2015 *JOM* Technical Emphasis Calendar

January	Theme: Applying Materials Science and Engineering					Manuscripts Due: September 15, 2014
Topic	Scalable Nanomanufacturing	High-Temperature Coatings for Environmental Protection	Multi-Objective Optimization for Materials	Multi-Scale Modeling: Concurrent and Hierarchical Methods	Alloys and Compounds for Thermoelectric and Solar Cell Applications: Part II	
Guest Editor	*Terry Xu and Jung-Kun Lee*	*Vilupanur A. Ravi*	*Bala Radhakrishnan*	*Nitin Chopra*	*Sinn-wen Chen*	
Committee	Nanomaterials	Corrosion & Environmental Effects	Computational Materials Science and Engineering	ICME	Alloy Phases	
February	Theme: Upstream Materials: Extraction, Processing, and Characterization					Manuscripts Due: October 15, 2014
	TMS 2015 Annual Meeting at-meeting issue					
Topic	Aluminum: Bauxite-Alumina-Carbon-Reduction	Characterization of Advanced Mineral Materials	Critical Metals Hydrometallurgy	Modeling, Simulation, and Development of Metallurgical Processes: Part II		
Guest Editor	*Alton Tabereaux*	*Bowen Li*	*Harald Oosterhof*	*Dean Gregurek and Zhiwei Peng*		
Committee	Aluminum	Materials Characterization	*Hydrometallurgy & Electrometallurgy*	Pyrometallurgy		
March	Theme: Additive Manufacturing					Manuscripts Due: November 15, 2014
Topic	Metal Powder for Additive Manufacturing (3D Printing)	Progress in Additive Manufacturing				
Guest Editor	*Ma Qian*	*Ed Herderick*				
Committee	Powder Materials	Process Technology & Modeling				
April	Theme: Biomaterials and Thin Films					Manuscripts Due: December 15, 2014
Topic	Nanomechanical Behaviors of Biomaterials	Surfaces and Biointerfaces: Part I	Electronic, Biological, and Functional Thin Films: Part I			
Guest Editor	*Kantesh Balani, Xiaodong Li, and Jian Wang*	*Candan Tamerler*	*Roger Narayan*			
Committee	Nanomechanical Materials Behavior	Biomaterials	Thin Films & Interfaces			
May	Theme: Metallurgy and Processing					Manuscripts Due: January 15, 2015
Topic	Aluminum: Shaping and Forming	Friction Stir Welding and Processing	Metallurgy: Energy and Environmental Issues	Corrosion Fatigue	Modeling of Microstructure Evolution during Additive Manufacturing	
Guest Editor	*Alton Tabereaux*	*Yuri Hovanski*	*Dean Gregurek, Zhiwei Peng, and Phil Mackey*	*Raman Singh*	*John Carpenter*	
Committee	Aluminum	Shaping & Forming	Pyrometallurgy	Invited	Invited	
June	Theme: Metals and Alloys					Manuscripts Due: February 15, 2015
Topic	Beta-Titanium Alloys	Permanent Magnets beyond Nd-Dy-Fe-B				
Guest Editor	*William Joost*	*Satoshi Hirosawa*				
Committee	Titanium	Magnetic Materials				
July	Theme: Interfaces and Surface Engineering					Manuscripts Due: March 15, 2015
Topic	Control of Interfacial Phenomena during Processing: Modeling and Technology Developments	Effects of Interfaces on Mechanical Properties of Composites	Surface Engineering for Extreme Conditions	Electronic, Biological, and Functional Thin Films: Part II	Archaeomaterials	
Guest Editor	*Antoine Allanore*	*Tongxiang Fan, Yao Shen, Jian Wang, Xiaodong Li*	*Sandip Harimkar and Srinivasa R. Bakshi*	*Roger Narayan*	*Vilupanur A. Ravi*	
Committee	Process Technology & Modeling	Nanomechanical Materials Behavior	Surface Engineering	Thin Films & Interfaces	Invited	
August	Theme: Advanced Modeling and Characterization					Manuscripts Due: April 15, 2015
	MS&T15 preview issue					
Topic	In-Situ Mechanical Testing in Electron Microscopes: Part I	Advances in Modeling of Solidification Microstructures	New Horizons in Mechanical Spectroscopy	CALPHAD-Based ICME Research for Materials Genomic Design		
Guest Editor	*Amit Pandey*	*Mohsen Asle Zaeem*	*Michael Demkowicz*	*Wei Xiong*		
Committee	Advanced Characterization, Testing, and Simulation	Solidification	Chemistry & Physics of Materials	Invited		
September	Theme: Energy and Environment					Manuscripts Due: May 15, 2015
	MS&T15 at-meeting issue					
Topic	Sustainability in Metallurgy	Lead and Zinc Metallurgy	Energy Materials: Synthesis, Characterization, and Applications	MEMA 2015		
Guest Editor	*Dean Gregurek and Zhiwei Peng*	*Dean Gregurek and Zhiwei Peng*	*Xiaochuan Lu*	*Raymundo Arroyave*		
Committee	Pyrometallurgy	Pyrometallurgy	Energy Conversion & Storage	Invited		
October	Theme: Physical Metallurgy					Manuscripts Due: June 15, 2015
Topic	Phase Transformations and Microstructural Evolution: Part I	Progress in High-Entropy Alloys	Progress with Lead-Free Solders	Age-Hardenable Microalloying in Magnesium		
Guest Editor	*Amy Clarke*	*Michael Gao*	*Babak Arfaei*	*James Saal*		
Committee	Phase Transformations	Alloy Phases	Electronic Packaging & Interconnection Materials	Magnesium		
November	Theme: Materials for Energy and Extreme Environments					Manuscripts Due: July 15, 2015
Topic	Optimizing Energy in Industrial Furnaces	High-Temperature Corrosion of Ni-Base Alloys	Advances in Refractory Metals	Surfaces and Biointerfaces: Part II	Recycling of Materials	
Guest Editor	*Geoff Brooks*	*Kinga Unocic*	*Todd Leonhardt*	*Candan Tamerler*	*Gabrielle Gaustad*	
Committee	Energy	Corrosion & Environmental Effects	Refractory Metals & Materials	Biomaterials	Recycling and Environmental Technologies	
December	Theme: Materials: Past, Present, and Future		Manuscripts Due: August 1, 2015			Manuscripts Due: August 15, 2015
	TMS 2016 Annual Meeting preview issue					
Topic	Stability of Nanomaterials	Futuristic Nanomaterials and Composites	Nanomechanical Measurements in Harsh Environments	Aluminum: Cast Shop and Alloys	Archaeomaterials	
Guest Editor	*Marian Kennedy; guest eds. Brad Boyce and Suveen Mathaudhu*	*Muralidharan Paramsothy, Dirk Lehmhus, and James Njuguna*	*Peter Hosemann and Xiaodong Li*	*John Griffin*	*Vilupanur A. Ravi*	
Committee	Mechanical Behavior of Materials	Composite Materials	Nanomechanical Materials Behavior	Aluminum	Invited	