**ASM International®**
**and**
**The Minerals, Metals & Materials Society**

## DISTINGUISHED LECTURESHIP IN MATERIALS AND SOCIETY

Established in 1971 to clarify the role of materials science and engineering in technology and in society in its broadest sense; to present an evaluation of progress made in developing new technology for the ever changing needs of technology and society; and to define new frontiers for materials science and engineering.

1971 ..... Prof. Harvey Brooks, Harvard University
"Materials in a Steady-State World"

1972 ..... Sir Alan H. Cottrell, Chief Scientific Advisor, Cabinet Office, England
"Materials and Energy"

1973 ..... Dr. James Boyd, Executive Director, National Commission on Materials Policy
"The Resource Trichotomy"

1974 ..... Dr. Cyril Stanley Smith, Professor Emeritus, Massachusetts Institute of Technology
"Metallurgy as a Human Experience"

1975 ..... Dr. Michael Tenenbaum, President, Inland Steel Company
"Iron and Society - A Case Study in Constraints and Incentives"

1976 ..... Dr. William O. Baker, President, Bell Laboratories
"Materials Proficiency for National Progress"

1977 ..... Sir H. Montague Finniston, F.R.S., Chairman, Sears Holdings Ltd., England
"The Shape of Things Past and To Come"

1978 ..... Prof. Herbert H. Kellogg, Stanley-Thompson Professor of Chemical Metallurgy, Columbia University
"Toward a Materials-Conservation Ethic"

1979 ..... Dr. Glenn T. Seaborg, Associate Director, Lawrence Berkeley Laboratory, University of California
"Our Heritage of the Elements"

1980 ..... Dr. Charles Crussard, Scientific Advisor, Pechiney Ugine Kuhlmann, France
"A New Concept of Thermodynamics Applied to Materials in Industry"

1981 ..... The Honorable Dixy Lee Ray, Writer and Lecturer
"Scarce Materials or Plenty: Do We Believe in Technology"

1982 ..... Dr. Morris Cohen, Institute Professor Emeritus, Massachusetts Institute of Technology
"Materials, Materialism, and Search for Meaning--An Essay"

1983 ..... Dr. Raymond L. Smith, Retired President, Michigan Technological University
"Atlas Never Shrugged"

1984 ..... Dr. Nathan E. Promisel, Engineering Consultant and Retired Executive Director, National Materials Advisory Board, National Academy of Sciences
"Of Perspectives, Issues and Politics in Materials Technology"

1985 ..... Dr. Robert I. Jaffee, Senior Technical Advisor, Materials Support Group, Research and Development Staff, Electric Power Research Institute
"Materials and Electricity"

1986 ..... Dr. Arden L. Bement, Jr., Vice President-Technical Resources, TRW, Inc.
"The Greening of Materials Science and Engineering"

1987 ..... Dr. James S. Kane, Special Assistant for Laboratory Affairs, University of California-Berkeley
"An Emerging Role for the National Laboratories in Materials Science"

1988 ..... Dr. Frank Press, President, National Academy of Sciences
"Advanced Materials and Competitiveness"

1989 ..... Dr. Siegfried S. Hecker, Director, Los Alamos National Laboratory
"Los Alamos -- Materials and Society"

1990 ..... Sir Robin Nicholson, Executive Director, Pilkington plc, England
"Materials Engineering with Vision"

1991 ..... Dr. Praveen Chaudhari, IBM Research Division, T.J. Watson Research Center
"Materials Science and Engineering in the 1990s"

1992 ..... Dr. Frederick Seitz, President Emeritus, Rockefeller University
"The Materials Network" (Lecture not presented due to illness)

1993 ..... Dr. Donald R. Muzyka, President, Special Metals Corporation
“Materials Technology and the Materials Industry: A Critical Transition”

1994 ..... Dr. Peter R. Bridenbaugh, Executive Vice President & Chief Technical Officer, Aluminum Company of America
“A 50-Year View of Materials Science - 30 Down and 20 To Go”

1995 ..... Dr. Albert R.C. Westwood, Vice President, Research and Exploratory Technology, Sandia National Laboratories
“Materials and Society–Impacts and Responsibilities”

1996 ..... Dr. Peter Cannon, Managing Partner, VRE Company
“Report from a Traveller -- A New ‘Silk Road’ for Materials Science”

1997 ..... Dr. James C. Williams, General Manager, Engineering Materials Technology Laboratories, GE Aircraft Engines
"The Future of Advanced Materials in the Face of the New World Order"

1998 ..... Dr. Lyle H. Schwartz, Retired Director, National Institute of Standards & Technology
"Materials and Sustainability: How Are We Doing?"

1999 ..... Dr. Mary Lowe Good, Donaghey University Professor, University of Arkansas
"Materials in the 21st Century – Global Economy Innovation vs. Discovery"

2000 ..... Prof. Merton C. Flemings, Toyota Professor, Massachusetts Institute of Technology
"Materials Education in 2000+"

2001 ..... Dr. Bhakta B. Rath, Associate Director of Research, US Naval Research Laboratory, Material Science & Component Technology Directorate
"Abundance of Frozen Clean Energy From the Sea"

2002 ..... Dr. Duncan Moore, Deputy Director for Technology, Office of Science and Technology Policy
"Continued Economic Growth and its Barriers"

2003 ..... Alton D. Romig, Jr., Vice President, Nonproliferation and Assessments, Sandia National Laboratories
"Nanotechnology: Scientific Challenges and Societal Benefits and Risks"

2004 …….. Prof. Diran Apelian, Howmet Professor of Engineering,
Director, Metal Processing Institute
Worcester Polytechnic Institute
"Materials Engineering Challenges for the Society of 'Tomorrow'": Housing, Transportation, Health and Food Delivery Needs"

2005…….Dr. William Madia, Vice President for Laboratory Operations, Battelle
"Nanoscale Science".

2006…….Prof. Joel P. Clark, Professor, Massachusetts Institute of Technology
"Economic and Environmental Issues Associated with the Selection, Manufacturing and Use of Materials."

2007…….. Dr. Alan I. Taub, GM Research and Development, General Motors Corporation.
" Materials Challenges for a Sustainable Automotive Industry."

2008…… Dr. Leo Christodoulou, FASM, Program Manager, DARPA DSO, Arlington, VA
"Engineering Materials Systems for an Ever Demanding Society."

2009…….. Dr. Jeffrey Wadsworth, CEO and President, Battelle Memorial Institute
"Powering the Future: New Energy Opportunities for Materials Science and Engineering."

2011……. Dr. Subra Suresh, FASM, Director, National Science Foundation, Arlington, VA
"Innovation Ecosystems: Where Do We Go From Here".

2012……. Prof. Julia Weertman, FASM, Walter P. Murphy Professor Emerita, Northwestern University, Evanston, IL "Economics, Materials and Materials Scientists."

2013……Dr. Tresa M. Pollock, FASM, Alcoa Professor, University of California Materials Department, Santa Barbara, CA
"Flight in the 21st Century: The Roles of Materials and ICME."

2014……Dr. Robert E. Schafrik, FASM, General Electric Aviation, Cincinnati, OH
"Materials for a Non-Steady State World".

2015……Dr. Vincent J. Russo, FASM, Executive Director, Aeronautical Systems Center Wright-Patterson ARB, OH (Retired)
"What is a Splendid Leader."

2016……Prof. Julie A. Christodoulou, FASM, Director, Naval Materials, S&T Division Sea Warfare and Weapons Department, Office of Naval Research Alexandia, VA
"Elegant Solutions: Exploration and Outcomes that Matter".

2017……...Dr. Alexander H. King, FASM, Director, Critical Materials Institute The Ames Laboratory, IA
"What Do We Need and How Will We Get It."

2018……Dr. Lynnette D. Madsen, Program Director, National Science Foundation, Arlington, VA
"The Ecosystem of Research, Education, and Community."

2019……Dr. Carolyn M. Hansson, Professor, Mechanical and Mechatronics Engineering University of Waterloo, Ontario, Canada
"The challenge of 100 year servie-life requirement"

2020……Dr. Charles Ward, FASM, Chief, Manufacturing & Industrial Technologies Wright Patterson AFB, Ohio
"Integrating Materials and Manufacturing"

2021……Dr. Ian M. Robertson, FASM, Professor, University of Wisconsin-Madison
"Hydrogen as an energy carrier"

2022……Dr. Iver E. Anderson, FASM Senior Metallurgist, Ames Laboratory, Iowa
"Materials Research on Clean Energy: For the Sake of our Grandchildren"

2023……..Dr. Viola L. Acoff, Dean of the School of Engineering, Professor of Mechanical Engineering, University of Mississippi, Oxford
"Reimagining the Development of a 21st Century Workforce to Address Society's Need for Materials Engineering and Technology."

2024…….. Prof. Julie M. Schoenung, FASM, Professor and Department Chair, MSE Department, University of California, Irvine
"Saving the Planet through Sustainability-Informed Selection, Design and Discovery of Materials."