Thermal Spray Society announces the 2025 Hall of Fame recipients: Ann Bolcavage and Charles M. Kay

Thermal Spray Society An Affiliate Society of ASM International
THERMAL SPRAY HALL OF FAME

The Thermal Spray Hall of Fame was established in 1993 to recognize the many outstanding leaders who have made significant contributions to the science, practice, education, management and advancement of thermal spray. Nominations for the Class of Inductees into the TSS Thermal Spray Hall of Fame are accepted until 30 September of the preceding year. Candidates for the Thermal Spray Hall of Fame may be proposed by any five members of the Thermal Spray Society or any of the working groups, committees, subcommittees or other duly recognized bodies within the Thermal Spray Society.

Dr. Ann Bolcavage, FASM is Engineering Fellow for Coatings at Rolls-Royce, a global manufacturer of propulsion solutions for civil aerospace, defense, and power systems markets. She is responsible for the strategic development of critical coating materials and manufacturing technologies for surface engineering to provide through-life support for all products. Over the course of her career, Ann has focused on developing metallic and ceramic coatings and thin films, and her expertise includes the measurement of process-structure-property relationships leading to optimized thermal spray, chemical vapour deposition, and physical vapour deposition processing methods for new and repaired aerospace and industrial gas turbine engine components.

Ann joined Rolls-Royce in 2006 as a Senior Engineering Specialist in Indianapolis, IN and subsequently held roles as Surface Engineering Manager (UK) and Chief of Materials Capability Acquisition before her appointment to the Rolls-Royce Engineering Fellowship in 2014. She also helped establish and build key research programs for surface engineering at the Commonwealth Center for Advanced Manufacturing (VA) and at the University of Virginia / Rolls-Royce UTC for Advanced Materials Systems. Prior to joining Rolls-Royce, Ann worked at Praxair Surface Technologies (now Linde AMT) in Indianapolis.

In recognition of her technical achievements and leadership, Ann was appointed Fellow of ASM International in 2011. She has been active in ASM for 40 years, including leadership positions in the Indianapolis Chapter, Board member of the Thermal Spray Society, and ASM International Board of Trustees member.

Ann received her B.S. with honors in Materials Science and Engineering from Lehigh University and her M.S and Ph.D. in Metallurgical Engineering from the University of Wisconsin-Madison. She has written or co-authored 23 technical publications, given 27 conference / workshop presentations (9 invited), and has 23 patented inventions.

Bolcavage was recognized for "Ann is globally recognized for technical innovation research in thermal spray that has influenced and changed the performance of coatings and how they are used in aerospace applications."

Mr. Charles Kay, FASM, joined ASB Industries in 1985. ASB Industries located in Ohio, USA, business focus as a turnkey supplier of thermal spray processing utilizing pre and post machining and grinding of job shop type industrial components. Charlie was directly involved with many customers in a broad range of industries in North America and beyond. He recently retired at the end of 2024 after being involved in the sale of ASB Industries in 2021, to an international focused roll covering company, Hannecard with business interest in further diversifying thermal spray.

Multiple technology agreements were collaborated including process techniques utilizing developed materials, procedures and post sealing treatments for the steel industry from companies in the U.K. and Japan. The early-stage development of high pressure cold spray technology involved working with many close and diverse colleagues leading to companies collaborating on technical advancements.

Charlie believes relationships are necessary to adapt to market changes both in process technology and business changes which influence business direction on current and new markets. Also important is collaborating with co-workers, including skilled technicians, materials and equipment suppliers, and diverse customers. These were key to the successful long-term relationships at the core of ASB business. Cold Spray is a key technology focused on R&D with successful aerospace application development. These efforts began with collaborations with worldwide relationships advancing equipment and applications with notable contributions by material suppliers. Although a smaller percentage of the business, technology influenced the entire ASB Industries company.
The Thermal Spray Society was a key organization for Charlie to gain relationships to advance ancillary technologies. Volunteering and collaborating with others for many projects including editor for iTSSe more than 10 years, organizer duties and attendee for Topical Cold Spray and Topical Thermal Spray conferences, and the yearly International Thermal Spray Conferences, co-editor with colleague Jegan Karthikeyan for the ASM publication High Pressure Cold Spray: Principles and Applications, TSS Past President, chair of North American Cold Spray conference, TSS White Paper contributor, ASM Handbook updates, and more. Being close to the Dome was advantageous in working with the professionals at ASM directly.

Many years ago, a competitor stated Charlie is on “roller skates-everywhere”-a fond compliment instilling respectful and competitive business practices.

Kay was recognized for “Mr. Charles Kay, FASM, for focus and dedication to progressing thermal spray and cold spray commercial applications. TSS Past President and retired President of Hannecard Roller Coatings Inc. (formerly ASB Industries Inc.), recognized a worldwide network that can work together to combine leadership in research, technology, materials and industry to promote innovation for functional applications.”