Wenwu Xu, Ph.D.

Editorial Experience CV

Associate Professor of Mechanical Engineering, San Diego State University
wenwu.xu@sdsu.edu | Multiscale Modeling of Materials Lab | November 2026

Editorial experience includes specialty-section manuscript handling, journal advisory and board service, and the development of special issues and topical collections in computational materials science, materials processing, and manufacturing.

Journal appointments

Editorial Board Member, *Advanced Materials and Intelligent Manufacturing*

Accepted 26 November 2026 | Initial two-year term, renewable

Accepted the appointment to this official journal of Wuhan University of Technology, published by SciE Publishing. The invitation calls for supporting the journal's editorial activities and development. The start date and workload are pending confirmation. Journal information

Editorial Board Member and Academic Editor, *Materials*

September 2026–present | Materials Simulation and Design section | MDPI

Appointed for a renewable two-year term. Supports section development and serves as an Academic Editor for manuscripts within areas of expertise. Appointed in September 2026 and received the board certificate in November 2026. Publisher announcement

JOM Advisor, The Minerals, Metals & Materials Society

2025–present | Process Technology and Modeling Committee

Represents the committee in JOM editorial programming and develops technical topics. Led the July 2026 topic on field-assisted processing and recommended an Editor's Choice paper from the collection. TMS topic record

Associate Editor, *Frontiers in Materials*

April 2023–present | Computational Materials Science section | Frontiers

Handles manuscripts in computational materials science and coordinates peer review. Published editor credits include a 2025 article on defect localization in carbon-fiber-reinforced composites using finite element modeling and graph neural networks. Example handling-editor credit

Editorial awards

2026 Springer Nature Editor of Distinction Awards, JOM. Editorial Contribution Award, top 20% for manuscripts sent to peer review. Author Service Award, top 20% for time to first decision.

Guest editorships and special collections

Lead Guest Editor, *JOM*

2025–2026 | Published July 2026

Emerging Field-Assisted Processing for Advanced Materials. Led the TMS Process Technology and Modeling Committee–sponsored topic with co-guest editors Wei Huang and Vipul Gupta. The topic focused on using external fields to control processing, microstructure, and material properties. Published 24 papers in JOM 78(7). TMS topic record and published issue.

Lead Guest Editor, *Integrating Materials and Manufacturing Innovation*

2025–2026 | 2026 topical collection | TMS and Springer Nature

Artificial Intelligence Applications in Integrated Computational Materials Engineering (AI-ICME). Developed the collection with Vikas Tomar (Purdue University) and Avanish Mishra (Los Alamos National Laboratory) in conjunction with the TMS 2026 symposium. Solicited contributions on AI-enabled materials modeling, informatics, and process–structure–property relationships. Springer Nature collection

Co-Guest Editor, *JOM*

2024–2025 | Planned for January 2026 | Topic canceled

Advancements in Characterization and Modeling of Nuclear Materials. Appointed with lead guest editor Md Ali Muntaha and co-guest editors Arya Chatterjee and Janelle Wharry. Jointly sponsored by the TMS Nuclear Materials and Process Technology and Modeling committees. TMS records the appointment and cancellation. TMS topic record

Lead Topic Editor, *Frontiers in Materials*

2023–2024 | Published Research Topic

Modeling and Experimentation of Imperfections in Materials. Led the Research Topic with Chu Lun Alex Leung, Massoud Malaki, Enyu Guo, Yang Yang, and James M. Goff. The collection brought together four research contributions on defect modeling and characterization. First and corresponding author of the accompanying editorial, Frontiers in Materials 11, 1473420 (2024). Research Topic and editorial DOI.

Lead Guest Editor, *Crystals*

2021–2023 | Published special issue | MDPI

Nanocrystalline Bulk Materials at Multiple Scales. Edited with Fawei Tang and Massoud Malaki. The issue covered synthesis, characterization, deformation, and interface effects in bulk nanocrystalline materials. The submission deadline was 16 December 2022, and the collection published four papers. Special issue

Co-Guest Editor, *Advances in Mechanical Engineering*

2018–2019 | Sage special collection

Theoretical and Experimental Advances of Complex Fluid Flow in Mechanical Engineering. Worked with lead guest editor Yuning Zhang (North China Electric Power University) and co-guest editors Xiaoxiao Han, Qi Min, Dan Gao, and Yuning Zhang (China University of Petroleum, Beijing). The call included cavitation, turbulence, flow measurement, and numerical modeling. Submission deadline 31 December 2018. Sage call for papers

Proceedings editorship

Proceedings Editor, TMS 2027 Annual Meeting & Exhibition

2026–2027 | Supplemental proceedings | In progress

Field-Assisted Material Processing and Solidification. Editorial work began in 2026 for the symposium's proceedings contributions, including coordinating manuscript review and revisions. TMS symposium program

Journal peer review

2017–present. Invited reviewer for more than 25 journals, including Acta Materialia, Computational Materials Science, Journal of the American Chemical Society, Journal of Materials Science, JOM, Materials, Metals, Ultrasonics Sonochemistry, and Ceramics International.