

# ASME Materials Division 2022 News

## MESSAGE FROM THE CHAIR



Min Zhou, Chair  
Materials Division (2021-22)  
Georgia Institute of  
Technology

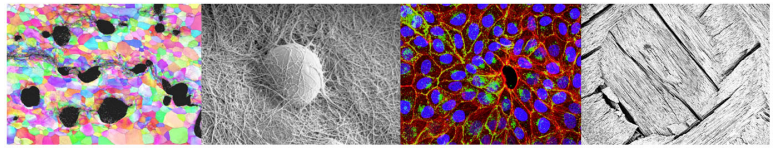
As my tenure as chair of Executive Committee (EC) of the ASME Materials Division comes to an end, I would like to use this opportunity to thank the other EC members for all the work they have done over the past year:

**Hareesh Tippur** (Vice Chair) from Auburn U. has chaired the Division Awards Committee, **Çağlar Oskay** (Program Chair) from Vanderbilt U. and **Hanqing Jiang** (Program Vice Chair) from Westlake U. in China have led the organization of the MD Track at IMECE 2022 (see list of symposia below), **Curt Bronkhorst** (EC Secretary) from the U. of Wisconsin, has kept the records of our meetings, and **Huck Beng Chew** (EC Member-at-Large) from the U. of Illinois has put together this newsletter. It has been a true pleasure to be part of that team over this past year.

I also would like to recognize the leaders of the MD Technical Committees for their contributions and service to the Materials Division and to the community. I would also like to thank organizers of the symposia at IMECE 2022.

The highlights of our activities during 2021-22 are described below.

**Materials Division Centennial Celebration Symposium.** This year marks a special year for our division, as we return to our first in-person IMECE since 2019, where we will be celebrating the 100<sup>th</sup> anniversary of the ASME Materials Division. We had hoped to celebrate this major milestone at IMECE 2020-2021, but we had to postpone the celebrations due to the virtual nature of the past two annual meetings. Still, better late than never! In addition to our regular events including plenary and award lectures at IMECE 2022, we will have a **Materials Division Centennial Celebration Symposium (MD-CCS) – Materials Past, Present, and Future**, which will feature four invited speakers, **Profs. Huajian Gao, John Rogers, Ellen Arruda, and Yonggang Huang**, who are all members of the National Academy of Engineering and the Division's past Nadai Medalists.



**IMECE 2022.** Through its Technical Committees, the Materials Division continues to play active roles in the organization of symposia and plenary lectures at the annual ASME International Mechanical Engineering Congress and Exposition (IMECE). In the IMECE 2022 MD-sponsored Track 3 entitled “**Advanced Materials: Design, Processing, Characterization and Applications**”, we are sponsoring/co-sponsoring 22 symposia with a total of 116 presentations/papers. The list of Track 3 symposia and symposium organizers is provided below.

We are also looking forward to the two MD-sponsored plenary lectures for Track 3 by Professor **Julia Greer**, from the Department of Applied Physics and Materials Science at Caltech, and Professor **Cate Brinson** from the Department of Mechanical Engineering and Materials Science at Duke University. The titles and abstracts of these two plenary talks are provided below. Please make sure to join us for these two plenary lectures.

**Awards:** Every year, the Materials Division conducts a rigorous nomination and evaluation process to select the most deserving candidate for the MD-sponsored societal and divisional awards. This year, the list of awardees is as follows:

Honorary Member: Professor **Tsu-Wei Chou**, University of Delaware

Nadai Medal: Professor **George Voyiadjis**, Louisiana State University

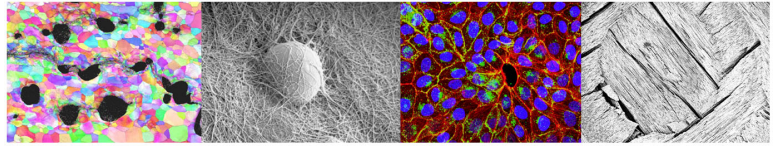
Sia Nemat-Nasser Early Career Award: Associate Professor **Ankit Srivastava**, Texas A&M University

Materials Division Centennial Mid-Career Award: Professor **Samantha Dally**, UC Santa Barbara

**Journals:** The Materials Division is sponsoring two ASME journals – the [\*Journal of Engineering Materials and Technology\*](#) (JEMT) and the [\*ASME Journal of Engineering and Science in Medical Diagnostics and Therapy\*](#) (JESMDT). Under the leadership of the current Editor-in-Chief **Mohammed Zikry** from North Carolina State University and a group of dedicated Associate Editors, JEMT continues to do very well. We are also proud to present the Orr Best Paper Award from JEMT to **Ala Qattawi, Muhammd Ali Ablat, Ala’aidin-Alafaghani, Jian-Qiao-Sun**, University of Toledo. The JESMDT, led by the founding Editor-in-Chief **Ahmed Al-Jumaily** from Auckland University of Technology, aims to bridge the gap between engineers and non-engineers and translate engineering knowledge into clinical applications to accelerate biomedical innovation, trial, and commercialization. Members are encouraged to submit their high-quality works to both journals. On behalf of the Executive Committee, I would like to thank Profs. **Zikry** and **Al-Jumaily** for their dedication and leadership.

**Technical Committees:** The Materials Division has eight Technical Committees who have been essential in organizing the many symposia in Track 3 at IMECE 2021. The list of MD Technical Committees and their leaders is provided at the end of this newsletter.

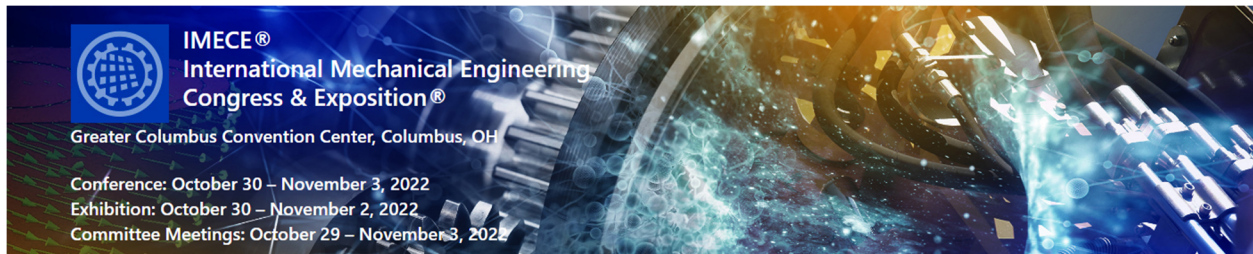
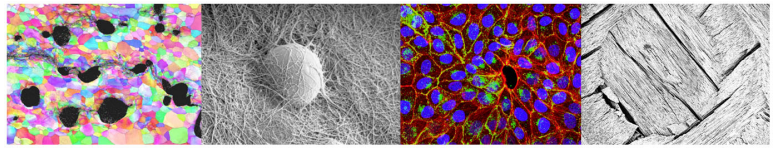
In closing, I would like to recognize and thank some individuals who contributed to the continued success of MD during the past year, and in particular **April Tone**, who is the Senior Manager, Technical & Engineering Communities (TEC) Operations at ASME and our key point of contact with the ASME Headquarters. I also would like to thank **Leila Persaud**, who, as Administrator of



Honors & Fellows at ASME, has been very helpful during the award process. Thanks also go to **Kim Williams**, who is Manager of Events Management, for working with us on our programs.

Professor **Hareesh Tippur** will take over as Chair of the MD Executive Committee after IMECE 2022. I am convinced that the Materials Division is in good hands under his leadership and that of the members of the Executive Committee. I wish them the very best.

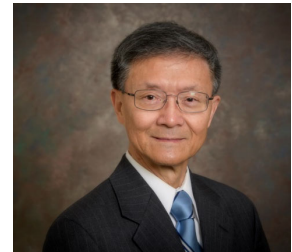
Min Zhou, Chair  
ASME Materials Division (2021-2022)



## 2022 Materials Division Awards Winners

**Honorary Member: Honorary Membership** is awarded for lifetime of service to engineering or related fields, and represents the second highest honor of ASME.

**Tsu-Wei Chou**, Pierre S. du Pont Chair of Engineering, University of Delaware, is recognized as a 2022 Honorary Member Awardee *for pioneering and seminal research accomplishments in functional composite materials for energy storage, electromagnetic wave interference shielding and 4D-printing, his contribution to mechanical engineering, mentoring of next-generation engineers, and sustained service to the international composite community.*



**Nadai Medalist:** The **Nadai Medal** is awarded in recognition of significant contributions and outstanding achievements which broaden the field of materials engineering.

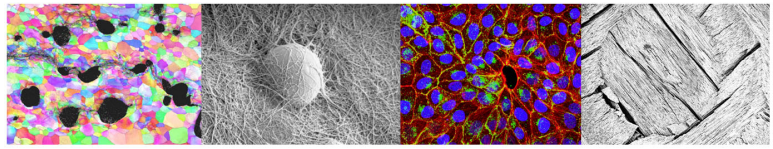
The 2022 Nadai Medalist is **George Voyiadjis**, Boyd Professor and Freeport-MacMoRan Endowed Chair in Engineering, Louisiana State University, *for his outstanding achievements in micro-mechanical characterization of plasticity and damage in materials, his pioneering contributions in multi-scale modeling and localization problems, and for this leadership role and service in materials at the National and International levels.*



Nadai Award Lecture: Gradient Enhanced Physically Based Plasticity with Size Effects: Crystal Plasticity to Gradient Continuum Plasticity

Tuesday, Nov. 1, 2022, 4:00 PM – 4:45 PM ET





**Sia Nemat-Nasser Early Career Awardee:** The Sia Nemat-Nasser Award is given to a researcher within 10 years of completing the terminal degree, working in experimental, computational, or theoretical mechanics and materials, with an emphasis on under-represented groups.

The 2022 Sia Nemat-Nasser Awardee is **Ankit Srivastava**, Associate Professor, Department of Materials Science and Engineering, Texas A&M University, *for innovative research on micro-mechanisms of deformation and failure of advanced structural materials, and enabling material design by synergistically combining the fundamental theories, small-scale experiments and microstructural mechanics.*



Sia Nemat-Nasser Early Career Award Lecture: Crystallographic Slipm Cracking and Kinking in Atomically Layered Ternary Carbides

Tuesday, Nov. 1, 2022, 3:00 PM – 3:30 PM ET

**Materials Division Centennial Mid-Career Awardee:** The Centennial Mid-Career Award is given to a researcher between 10 and 20 years of his/her terminal degree who has made impactful contributions in a technical area at the interface of materials and mechanics.

The 2022 Centennial Mid-Career Awardee is **Samantha Hayes Daly**, Professor of Mechanical Engineering, University of California at Santa Barbara *for contributions at the intersection of machine learning and the experimental mechanics of materials, enabling high-throughput experimentation and large-scale analysis of the interactions between the structure of solid materials and their deformation and failure.*



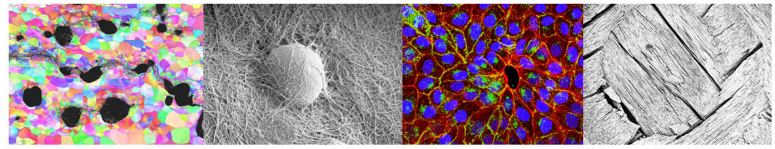
Centennial Mid-Career Award Lecture: Machine Learning for the Experimental Mechanics of Structural Materials

Tuesday, Nov. 1, 2022, 3:30 PM – 4:00 PM ET

**Materials Division Journal of Engineering Materials and Technology Orr Best Paper Award:** This award recognizes the best experimental, computational or theoretical paper published in the JEMT in the areas of fatigue, fracture, or creep. This year's award goes to **Ala Qattawi, Muhammd Ali Ablat, Ala'aidin-Alafaghani, Jian-Qiao-Sun** from the University of Toledo. The subject paper is Experimental Evaluation of Tension and Shear Responses of Material Discontinuities in Origami-Based Sheet Metal Bending, J. Eng. Mater. Technol. April 2022, 144(2): 021012. doi: <https://doi.org/10.1115/1.4053145>.



Ala Qattawi



## Materials Division Centennial Celebration Symposium at IMECE 2022

In celebration of the 100<sup>th</sup> anniversary of the ASME Materials Division, the Materials Division Centennial Celebration Symposium (CCS) will feature four invited speakers during IMECE 2022, to present their research on “Materials Past, Present, and Future”.

Monday, Oct. 31, 2022, 4:00 PM – 6:30 PM ET

### CCS Talk I: **From Mechanics of Materials to Mechanomaterials: a Perspective**

**Huajian Gao**, Distinguished University Professor, Nanyang Technological University; Scientific Director, Institute of High Performance Computing, A\*STAR

The classical subject of mechanics of materials has been extensively implemented in developing structural and functional materials, giving rise to recent advances in nanostructured materials, biomedical materials, mechanical metamaterials, soft actuators, flexible electronics, tunable mechanochromics, regenerative mechanomedicine, etc. While conventional mechanics of materials offers passive access to mechanical properties of materials in existing forms, a paradigm shift, referred to as mechanomaterials, is emerging toward proactive programming of materials’ property and functionality during the manufacturing process by leveraging the force–geometry–property relationships. Here, we provide a couple of recent examples that illustrate this emerging paradigm, which include the designs of fatigue resistant metals via a nanotwinned microstructure, deformable micro-/nanolattices and acellular epicardial patches for the treatment of myocardial infarction.

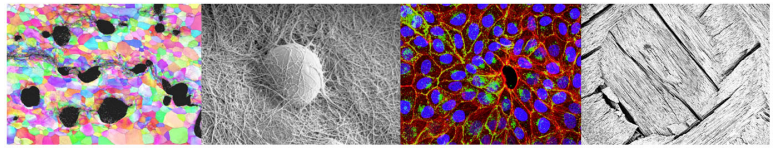


### CCS Talk II: **Mechanics, Materials and the Metaverse**

**John A. Rogers**, Louis Simpson and Kimberly Querrey Professor of Materials Science and Engineering, Biomedical Engineering and Medicine, Northwestern University

Advanced, immersive systems for virtual and augmented reality (VR/AR) promise to transform the way that we interact with computer-generated environments and, by extension, with one another. Although audio-visual aspects of VR/AR hardware are increasingly well developed, a frontier, underexplored opportunity is in the development of interfaces that add spatio-temporally controlled physical sensations to the VR/AR experience, where the skin, including but not limited to the fingertips, serves as the input interface. This talk introduces a collection of foundational ideas in mechanics and materials that build on work in skin-integrated electronics for health monitoring, to enable a unique, new class of technology for this purpose – thin, soft, lightweight sheets that





embed wirelessly controlled arrays of millimeter-scale vibro-haptic actuators, capable of gently laminating onto the skin at nearly any region of the body. These systems qualitatively expand the VR/AR interface through complex patterns of physical sensory inputs, time-coordinated with visual and auditory cues. The latest systems and examples in social media, medicine, rehabilitation, gaming, entertainment and navigation will be presented.

### CCS Talk III: **Full-Field Methods for Characterizing Soft Tissues**

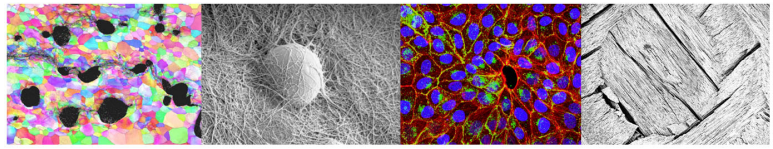
**Ellen M. Arruda**, Tim Manganello/BorgWarner Department Chair and Maria Comninou Collegiate Professor of Mechanical Engineering, University of Michigan

Soft tissues of the body such as ligaments and tendons tend to have irregular shapes and attachment sites to bones and muscles (entheses and myotendinous junctions). As a result, they deform heterogeneously throughout their volumes, and accurate computational modelling of their mechanical response requires the ability to access the full-volume, finite deformation maps under applied loads. Moreover, these full-volume deformation fields enable characterization of the non-linear, anisotropic response with a limited number of experiments, particularly when all components of the resulting strain tensor are non-zero and finite. We obtain full-field displacement data directly from the phase signal of the magnetic resonance imaging of soft materials such as the anterior cruciate ligament (ACL) of the knee and the supraspinatus tendon (rotator cuff) of the shoulder using a custom built in-situ loading apparatus. The in-situ MRI approach to understanding the mechanical properties of soft tissue is a finite deformation, full-volume technique. No contrast agents or other fiducial markers that could interfere with the mechanics of the tissue are needed for this method. We use these data with the applied traction boundary conditions and inverse computational methods to characterize the mechanical properties of the tissue. Two methods have been explored to do this, the virtual fields method in which the form of the constitutive model is chosen a priori, and the variational system identification method in which the form of the model is learned through an iterative process. Once the tissue is characterized we develop a finite element (FE) model of it to simulate the experiment and compare the predictive capability of our approach. The heterogeneous displacement fields throughout the interior of the ACL bundles demonstrate that uniform axial loading assumptions cannot be used in the characterization of these soft tissues. Full-field methods are needed and greatly enhance our ability to characterize the mechanics of soft tissues, a critical step on the path to computational models of joints (such as the knee) needed to predict injurious events.



### CCS Talk IV: **Mechanics-guided 3D Assembly of Complex Mesostructures and Functional Devices**

**Yonggang Huang**, Jan and Marcia Achenbach Professor, Northwestern University



A rapidly expanding research area involves the development of routes to complex 3D structures with feature sizes in the mesoscopic range (that is, between tens of nanometres and hundreds of micrometres). A goal is to establish methods to control the properties of materials systems and the function of devices constructed with them, not only through chemistry and morphology, but also through 3D architectures. However, existing approaches of 3D assembly/fabrication are only compatible with a narrow class of materials and/or 3D geometries. In this talk, I will introduce a mechanics-guided assembly approach that exploits controlled buckling for constructing complex 3D micro/nanostructures from patterned 2D micro/nanoscale precursors that can be easily formed using established semiconductor technologies. This approach applies to a very broad set of materials (e.g., semiconductors, polymers, metals, and ceramics) and even their heterogeneous integration, over a wide range of length scales (e.g., from 100 nm to 10 cm). To enrich the class of 3D geometries accessible to the proposed assembly approach, we devised a set of mechanics-driven design strategies, such as kirigami/origami designs of 2D precursors, heterogeneous substrate designs and loading-path controlled shape morphing strategies. I will also introduce a series of mechanics models for the direct postbuckling analysis, as well as inverse design methods that map target 3D topologies onto unknown 2D precursor patterns, which could provide an important theoretical foundation of the rational 3D assembly. The compatibility of the approach with the state-of-the-art fabrication/processing techniques, along with the versatile capabilities, allow transformation of diverse existing 2D microsystems into 3D configurations, providing unusual design options in the development of novel functional devices. I will demonstrate a few examples in this presentation, including biomedical devices conformally integrated with organoids/tissues/organs, 3D MEMS capable of efficient energy harvesting of low-frequency vibration, bioinspired electronic systems, and 3D microfluidic devices.



## Materials Division Plenary Lectures at IMECE 2022

The Materials Division will sponsor two plenary lectures during IMECE 2022. The plenary lectures feature two of the foremost experts in mechanics and materials.

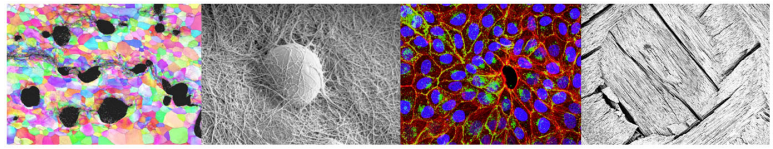
### Plenary Talk I: **Materials by Design: Three-Dimensional (3D) Nano-Architected Meta-Materials**

**Julia Greer**, Ruben F. and Donna Mettler Professor of Materials Science, Mechanics, and Medical Engineering, Caltech

Tuesday, Nov. 1, 2022, 9:15 AM - 10:00 AM ET

Creation of extremely strong and simultaneously ultra lightweight materials can be achieved by incorporating architecture into material design. Dominant properties of such meta-materials are





driven by their multi-scale nature: from characteristic microstructure (atoms) to individual constituents (nanometers) to structural components (microns) to overall architectures (millimeters+). To harness the beneficial properties of 3D nano-architected meta-materials, it is critical to assess their properties at each relevant scale while capturing overall structural complexity.



Our research is focused on design, synthesis, and characterization of nano-architected materials using nanofabrication and additive manufacturing (AM) techniques, as well as on investigating their stimulus-driven response as a function of architecture, constituent materials, and microstructure. These "meta-materials" exhibit superior and often tunable properties, i.e. resilience against impact, recoverability, failure suppression, anisotropic stiffness; nano-photonics response (PhCs); new electrochemical degrees of freedom (Li-ion batteries), and shape memory response (SMPs) at extremely low mass densities, as well as lend themselves to novel functionalities (hydrogel-enabled synthesis) which renders them useful and enabling in technological applications. We strive to uncover the synergy between atomic-level microstructure and nano-sized external dimensionality, where competing material- and structure-induced size effects drive overall response. My talk with focus on additive manufacturing via function-containing chemical synthesis to create nano- and micro-architected metals, ceramics, multifunctional metal oxides, and shape memory polymers, as well as demonstrate their potential in some real-use applications. I will describe how the choice of architecture, material, and external stimulus can elicit stimulus-responsive, reconfigurable, and multifunctional response.

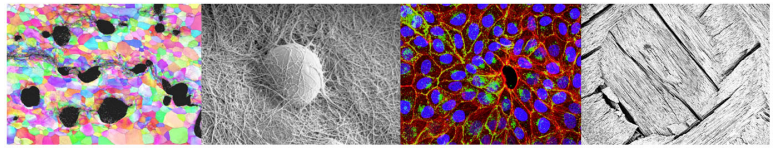
### Plenary Talk II: **Materials Data & Informatics: Curation, Frameworks, Access, and Potential for Discovery and Design**

**L. Cate Brinson**, Sharon C and Harold L Yoh III Professor of Engineering and Donald M Alstadt Department Chair of the Mechanical Engineering and Materials Science Department, Duke University

Wednesday, Nov. 2, 2022, 9:45 AM - 10:30 AM ET

With the advent of the materials genome initiative (MGI) in the United States and a similar focus on materials data around the world, numerous materials data resources and associated vocabularies, tools, and repositories have been developed. While the majority of these systems focus on slices of computational data with an emphasis on crystallographic materials, platforms for organic materials and their composites, especially those incorporating experimental data, have been quite limited. We will discuss the unique aspects of tackling data assembly and informatics associated with experimental organic materials data, with focus on our experiences creating an open-source data resource, NanoMine, part of MaterialsMine. Our goal has been to curate, annotate and store widely varying experimental data on polymer





nanocomposites (polymers doped with nanofiller) and providing access to characterization and analysis tools with the long-term objective of promoting facile nanocomposite design. The challenges and promises associated with data curation, ontology and vocabulary development, standardization and interoperability, and data visualization and analysis tools will be discussed. Several case studies will be presented, including use of natural language processing for archival data curation, coupling of experimental and computational data for materials design, and development of machine learning tools for rapid property screening and inference. Overall, we focus on the promise of this new approach to tackle materials design principles for the complex, high dimensional problems inherent in the multi-phase polymer space.

## Materials Division Track at IMECE 2022

The Division Track Program, shown below, is organized by **Çağlar Oskay** (Program Chair) and **Hanqing Jiang** (Program Vice Chair). Some Technical Committees have collaborated with the organizers from other Divisions to minimize replication of topics and maximize attendance. There are 22 symposia sponsored by the Division in Track 3: Advanced Materials: Design, Processing, Characterization and Applications, with 116 presentations.

We are very grateful to the considerable dedication of the organizers of the symposia sponsored by the Division, in Track 3 and others. Track 3 symposia and their organizers are recognized below:

### Track 3: Advanced Materials: Design, Processing, Characterization and Applications

#### 03-01-01: Mechanics of Penetration, Shockwaves, and High-Strain-Rate Events: Modeling and Experiments

Tuesday, November 1, 1:30 PM - 3:15 PM

**Session Chairs:** Andrew Bowman, William Lawrimore

#### 03-02-01: Modeling and Experimentation of Geomaterials

Tuesday, November 1, 3:30 PM - 5:15 PM

**Session Chairs:** Andrew Bowman, Joseph Anthony

#### 03-03-01: Integrated Computational Materials Engineering (ICME)

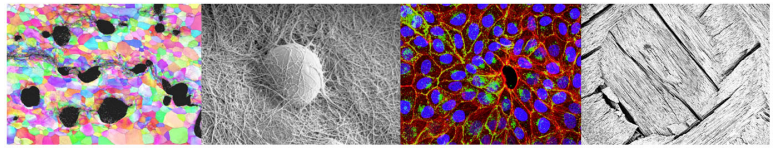
Tuesday, November 1, 10:15 AM - 12:00 PM

**Session Chairs:** George Z Voyiadjis, Andreas Robertson

#### 03-04-01: Modeling and Experiments in Nanomechanics and Nanomaterials

Wednesday, November 2, 10:45 AM - 12:30 PM

**Session Chairs:** Yumeng Li, Yozo Mikata



03-05-01: Design, Material Processing, and Applications of Polymer Composites

Monday, October 31, 10:45 AM - 12:30 PM

**Session Chairs:** Xueju Wang, Kedar Kirane

03-05-02: Design, Material Processing, and Applications of Epoxy Composites

Monday, October 31, 2:00 PM - 3:45 PM

**Session Chairs:** Kedar Kirane, Xueju Wang

03-05-03: Design, Material Processing, and Applications of Metal and Ceramic Composites

Monday, October 31, 4:00 PM - 5:45 PM

**Session Chairs:** Kedar Kirane, Xueju Wang

03-07-01: Material Processing of Flexible/Emerging Electronics, Sensors, and Devices I

Monday, October 31, 2:00 PM - 3:45 PM

**Session Chairs:** Xueju Wang, Bo Li

03-07-02: Material Processing and Mechanics of Flexible/Emerging Electronics, Sensors, and Devices II

Monday, October 31, 4:00 PM - 5:45 PM

**Session Chairs:** Bo Li, Xueju Wang

03-09-01: High Temperature Materials

Wednesday, November 2, 10:45 AM - 12:30 PM

**Session Chairs:** Anil Saigal, Xin Ning

03-09-02: Inverse Design of Metamaterials

Wednesday, November 2, 2:00 PM - 3:45 PM

**Session Chairs:** Feruza Amirkulova, Mohammadreza Yaghoobi

03-09-03: Design of Engineering Materials

Wednesday, November 2, 4:00 PM - 5:45 PM

**Session Chairs:** Sara Adibi, Andrew Gaynor

03-11-01: Manufacturing, Integration and Characterization of Multifunctional Structure and Devices

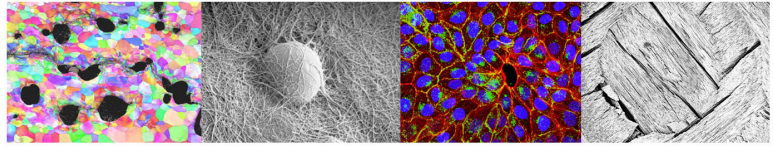
Tuesday, November 1, 3:30 PM - 5:15 PM

**Session Chairs:** Jon Ryu, Weiyi Lu

03-13-01: Multifunctional Electronics and Energy Devices

Monday, October 31, 2:00 PM - 3:45 PM

**Session Chairs:** Ling Liu, Jun Xu



03-15-01: Mechanics of Low Dimensional Materials

Monday, October 31, 10:45 AM - 12:30 PM

**Session Chairs:** Chenglin Wu, Mohammad Naraghi

03-18-01: Bio-inspired and biomedical materials and devices; General Topics

Tuesday, November 1, 10:15 AM - 12:00 PM

**Session Chairs:** Seyed Allameh, Baoxing Xu

03-20-01: Multifunctional and Architected Composites

Tuesday, November 1, 1:30 PM - 3:15 PM

**Session Chairs:** Weiyi Lu, Sha Yin

03-23-01: Dynamics of Advanced Functional Materials and Structures

Monday, October 31, 10:45 AM - 12:30 PM

**Session Chairs:** Xiang Gao, Chunhao Yuan

03-24-01: Nanoengineered, Nano Modified, Hierarchical, Multi-Scale Materials, and Structures

Wednesday, November 2, 2:00 PM - 3:45 PM

**Session Chairs:** Vishwas Jadhav, Ram Mohan, Yan Li

03-27-01: Materials Processing and Characterization - I

Tuesday, November 1, 10:15 AM - 12:00 PM

**Session Chairs:** Anil Saigal, Raghu Prakash

03-27-02: Materials Processing and Characterization - II

Tuesday, November 1, 1:30 PM - 3:15 PM

**Session Chairs:** Sridhar Santhanam, Raghu Prakash, Ram Mohan

03-27-03: Materials Processing and Characterization - III

Tuesday, November 1, 3:30 PM - 5:15 PM

**Session Chairs:** Raghu Prakash, Sridhar Santhanam

03-28-01: Joint Session on Recent Advances in Advanced Materials Processing and Tribology

Wednesday, November 2, 4:00 PM - 5:45 PM

**Session Chairs:** Majid Minary Jolandan, Ahsan Mian, Patricia Iglesias

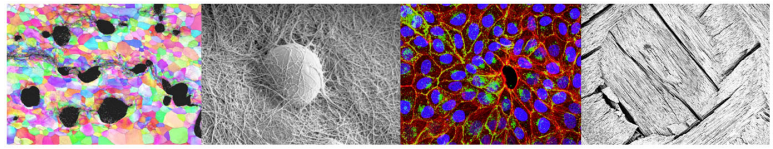
03-34-01: Nanomaterials for Energy

Monday, October 31, 4:00 PM - 5:45 PM

**Session Chairs:** Michael Pettes, Pei Dong, Mrityunjay Kothari

## Spotlights on Journals





## *ASME Journal of Engineering Materials and Technology (JEMT)*

**Mohammed A. Zikry**, Zan Prevoost Smith Distinguished Professor, North Carolina State University (USA), serves as the Editor-in-Chief of the **ASME Journal of Engineering Materials and Technology (JEMT)**.



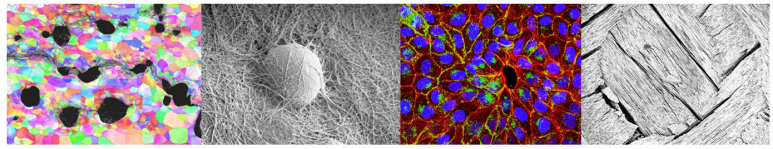
The scope of the journal covers a broad spectrum of issues regarding experimental, computational, and theoretical studies of mechanical properties of materials, as well as mechanics of materials issues in metals, polymers, ceramics, composites, biomaterials, and nanostructured materials. The journal's major objective is to continue to publish research of the highest quality and of lasting significance in areas related to engineering materials, mechanics of materials, and materials technology. The scope is broad, since it encompasses interdisciplinary research that spans fundamental knowledge, which is related to mechanics of materials, materials science, mathematics, and applied physics, and technological applications, which are related to engineering innovations and applications. The journal will include research articles, technical notes, book reviews, and special issues related to emerging areas. The acceptance rate for the journal is 15% for 2021 and demand for the journal remains strong, with issues already confirmed till the end of 2023. We had a Special Issue honoring Professor Zbib from Washington State University in January, which had a high number of downloads and citations. Hussein passed away recently, and the special issue honors his memory and contributions to plasticity, dislocation dynamics, and multiscale modeling. Hussein was also a past Editor in Chief of JEMT. If there are suggestions for special issues or editorials, please contact me. There will also be a Special Issue in 2023 celebrating the 50<sup>th</sup> Golden Jubilee of the Journal, which was founded in 1973.

I will be ending my second term officially in June 2023, at the end of my second five-year appointment. It has been an honor to serve the research community, the MD, and the ASME and to promote new fundamental scientific and engineering knowledge. Since, I have been Editor, the Impact factor of the Journal had increased by 155% to 1.713, and I look forward to its continued growth and visibility. This higher impact of the Journal is due to our talented past and current Associate Editors and their tireless dedication. I look also forward to working with the new Editor to continue to serve the research community.

As you can also see from our list below for Associate Editors on the website, we have a diverse and internationally recognized board from leading global researchers, as we extend the reach of JEMT to a worldwide audience. The journal is always looking for new Associate Editors who can contribute to the stated mission and aims of the journal.

The JEMT website can be found at:

<http://materialstechnology.asmedigitalcollection.asme.org/journal.aspx>



**Editorial Board of ASME Journal of Engineering Materials and Technology** (as of 12/2022)

**ASSOCIATE EDITORS**

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