, Systems and Electronics, Inc., Ward Machinery Co., Sun Automation, Weil-McLain, MarquipWardUnited Co., and numerous legal and insurance firms. He is Fellow-by-Courtesy of Johns Hopkins University. He also teaches for the American Society of Materials International and for The Society of Manufacturing Engineers.

For Baltimore Gas and Electric, he investigated, reviewed and approved more than 2500 materials, component and system design problems and failure analyses. Since 1970, Dr. Pond has analyzed hundreds of materials engineering problems, and component and system failures for industry, government, and the insurance and legal professions as an independent consultant. He has testified more than 150 times as an expert witness in federal, district and other courts on material failures and patent issues concerning materials.

Dr. Pond has controlled and administered nuclear quality assurance programs for the power industry in the areas of NDE, materials engineering, testing analysis, welding engineering, cathodic protection, coatings engineering, corrosion control, and ASME Codes. He has also controlled and administered the materials engineering aspects of commercial dedication of components for safety-related applications, a program for reactor vessel surveillance capsule testing and evaluations, and a corrosion and coatings program. He was a member of the Off Site Safety Review Committee for Calvert Cliffs Nuclear Power Plant in Maryland for thirteen years.

He has created, controlled, and administered welding engineering, materials testing and evaluation, materials procurement and receipt inspection, and nondestructive examination sections of ASME Section I and VIII, S and U stamp boiler and piping programs for fossil power, and created a quality program for gas distribution. He was trained as a Level III Examiner in Baltimore Gas and Electric Co.'s NDE program and he has been certified in visual, dye penetrant, magnetic particle, eddy current, ultrasonic, and radiographic examination techniques. He has been an AWS Certified Welding Inspector.

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Dr. Pond teaches technical and academic courses for The Society of Manufacturing Engineers, Dearborn, Michigan, The American Society for Materials International, Materials Park, Ohio, and Loyola University Maryland. He was engaged as a research scientist for the Center for Non-Destructive Evaluation at Johns Hopkins University until the center closed in 2003. He has been a Lecturer and a Fellow-by-Courtesy at Johns Hopkins. Dr. Pond received the Teacher of the Year Award in the Part Time programs at Johns Hopkins University for 1995 and the Instructor of Merit Award in 1996 and the Distinguished Educator Award in 1999 from American Society for Materials International. He is responsible for numerous industrial and academic research projects.

PROFESSIONAL CHRONOLOGY: Associate Dean of Natural Sciences of Loyola University, 2008-2013; Associate Professor of Engineering, 2001-Present; Chair of the Engineering Department of Loyola University, Baltimore, Maryland, 2001-2009; Advisory Steering Committee for STS Safety Review of the Big Dig, Massachusetts, 2007-2008; President, M-Structures Engineering, L.L.C., Baltimore, Maryland, 1976-Present; Adjunct Faculty, The Johns Hopkins University, Baltimore, Maryland, 1978-2008; Adjunct Faculty, The American Society for Materials International, Materials Park, Ohio, 1986-Present; Associate Research Scientist, The Center for Nondestructive Evaluation, Johns Hopkins University, Baltimore, Maryland, 1995-2003; Adjunct Faculty, The Society for Manufacturing Engineers, 1995-Present; Affiliate Faculty, Loyola College Maryland, Baltimore, Maryland, 1997- 2001; Vice-President, Utility Operations, Karta Technology, Inc., 1994-1996; Principal Metallurgist, Baltimore Gas and Electric Company, Baltimore, Maryland, 1981-94; Member, The Off-Site Safety Review Committee for Calvert Cliffs Nuclear Power Plant, 1981-1994; Assistant Professor, Department of Mechanical Engineering, The United States Naval Academy, Annapolis, Maryland, 1979-82; Consultant, Ballistics Research Laboratory, Aberdeen Proving Ground, Aberdeen, Maryland, 1975-79; Consultant, Department of Defense, Republic of South Korea, Washington, DC, 1976-77; President, Windsor Metalcrystals, Inc., New Windsor, Maryland, 1973-75; Principal Researcher, Marvalaud, Inc., Westminster, Maryland, 1969-73; Teaching Assistant, The University of Pennsylvania, Philadelphia, Pennsylvania, 1968-69; Research Fellow, The University of Pennsylvania, Philadelphia, Pennsylvania, 1965-69; Laboratory Assistant, Baltimore Gas and Electric Company, Baltimore, Maryland, 1965; Laboratory Assistant, Koppers Company Foundry, Baltimore, Maryland, 1964; Research Assistant, Department of Mechanics, The Johns Hopkins University, Baltimore, Maryland, 1962-63; Laboratory Assistant, Marvalaud, Inc., Westminster, Maryland, 1960-61.

PROFESSIONAL ORGANIZATIONS: American Society for Materials International, 1964-Present, serving on the Materials Engineering Institute Committee 1989-2000; American

Welding Society, 1994-Present; Center for Non-Destructive Evaluation, The Johns Hopkins University, as Representative for Baltimore Gas and Electric, 1985-94 and as Associate Research Scientist, 1995-2003; Electric Power Research Institute's NDE Center, serving as Chair of the Steering Committee, 1993-94, Edison Electric Institute's Materials and Processing Committee, 1981-93, serving as Vice Chair, 1992-93.

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