EDITORIAL

Surface Engineering is defined as designing and modifying the surfaces of engineering components to enhance performance and extend the lifetime of specific functional features. In recognition of the special role offered by surface engineering processes, ASM International has organized four International Surface Engineering Congresses, and this issue of the *Journal of Materials Engineering and Performance* is devoted to surface engineering.

The papers presented in this issue are based on oral presentations made during the fourth International Surface Engineering Congress and Exposition held August 1-3, 2005 at the Radisson Riverfront Hotel in St. Paul, Minnesota. At the Congress, a large number of technical sessions (14), presentations (more than 65), and posters (18) were provided on a wide range of topics such as Industrial Physical and Chemical Vapor Deposition (PVD/CVD), Thin Films and Coatings, Failure Analysis, Mechanical Properties, Micro and Nanoscale Tribology, Thermal Spray, Biomedical Applications, Corrosion, Nanoscale Coatings, and Environmentally Benign Surface Engineering Processes. Although the conference proceedings contain many of the presentations (Proceedings of the 4th International Surface Engineering Congress and Exposition, Editors: M. J. Jackson and W. Ahmed, ASM International, 2005), a selection of papers included in this special issue are extended versions of the proceedings papers selected to represent the cross section of aspects of surface engineering and are expected to enlighten readers of the Journal of Materials Engineering and Performance. We are grateful to authors who contributed to this special issue.

We wish to thank ASM International for providing us the opportunity to chair the International Surface Engineering Congress and Exposition, and we thank Dr. Jeffrey Hawk, Editor, and Laura Cameron of the *Journal of Materials Engineering and Performance* for publishing this special issue.



M.J. Jackson



W. Ahmed

Guest Editors

Professor Mark J. Jackson, Ph.D.Purdue University, West Lafayette, IN

Professor Waqar Ahmed, Ph.D.University of Ulster, Newtownabbey, U.K.