# 2004 Class of Fellows

### Congratulations to our 2004 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 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. Additional Fellows may be elected to this distinguished body in subsequent years. The solicited guidance, which the Fellows will provide to the Board of Trustees, will enhance the capability of ASM as a technical and professional society to serve the technical community of materials science and engineering in the years ahead.

**Prof. Brent L. Adams**
Dusenberry Professor, Mechanical Engineering, Brigham Young University, Provo, Utah.
“For contributions to the study of microstructure, including advances in representation, stereology and the development of orientation imaging microscopy.”

**Prof. Enrique V. Barrera**
Professor and Chair, Department of Mechanical Engineering and Materials Science, Rice University, Houston, Texas.
“For innovative composites and nanotechnology research, and for mentoring of materials science and engineering students.”

**Prof. Rafael Colas**
Professor, Universidad Autonoma de Nuevo Leon, N L, Mexico
“For the advancement of casting, forging and heat treatment technology through the combined use of experiment and modeling/simulations.”

**Dr. Khershed P. Cooper**
Metallurgist, Materials Science and Technology, Naval Research Laboratory, Washington, D.C.
“For outstanding contributions to the fields of solidification processing and liquid metal atomization.”

**Mr. Daryl E. Crawmer**
Director of Technology, Thermal Spray Technologies Inc., Sun Prairie, Wis.
“For advancing the industrial development and application of thermal spray technologies and coatings.”

**Prof. Narendra B. Dahotre**
Professor of Materials Science and Engineering, The University of Tennessee, Knoxville, Tenn.
“For pioneering contributions to research and development of surface engineering and laser based processing of materials.”

**Dr. Eric F. Drake**
Director, Materials Technology, Reed Hycalog, Houston, Texas.
“For contributions to the fundamental understanding of the mechanical behavior of metal matrix composites, and for development of fabrication processes for functionally graded and powder-forged hard materials.”

**Prof. Indranath Dutta**
Professor, Center for Materials Science & Engineering, Dept. of Mechanical Engineering, Naval Postgraduate School, Monterey, Calif.
“For outstanding contributions to the analysis of thermomechanical behavior in multicomponent materials systems and their application to materials issues in microelectronic packaging and interconnects.”

**Prof. Pierre Fauchais**
Professor, University of Limoges
Faculté des Sciences, Limoges Cedex, France.
“For significant contributions to plasma processing of materials, and for thermal spray processing technology.”

**Dr. Warren J. Haws**
Principal Metallurgist, Brush Wellman Inc., Cleveland, Ohio.
“For sustained technical contributions to the science and technology of beryllium and Al-Be alloys and for contributions to ASM International®.”

**Mr. F. Michael Hosking**
Principal Member of Technical Staff, Sandia National Laboratories, Albuquerque, N.M.
“For distinguished achievements and sustained contributions to the understanding and advancement of the science and technology of the wetting behavior and interfacial reactions that occur during soldering and brazing.”

**Dr. Michel Jeandin**
Research Professor and Director of the Center for Plasma Processing , Ecole des Mines de Paris, Evry Cedex,France.
“For sustained and innovative contributions to the fields of surface engineering and powder metallurgy.”

**Prof. Sanboh Lee**
Professor, Department of Materials Science and Engineering, National Tsing Hua University, Hsinchu, Taiwan.
“For outstanding contributions to the understanding of defect interactions and fracture, and for seminal studies of transport processes in metals and polymers.”

**Dr. Gerard M. Ludtka**
Distinguished R&D Staff, Metals & Ceramics Division, Oak Ridge National Laboratory, Oak Ridge, Tenn.
“For pioneering accomplishments in computational modeling of microstructure evolution, and for quantitative characterization of phase transformations and properties.”

**Dr. Rabindra N. Mahapatra**
Materials Engineer, Naval Air Systems Command, Patuxent River, Md.
“For innovative scientific and technological contributions to the processing and development of advanced high temperature single crystal materials.”

**Prof. Brajendra Mishra**
Professor, Metallurgical & Materials Engineering, Colorado School of Mines, Golden, Colo.
“For distinguished contributions to education and research in high temperature electrochemical and pyrometallurgical materials processing, and for outstanding achievements in adoption of surface engineering technologies for improved tribology.”

**Mr. Paul M. Munafo**
Department Manager, Materials, Processes, and Manufacturing Department, NASA-Marshall Space Flight Center, MSFC, Ala.
“For sustained contributions to alloy development, manufacturing and mechanics of aerospace materials.”

**Mr. Harvey V. Pellegrini**
Network Liaison Manager, Materials and Manufacturing Ontario, Mississauga, Ontario, Canada
“For significant contributions in promoting university-industry partnerships, and for outstanding leadership in the advancement of engineering education.”

**Prof. David R. Poirier**
Professor, Department of Materials Science and Engineering, University of Arizona, Tucson, Ariz.
“For distinguished contributions to research and development in the field of solidification and casting processes, and for outstanding contributions to students of materials science and engineering.”

**Prof. Michel Rappaz**
Director, Computational Materials Laboratory, Swiss Federal Institute of Technology, Lausanne, Switzerland.
“For pioneering developments in the understanding and modeling of microstructure evolution during materials processing related to solidification processing, and for research leading to innovative microstructure simulation tools on technological products.”

**Mr. Ronald W. Schutz**
Corporate Specialist, Industrial Techhnology, RMI Titanium Company, Niles, Ohio.
“For outstanding contributions to science and technology of titanium alloys and their wide-scale applications in the chemical and energy industries.”

**Dr. Roland D. Seals**
Senior Staff Scientist, Technology Development Division, Oak Ridge Y-12 National Security Complex , Oak Ridge, Tenn.
“For innovative research and development in advanced manufacturing processes based on surface engineering and thermal spray technologies.”

**Mr. Soren O. Segerberg**
Senior Research Leader in Heat Treatment, Industrial Research and Development Corporation (IVF), Molandal, Sweden.
“For sustainable development of quenching technology and leadership in the global heat treating industry, including research leading to the understanding of quenching principles and for the development of testing equipment for gas and liquid quenchant characterization.”

**Dr. Oleg N. Senkov**
Senior Scientist, Materials and Processes Division, UES Inc., Dayton, Ohio.
“For outstanding contributions in research and development of aluminum and titanium alloys and amorphous metallic materials.”

**Prof. Leon Shaw**
Interim Department Head & Associate Professor, University of Connecticut, Storrs, Conn.
“For significant contributions to the fields of synthesis and processing of composites and nanomaterials.”

**Dr. Roch J. Shipley**
P.E., Senior Vice President, Packer Engineering, Naperville, Ill.
“For excellence in failure analysis and for contributions to industry and to the ASM local and national leadership.”

**Dr. George Spanos**
Section Head, Physical Metallurgy Branch, Naval Research Laboratory, Washington, D.C.
“For benchmark contributions to three-dimensional analysis of microstructural evolution during solid-state transformation.”

**Prof. Surendra N. Tewari**
Professor, Chemical and Biomedical Engineering Department, Cleveland State University, Cleveland, Ohio.
“For outstanding scientific and technical contributions in solidification processing of materials.”

**Dr. Raymond G. Thompson**
President, Vista Engineering Incorporated, Birmingham, Ala.
“For leadership in education, and for the application of phase diagrams, computational thermodynamics and microstructural modeling to the fields of welding and alloy design.”

**Prof. Mirna Urquidi-MacDonald**
Professor, Department of Engineering Science and Mechanics, Pennsylvania State University, University Park, Pa.
“For contributions to the modeling of corrosion and electrochemical phenomena, particularly those related to nuclear energy and fuel cells, and for pioneering research in applying artificial neural networks to materials phenomena.”

**Dr. Yucong Wang**
Leader, Surface Engineering and Tribology Center, General Motors Corp., Pontiac, Mich.
“For pioneering contributions to surface engineering and tribology for improved automotive product quality and performance at reduced manufacturing costs, and for working to establish an ASM International® presence in China.”