

## Materials Science and Engineering Study Panelists

The following is a list of the chairmen, vice-chairmen, and panelists for the national Materials Science and Engineering Study commissioned by the National Research Council at the request of the National Academy of Sciences and the National Academy of Engineering.

### Panel 1—Materials Research Opportunities and Needs in MSE

James S. Langer, University of California, Santa Barbara, *Chairman*  
George Parshall, E.I. du Pont de Nemours & Co., Inc., *Vice Chairman*  
James O. Stiegler, Oak Ridge National Laboratory, *Vice Chairman*  
Sumner A. Barenberg, E.I. du Pont de Nemours & Co., Inc.  
Elias Burstein, University of Pennsylvania  
Peter Cannon, Rockwell International  
Mildred Dresselhaus, Massachusetts Institute of Technology  
James Economy, IBM Corporation

George S. Hammond, Allied-Signal Inc.  
Arthur H. Heuer, Case Western Reserve, University  
John P. Hirth, Ohio State University  
Pierre C. Hohenberg, AT&T Bell Laboratories  
Ian Hughes, Inland Steel Co. Research Laboratory  
Robert I. Jaffee, Electric Power Research Institute  
John D. Joannopoulos, Massachusetts Institute of Technology

Herbert H. Johnson, Cornell University  
Robert A. Laudise, AT&T Bell Laboratories  
Christopher Magee, Ford Motor Company  
E. Ward Plummer, University of Pennsylvania  
Robert Stratton, Texas Instruments  
James R. Rice, Harvard University  
Gareth Thomas, University of California  
Mark Wrighton, Massachusetts Institute of Technology

### Panel 2—Exploitation of MSE and Technology for National Welfare

Alan C. Chynoweth, Bell Communications Research, Inc., *Chairman*  
R. Glen Kepler, Sandia National Laboratories, *Vice Chairman*  
James C. Williams, Carnegie-Mellon University, *Vice Chairman*  
Joseph D. Andrade, University of Utah  
Mylle H. Bell, Bell South Corporation  
Joel Clarke, Massachusetts Institute of Technology

L. Eric Cross, Pennsylvania State University  
Theodore Geballe, Stanford University  
Gordon H. Geiger, North Star Steel  
Frank E. Jamerson, General Motors Research Laboratories  
Harry A. Lipsitt, AFWAL, Wright Patterson Air Force Base  
James L. McCall, Battelle Columbus Division

Thomas C. McGill, Jr., California Institute of Technology  
John P. Riggs, Celanese Research Corporation  
Gerd M. Rosenblatt, Lawrence Berkeley Laboratory  
Palle Smidt, Microelectronics Corporation  
Robert Street, Xerox Palo Alto Research Center  
Hilliard Williams, Monsanto Company

### Panel 3—International Cooperation and Competition in MSE

Lyle Schwartz, National Bureau of Standards, *Chairman*  
W. Dale Compton, National Academy of Engineering, *Vice Chairman*  
Rustum Roy, Pennsylvania State University, *Vice Chairman*  
Jordan Baruch, Jordan Baruch Associates  
Peter Bridenbaugh, Aluminum Company of America

C. Peter Flynn, University of Illinois  
Richard J. Fruehan, Carnegie-Mellon University  
Herbert I. Fufeld, New York University  
Serge Gratch, GMI Institute  
Rudolph Pariser, E.I. du Pont de Nemours & Co., Inc.  
R. Byron Pipes, University of Delaware

Maxine Savitz, The Garrett Corporation  
Gabor A. Somorjai, University of California, Berkeley  
Gregory Stillman, University of Illinois  
James J. Tietjen, RCA Laboratories  
Robert White, Control Data

### Panel 4—Research Resources in MSE

Terry L. Loucks, Norton Company, *Chairman*  
Martin Blume, Brookhaven National Laboratory, *Vice Chairman*  
George Whitesides, Harvard University, *Vice Chairman*  
Bill R. Appleton, Oak Ridge National Laboratory  
Robert S. Bauer, Xerox Palo Alto Research Center  
H. Kent Bowen, Massachusetts Institute of Technology

Peter M. Eisenberger, Exxon Research and Engineering Co.  
Nicholas F. Fiore, Cabot Corporation  
John Gilman, Lawrence Berkeley Laboratory  
Karl Hess, University of Illinois  
Israel S. Jacobs, General Electric Research and Development Center  
J. David Litster, Massachusetts Institute of Technology

Noel MacDonald, Cornell University  
Dennis McWhan, AT&T Bell Laboratories  
Emil Pfender, University of Minnesota  
Bhakta B. Rath, Naval Research Laboratories  
John S. Rydz, Emhart Corporation  
Isaac F. Silvera, Harvard University  
Richard Stein, University of Massachusetts  
Julia Weertman, Northwestern University

### Panel 5—Education in MSE

I. Melvin Bernstein, Carnegie-Mellon University, *Chairman*  
Robert S. Hansen, Ames Laboratory, *Vice Chairman*  
John Hulm, Westinghouse Electric Corporation, *Vice Chairman*  
Diran Apelian, Drexel University  
Ali S. Argon, Massachusetts Institute of Technology  
Malcolm R. Beasley, Stanford University

Gilbert Y. Chin, AT&T Bell Laboratories  
Robert Clagett, University of Rhode Island  
Anthony G. Evans, University of California, Santa Barbara  
Leroy Eyring, Arizona State University  
Hellmut Fritzsche, University of Chicago  
Bruce Harmon, Iowa State University

Edward J. Kramer, Cornell University  
Gerald L. Liedl, Purdue University  
Kathleen Taylor, General Motors Research Laboratories  
Edwin L. Thomas, University of Massachusetts  
Richard E. Tressler, Pennsylvania State University  
Kenneth G. Wilson, Cornell University