

Editorial

C. Barry Carter¹

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The quality of any journal depends to a large extent on the expertise of the Editors. Some journals aim at publishing high-impact papers (which may or may not be valid or correct and may have a short shelf life), others at serving the membership of a professional Society, while a third group concentrate on publishing articles that will stand the test of time. The Editors at the Journal of Materials Science work to place our journal solidly in the third category.

Our system is that all papers are received initially by the Editor-in-Chief who then distributes them to one of our twenty Editors—the one who is most familiar with the subject of a particular paper. The assigned Editor then makes the decision as to whether the manuscript may be suitable for the journal. If it is not, it may be rejected without further review or sent to our Transfer Desk, which will ensure that it quickly moves to a more suitable journal in the Springer Nature portfolio. The Editor will typically make this first decision within 1–3 days. If the manuscript shows promise, the Editor will send it out to at least two reviewers (sending to just one could invite personality conflicts and sending to too many would waste the reviewers' valuable time) and will make a final decision within 4 months of receipt. If a paper is clearly good and the reviewers respond quickly, we can have a manuscript accepted and published online within 4–5 weeks.

All of the Editors handling manuscripts are professional, fulltime scientists working at Universities or in National Laboratories. We have had Editors from industry, and several of our Editors do have industrial experience, but at this time industry is not well represented in the group. On



average, each Editor will process about 20 papers per month and select about four for publication. Clearly, the expertise of the Editor is critical so I thought it would be useful to our readers to learn more about our Editors and what their areas of expertise are. As you will appreciate, from just a quick glance at an issue of the Journal of Materials Science, our journal welcomes papers on all aspects of the subject. This range of subjects presents another challenge for the journal—a paper on polymers may be sandwiched by those on metals and ceramics. One way by which we try to overcome this abundance of variety is to create our Virtual Issues. You can find these in the top-right column on <http://www.springer.com/materials/journal/10853>. You can also download and search the year's EndNote file (see www.CBarryCarter.com/j-mater-sci.html).

So, below is a summary of our Editors together with the background and principal interests of each one. Incidentally, you'll see articles from several of the Editors in the 50th Anniversary Issue [J Mater Sci 51(1)]. You'll also

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find regular articles (e.g., [1] and [2]) or classic reviews (e.g., [3] and [4]) by the Editors (some being former Editors) throughout the issues of the journal. Each article authored by an Editor is processed by a different Editor outside the Editorial Manager system or with the author blinded; and yes, we have rejected articles authored by Editors!

C. Barry Carter, Editor-in-Chief

Distinguished CINT Affiliate Scientist and Professor at the University of Connecticut, USA. Previously Department Head of Chemical, Materials and Biomolecular Engineering at UConn, the 3M Heltzer Endowed Chair at the University of Minnesota and Professor at Cornell.

BA, MA, ScD in Natural Sciences, Cambridge; MSc Imperial College London, UK. DPhil Oxford.

Postdoctoral Fellow at University of Oxford and Cornell University.

Research interests include electron microscopy, ceramics, and dysfunctional materials.

Mark Aindow, Deputy Editor-in-Chief

Associate Director of IMS and Professor of Materials Science and Engineering at University of Connecticut, US. Previously Senior Lecturer at University of Birmingham, UK.

BEng in Metallurgy and Materials Engineering, PhD in Materials Science and Engineering, University of Liverpool, UK.

Postdoctoral Fellow at Case Western Reserve University and The Ohio State University.

Research interests include microstructural development in metallic alloys, coatings, epitaxial thin films, and catalytic nanostructures.

M. Grant Norton, Deputy Editor-in-Chief

Professor School of Mechanical and Materials Engineering and Dean of the Honors College, Washington State University, UK.

BSc (Honours) in Chemistry, University of Southampton, UK; PhD in Materials, Imperial College London, UK.

Postdoctoral Fellow in materials science at Cornell University, USA.

Research interests include ceramics, energy materials, nanomaterials.

S. Pamir Alpay

Professor and Department Head of MS&E at the University of Connecticut, USA.

BS, MS in Metallurgical and Materials Engineering, Middle East Technical University, Ankara, Turkey; PhD in Materials Engineering, University of Maryland, College Park, USA.

Research interests include functional ceramics, ferro-electrics, multiferroics, and multiscale materials modeling.

Raymundo Arroyave

Associate Professor in the Department of Materials Science and Engineering, Texas A&M University, USA. BSc in Mechanical and Electrical Engineering, Instituto Tecnológico y de Estudios Superiores de Monterrey, México; MSc, PhD in Materials Science and Engineering, Massachusetts Institute of Technology, USA.

Postdoctoral Fellow in the Department of Materials Science and Engineering, Pennsylvania State University.

Research interests include computational thermodynamics and kinetics of materials, computational materials science, and computer-aided materials design.

Christopher F. Blanford

Senior Lecturer in the School of Materials in the University of Manchester, UK.

BS in Chemical Engineering, University of Notre Dame, USA; PhD in Inorganic Chemistry, the University of Minnesota.

Postdoctoral Fellow at the University of Oxford.

Research interests include porous materials, surface engineering, nanomaterials, and protein electrochemistry.

Pedro Camargo

Associate Professor at the University of São Paulo, Brazil.

BSc and MSc in Chemistry, the Federal University of Paraná, Brazil; PhD in Biomedical Engineering, Fulbright Fellow at Washington University in Saint Louis, USA (partly at the University of Washington, USA).

Research interests include the design and synthesis of controlled nanomaterials for plasmonics, catalysis, and energy generation applications.

David Cann

Professor of Materials Science and Engineering and Interim Head at the Oregon State University, USA. Previously Professor of Materials Science and Engineering at Iowa State University.

BS in Materials Engineering, Virginia Tech, USA; MS, PhD in Materials Science, Penn State University, USA.

Research interests include electronic/magnetic ceramics, ferroelectrics, piezoelectrics, electrolytes, and other functional materials.

Chris Cornelius

Professor of Chemical Engineering and Associate Dean For Research at the University of Nebraska at Lincoln, USA. Previously a Member of Staff at Sandia National Laboratory, Albuquerque, USA and Associate Professor of Chemical Engineering at the University of Connecticut, USA.

BS, PhD in Chemical Engineering, Virginia Tech, USA. Research interests include fundamental material interrelationships between structure, physical properties, and transport of gas, liquid, and ions within polymers, ionomers, gels, hybrid organic–inorganic materials, nanocomposites, and sol–gel glasses.

Steve Eichhorn

Head of Engineering and Professor of Materials Science at the University of Exeter, UK. Previously Reader at University of Manchester.

BS in Physics, University of Leeds, UK; MSc in Paper and Forestry Industries Technology, University of Wales, Bangor, UK and University of Manchester Institute of Science and Technology; PhD UMIST, UK. Postdoctoral Fellow at UMIST, UK.

Research interests include the interface between natural and biomaterials research with particular emphasis on cellulosic materials and composites, the use of Raman spectroscopy, synchrotron X-ray diffraction, and molecular dynamics/mechanics modeling of polymeric materials.

Jan Evans-Freeman

Professor and Pro-Vice-Chancellor of Engineering, the University of Canterbury, New Zealand. Previously Professor and Head of Functional Materials at Sheffield Hallam University, UK.

BSc and PhD in Physics, both at UMIST, UK.

Research interests include defects in electronic materials including oxides, solar cells, LEDs, semiconductor quantum structures, novel materials for electronic devices.

Jaime C. Grunlan

Linda & Ralph Schmidt '68 Professor of Mechanical Engineering, Texas A&M University, USA; joint appointments in Chemistry and in Materials Science and Engineering.

BS in Chemistry, North Dakota State University, USA; PhD in Materials Science and Engineering, the University of Minnesota–Twin Cities, USA.

Research interests include thermal and transport properties of nanocomposite materials, especially in the areas of thermoelectric energy generation, gas barrier, and fire prevention.

Michael A. Hickner

Associate Professor of Materials Science and Engineering at The Pennsylvania State University, USA.

BS Michigan Technological University, USA; MEng, PhD Virginia Tech, USA; all in Chemical Engineering. Postdoctoral research at Sandia National Laboratories, USA.

Research interests focus on polymeric ion conductors and materials for fuel cells, batteries, water treatment, and other energy and environmental uses.

Kevin S. Jones

Professor at the University of Florida in Gainesville. Previously Department Head.

BS University of Florida; PhD in Materials Science and Engineering, University of California, Berkeley.

Research interests include semiconductor processing, ion implantation, epitaxial growth, defect formation, TEM, thin films, and Li-ion batteries.

Douglas L. Medlin

Distinguished Member of Technical Staff at Sandia National Laboratories, USA.

BSc and PhD in Materials Science and Engineering at the University of California, Davis, USA.

Research interests include interfaces, crystal defects, microstructure, functional and energy materials.

David Mitlin

Professor and General Electric Chair, Chemical & Biomolecular Engineering and Mechanical Engineering, Clarkson University, NY. Previously Professor of Chemical and Materials Engineering at the University of Alberta, Canada.

BS in Materials Engineering, Rensselaer Polytechnic Institute, USA; MS in Materials Science, The Pennsylvania State University, USA; Ph.D in Materials Science, University of California, Berkeley, USA.

Director Funded Postdoctoral Fellow, Los Alamos National Laboratory.

Research interests include corrosion, nanomaterials, metallurgy, phase transformations.

Philip Nash

Charles and Lee Finkl Professor of Metallurgical and Materials Engineering; Director of the Thermal Processing Center, Illinois Institute of Technology, USA.

BS in Metallurgy, City of London Polytechnic; PhD Materials Science London University, UK.

Research interests include everything to do with metals and phase equilibria.

N. (Ravi) Ravishankar

Professor in the Materials Research Centre, Indian Institute of Science, Bangalore, India.

BTech in Metallurgical Engineering, Banaras Hindu University, Varanasi, India; PhD Indian Institute of Science Bangalore, India.

Postdoctoral Fellow in Chemical Engineering and Materials Science at the University of Minnesota.

Research interests include wet-chemical synthesis, structure, stability, and properties of nanomaterials and hybrids with emphasis on materials for energy applications.

Gregory C. Rutledge

Lammot du Pont Professor in Chemical Engineering, Department of Chemical Engineering, Massachusetts Institute of Technology (MIT), USA.

BS in Chemical Engineering, University of Virginia, USA; PhD in Chemical Engineering, Massachusetts Institute of Technology, USA.

Postdoctoral Fellow at the Swiss Federal Institute of Technology, Zurich, Switzerland and University of Leeds, UK.

Research interests include polymers, statistical thermodynamics, and fiber science.

Annala Seddon

Senior Lecturer, School of Physics, Bristol University and Director of the Bristol Centre for Functional Nanomaterials.

MChem University of Edinburgh, UK; PhD in Chemistry University of Bristol, UK.

Postdoctoral Fellow University of Chicago, USA and Imperial College London, UK.

Research interests include X-ray and neutron scattering, biophysical measurements, bionanomaterials, and bio-inspired materials for engineering.

Brian Sheldon

Professor of Engineering, Brown University, USA.

SB in Chemical Engineering, Massachusetts Institute of Technology, USA; ScD in Ceramics, Massachusetts Institute of Technology, MA, USA.

Previously a Member of Research Staff at Oak Ridge National Laboratory, USA.

Research interests include processing and mechanical behavior of advanced ceramics and energy storage materials.

Charles B. Glaser

Editorial Director, Applied Sciences, Springer, a part of Springer Nature

BA in Philosophy, Carleton College, MN, USA.

Publishing Editor for Journal of Materials Science.

Manages Springer's US-based staff of editors, publishing scientific and technical journals and books in various disciplines of engineering and materials science.

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