EDITORIAL OBJECTIVES

The Journal of Testing and Evaluation is published in six issues per year by ASTM International, a nonprofit technical organization that develops and publishes voluntary consensus standards and related information for materials, products, systems, and services. Some issues, in whole or in part, may be Special Issues focused on a topic of interest to our readers. Contributions are peer reviewed prior to publication.

EDITORIAL SERVICES—SUBMISSIONS

Sara Welliver
Supervisor, Peer Review Services
Journal of Testing and Evaluation
Editorial Offices
J&J Editorial Services
201 Shannon Oaks Cir #124
Cary, NC 27551, USA
tel +1.919.650.1459, ext. 210
astm@jjeditorial.com

PURPOSE AND SCOPE

The editorial objectives of the Journal of Testing and Evaluation is to serve a broad-based audience by:

- Publishing new technical information derived from the field and laboratory testing, performance, quantitative characterization, and evaluation of these materials, products, systems, and services.
- Presenting new methods and data and critical evaluations of these methods and data.
- Reporting the users’ experience with test methods and the results of interlaboratory testing and analysis.
- Providing the scientific basis for both new and improved ASTM International standards.
- Stimulating new ideas in the fields of testing and evaluation.
- Including papers, technical notes, letters to the editor, discussions of previously published papers, and book reviews as contributions.

POSTMASTER send address change to:  
ASTM International—JTE  
100 Barr Harbor Drive  
P.O. Box C700  
West Conshohocken, PA  
19428-2959  
www.astm.org

EDITORIAL BOARD

Dr. Ali Abolmaali  
University of Texas at Arlington  
Arlington, TX, USA
Dr. Aziz Amoogezar  
North Carolina State University  
Raleigh, NC, USA
Dr. Farhad Aslani  
University of Western Australia  
Crawley, WA, Australia
Dr. Nemkumar Banthia  
University of British Columbia  
Vancouver, BC, Canada
Dr. Filippo Berto  
University of Padua, Italy, and Norwegian University of Science and Technology  
Trondheim, Norway
Dr. Krishna Prapoornabiligiri  
Indian Institute of Technology  
Kharagpur, West Bengal, India
Dr. Laura Bix  
Michigan State University  
East Lansing, MI, USA
Dr. Andrew F. Graham  
University of Arkansas  
Fayetteville, AR, USA
Dr. Andreas Brunner  
Empa, Swiss Federal Labs Switzerland
Prof. Andrea Carpi teri  
University of Parma  
Parma, Italy
Dr. Wen-Ruey Chang  
Liberty Mutual Research Institute for Safety  
Hopkinton, MA, USA
Dr. Dar Hao Chen  
Texas A&M University College Station, TX, USA
Dr. Tong Cui  
Qualcomm Packaging  
San Diego, CA, USA
John S. Dick  
Alpha Technologies  
Akron, OH, USA
Prof. Ying Fang  
Xiamen University  
Xiamen, China
Dr. Peter E. Fortini  
Pfizer/Wyeth Andover, MA, USA
Dr. Tâma r França  
Mississippi State University  
Starkville, MS, USA
Dr. Alessandro Gardi  
RMIT University  
Bundoora, VIC, Australia
Dr. Piotr Gas  
AGH University of Science and Technology  
Krakow, Poland
Dr. Yu-Ning Louis Ge  
National Taiwan University  
Taipei, Taiwan
Dr. Jianfeng Gu  
Jiao Tong University  
Shanghai, China
Dr. Meng Guo  
Beijing University of Technology  
Beijing, China
Dr. Rajeev Kumar Gupta  
University of Akron  
Akron, OH, USA
Prof. Jim Hartman  
AZGaitero Engineering  
Tempe, AZ, USA
Dr. Leila Hashemian  
University of Alberta  
Edmonton, Alberta Canada
Dr. Marcelo Hirschler  
Mill Valley, CA, USA
Dr. Hui-Min Huang  
Gaithersburg, MD, USA
Dr. Xiaoming Huang  
Southeast University  
Nanjing, China
Dr. Tao Jiang  
University of Connecticut  
Health Center  
Farmington, CT, USA
Dr. Thomas Jones  
Alcoa Howmet Corp.  
Whitehall, MI, USA
Dr. Sree ramesh Kalluri  
Ohio Aerospace Institute  
Brook Park, OH, USA
Dr. Sivakumar Kandasami  
Larsen & Toubro  
Construction  
Chennai, India
Dr. Xin Kang  
Hunan University  
Hunan, China
Dr. Vistasp M. Karb hari  
University of Texas at Arlington  
Arlington, TX, USA
Dr. Behnoud Kermani  
The Transstec Group, Inc.  
Enola, PA, USA
Dr. Yong-Rak Kim  
University of Nebraska-Lincoln  
Lincoln, NE, USA
Dr. Young Hoon Kim  
University of Louisville  
Louisville, KY, USA
Dr. Govindaraju Kondaswamy  
Massey University  
Palmerston, New Zealand
Dr. Eva Lantsoght  
Delft University of Technology  
Delft, Netherlands
Dr. William Luecke  
NIST  
Gaithersburg, MD, USA
Dr. Mohammad J. Mah tiabi  
University of Tennessee at Chattanooga  
Chattanooga, TN, USA
Douglas C. Meier  
NIST  
Gaithersburg, MD, USA
Dr. Ing. Mio mir Miljković  
University of Niš  
Niš, Serbia
Dr. Thomas F. O’Connor  
Milan, MI, USA
Dr. Božidar V. Popović  
University of Montenegro  
Podgorica, Montenegro
Dr. William T. Riddell  
Rowan University  
Haddonfield, NJ, USA
Dr. Elena Romeo  
University of Parma  
Parma, Italy
Dr. Rajarshi Saha  
BridgeLux, Inc.  
Livermore, CA, USA
Dr. Christopher G. Scott  
Lubrizol Corporation  
Wickliffe, OH, USA
Dr. Steven J. Shaffer  
Bucker Nano  
Surfaces Division  
San Jose, CA, USA
Dr. Suraj Sharma  
University of Georgia  
Athens, GA, USA
Dr. Ranganath K. Sha stri  
Plastics Solutions  
Midland, MI, USA
Dr. Punith Veeralinga  
Shivaprasad  
Clemson University  
Clemson, SC, USA
Dr. Mark Sidebottom  
Miami University  
Oxford, OH, USA
Dr. Cy (Chor-yiu) Sin  
National Tsing Hua University  
Hsinchu, Taiwan, R.O.C.
Dr. C. Elizabeth Stokes  
Mississippi State University  
Starkville, MS, USA
Dr. Stein Sture  
University of Colorado  
Boulder, CO, USA
Dr. Julian Tao  
University of Akron  
Akron, OH, USA
Dr. Ingrid Tomac  
University of California, San Diego  
San Diego, CA, USA
Dr. Blanka Tomkova  
Technical University of Liberec  
Liberec, Czech Republic
Dr. Sabrina Vantadori  
University of Parma  
Parma, Italy
Dr. Matthieu Vignes  
Massey University  
Manawatu Palmerston North, New Zealand
Dr. Hao Wang  
Rutgers University  
Piscataway, NJ, USA
Dr. Jinfeng Wang  
Zhejiang University  
Hangzhou, China
Dr. Shuying Wang  
Central South University  
Hunan, China

(Continued on Next Page)