ASM’s 2020 Class of Fellows

In 1969, ASM established the Fellow of the Society honor to provide recognition to members for their distinguished contributions to materials science and engineering and to develop a broadly based forum of technical and professional leaders to serve as advisors to the society. Following are the members recognized by their colleagues for 2020. Additional Fellows may be elected to this distinguished body in subsequent years. The solicited guidance, which the Fellows will provide, will enhance the capability of ASM as a technical community of materials science and engineering in the years ahead. Awards will be presented at ASM’s annual Awards Dinner, Tuesday, September 15th, in Cleveland, OH during IMAT2020.

Prof. Pamir Alpay, FASM
Board of Trustees Distinguished Professor
University of Connecticut
Storrs, Connecticut

"Exceptional contributions and leadership in materials theory, computational materials science, and multiscale materials modeling towards an understanding of aerospace alloys, functional materials, and surface properties."

Prof. Raymundo Arroyave, FASM
Professor
Department of Materials Science and Engineering
Texas A&M University
College Station, TX

"For pioneering innovative pathways in the design of materials through a combination of fundamental materials physics, systems engineering and materials informatics, for his service to the profession."
Prof. Kip Findley, FASM
Professor
Colorado School of Mines
Golden, Colorado

"For formative contributions in understanding fundamental relationships between microstructures and mechanical properties, contributions to engineering education, and enhancing research opportunities for undergraduate and graduate students."

Mr. Robert C. Goldstein, FASM
Director of Engineering
Fluxtrol, Inc.
Auburn Hills, MI

"For seminal work on induction heat treating applications, making significant contributions to diverse areas such as human health, space exploration and materials processing."

Dr. Janez Grum, FASM
Professor
Faculty of Mechanical Engineering, Retired
University of Ljubljana
Ljubljana, Slovenia

"For sustained contributions in metallurgical research and technologies, including nondestructive testing, failure analysis, and laser processing of steel and other engineering alloys."
Prof. Yun Hang Hu, FASM
Charles and Carroll McArther Endowed Chair Professor
Michigan Technological University
Houghton, MI

"For outstanding contributions to research and innovation in energy conversion materials; including application in solar cells, supercapacitors, hydrogen production and hydrogen storage."

Prof. Shrikant Joshi, FASM
Professor
Division of Additive & Subtractive Manufacturing
University West
Trollhättan, Sweden

"For sustained contributions in the fields of advanced surface engineering and laser materials processing and mentoring young professionals."

Dr. Michael R. Kessler, FASM
Dean, College of Engineering
North Dakota State University
Fargo, North Dakota

"For contributions to the understanding and development of multifunctional materials (including the development of self-healing structural composites), bio-renewable polymers, and composites and to leadership in materials science education."
Mr. Luis R. Leon, FASM
Associate Technical Fellow
Metallurgical, Propulsion Applications
The Boeing Company
Seattle, Washington

"A materials technology expert and mentor who pioneered utilization of advanced materials and processes to improve the performance of high temperature commercial aircraft propulsion support systems."

Dr. Dongjian (Don) Li, FASM
Engineering Manager
Research and Development
Howmet Aerospace
Niles, Ohio

"For substantial technical achievements in titanium alloy processing development leading to improved yield and lower cost titanium processing methodologies; and activities promoting dissemination of titanium technology."

Dr. Navin Manjooran, FASM
Chairman
Solve Technology and Research, Inc.
Windermere, Florida

"For driving scientific and technological advancements in nanomaterials processing techniques for energy and industry."

Dr. Guiru Nash Liu, FASM
Senior Experimental Metallurgist
Progress Rail, Inc.
Chicago, Illinois

"An exemplary career in practical root cause failure analysis covering a broad range of materials and manufacturing technologies."
Mr. Michael M. Niedzinski, FASM  
Director of Standardization  
Constellium  
South Barrington, Illinois

"For extraordinary contributions in implementing research and development to commercialize advanced aluminum alloy products for the aerospace and military communities."

Dr. Virginia Osterman, FASM  
Corporate Chemist  
Solar Atmosphere, Inc.  
Souderton, Pennsylvania

"For significant technical and educational contributions specific to vacuum heat-treating processes, including use of vacuum furnaces for the embrittlement of titanium, tantalum and other refractory metals for powder production."

Prof. Michael Pecht, FASM  
Professor  
Center for Advanced Life Cycle Engineering  
University of Maryland  
College Park, Maryland

"For technical contributions and leadership in the areas of electronics reliability, physics of failure and sustainment."

Prof. Ma Qian, FASM  
Distinguished Professor  
Royal Melbourne Institute of Technology  
Melbourne, Australia

"For innovations in solidification processing, additive manufacturing and powder metallurgy to manufacture metallic materials and products with enhanced performance and/or reduced cost or emissions."
Dr. Clare Rimnac, FASM  
Wilbert J. Austin Professor of Engineering  
Distinguished University Professor  
Case Western Reserve University  
Cleveland, Ohio

"For sustained research excellence in orthopedic biomechanics and biomaterials, particularly degradation of ultra-high molecular weight polyethylene and materials performance of implants and bone."

Prof. Thomas W. Scharf, FASM  
Professor of Materials Science and Engineering  
University of North Texas  
Denton, Texas

"For significant contributions in materials tribology and surface engineering, pioneering work on solid lubricant materials and mechanisms, and distinguished service to the materials science community."

Dr. Donglu Shi, FASM  
Professor  
University of Cincinnati  
Cincinnati, Ohio

"For pioneering contributions to superconducting materials, magnetism and magnetic materials and novel nanostructures for photonic, biomedical and drug delivery applications."

Mr. Jatinder P. Singh, FASM  
Technical Integration Engineer-Steel  
General Motors Company  
Troy, Michigan

"For significant advancement and implementation of advanced high strength steels for automotive body structures as a recognized leader in ferrous sheet metal, alongside a strong commitment to developing and promoting professionals in the materials engineering field."
Dr. Vasisht Venkatesh, FASM  
Associate Director Materials Modeling  
Pratt & Whitney  
East Hartford, Connecticut

"For outstanding leadership in integrated computational materials engineering approaches for building process-structure-property models enabling enhanced performance and quality of Ni- and Ti-based alloys for aerospace applications."

Prof. Jingyang Wang, FASM  
Division Head  
Shenyang National Laboratory for Materials Science  
Institute of Metal Research, Chinese Academy of Sciences  
Shenyang, China

"For pioneering contributions, global leadership, and mentoring in the field of science and technology of advanced ceramics, multifunctional coatings, and related materials and systems."

Prof. Xinghang Zhang, FASM  
Professor  
Purdue University  
West Lafayette, Indiana

"For groundbreaking discoveries in creating Nano twinned metals, control of mechanical behavior, and understanding of radiation damage in nanostructured metallic materials."