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MSEC 2025 SYMPOSIUM CALL FOR PAPERS

Technical Chairs:

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This final list of symposia is approved by the ASME MED Committee.

MSEC 2025 invites ALL high-quality advanced manufacturing research papers, even if they may not directly fit into one of these symposia. We ask authors to find the closest related symposium to place papers into. Technical Chairs and the Symposium Organizers will coordinate review of these submitted papers.

Key Dates

- Abstract submission (abstract must be submitted before uploading paper): November 4, 2024
- Full manuscript submission deadline: November 12, 2024
- Submission of revised papers for review: March 3, 2025
- Notification of acceptance of revised papers: March 17, 2025
- Copyright transfer form submission deadline: March 28, 2025
- Final revised manuscript submission deadline: March 31, 2025
- Presenting author registration deadline: April 10, 2025

Submissions will only be accepted via the ASME website: https://event.asme.org/MSEC/. No papers may be submitted to the organizers by email.

MSEC 2025 Paper Types

The following paper types may be submitted to any symposium in response to this call:

Full Papers

Full papers undergo full peer review and are published in the conference proceedings. A full paper is <u>7-10 pages</u> long. It reports technically original research that is of major and archival value to the manufacturing community. An accepted full paper is accompanied by a 25-minute oral presentation (including Q&A) at the conference. A full paper is eligible for the best paper award and, if deemed to be of journal quality, may be channeled to an appropriate ASME journal for fast-tracked review and publication.

Brief Papers

Brief papers undergo full peer review and are published in the conference proceedings, in the same manner as full papers. A brief paper is <u>4-5 pages</u> long. It reports technically original research that is of significant and archival value to the engineering community. A brief paper may contain preliminary work that has not yet been fully developed. An accepted brief paper is accompanied by a 15-minute oral presentation (including Q&A) at the conference and a poster presentation during the poster session. The expectation is that the authors will use the oral and poster presentations of a brief paper as an opportunity to get feedback from the engineering community leading to a full-length conference or journal paper in the near future. A brief paper is NOT eligible for the best paper award nor can it be fast-tracked for journal publication. However, the accompanying poster is eligible for the best poster award.

Presentation-only Papers

Presentation-only papers require only an abstract submission. They do not undergo peer review and are not published in the proceedings. A journal paper published in the ASME Journal of Manufacturing Science and Engineering or the ASME Journal of Micro and Nano Manufacturing between March 2024 and February 2025 may be submitted as a presentation-only paper by its corresponding author. A presentation-only paper may also be submitted by industry participants, if all the co-authors of the paper are from industry. An accepted presentation-only paper is accompanied by a 15-minute oral presentation (including Q&A) and an optional poster presentation during the poster session. A presentation-only paper is NOT eligible for the best paper award nor can it be fast-tracked for journal publication. However, the accompanying poster (where applicable) is eligible for the best poster award.

Note that there are <u>separate templates</u> to submit full and brief papers, and posters. Visit https://msec.secure-platform.com/a/page/author resources/information and templates for more information about the paper types and to download the appropriate templates.

— Call for Papers —

A Symposium on

Advances in Clean Energy and E-Mobility Manufacturing

Sponsored by the ASME Manufacturing Engineering Division's

Manufacturing Processes Technical Committee

2025 ASME International Manufacturing Science & Engineering Conference (MSEC)

June 23rd – June 27th, 2025

Greenville, South Carolina, USA

Hosted by the Clemson University

Technical Focus

Carbon neutrality is a major driving force for the development of renewable clean energy, e.g., batteries, fuel cells, solar cells, wind, hydropower, nuclear, etc., to replace the traditional fossil fuel and petroleum-based energy. Electro-mobility has become a world-wide recognized definition related to the use of electric energy to propel several types of vehicles: from motorcycles to cars, from scooters to buses. The introduction of clean energy (batteries and/or fuel cells) in modern vehicles has determined the rapid adoption of dedicated manufacturing processes that should be able to deal with massive production, low waste and high flexibility to face the continuous improvements characterizing this new disruptive industrial scenario. The manufacturing aspect for clean energy attracts increasing attention since the manufacturing cost, waste and carbon emissions play a significant role in the adoption of clean energy. This symposium focuses on research advances concerning manufacturing processes to produce clean energy and related components in electro-mobility and other decarbonization applications. Specific topics of interest include, but are not limited to:

- Novel manufacturing technologies and methods for clean energy.
- Joining, cutting, and texturing for production of battery electrodes, cells, and packs.
- Additive manufacturing processes for production of advanced housings and highly electro-conductive materials.
- Manufacturing process and system design and optimization.
- In-situ monitoring and sensing the manufacturing process for clean energy.
- Computational modeling and simulation for manufacturing process of clean energy.
- Artificial intelligence in clean energy manufacturing.
- Manufacturing equipment, facility, and infrastructure for clean energy.
- Sustainability and scalability of manufacturing technologies.

Paper Submission (Dates are subject to change)

Submission of abstract for review (mandatory)	November 4, 2024
Submission of full manuscripts for review	
Submission of revised papers for review	March 3, 2025
Notification of acceptance for revised papers	
Submission of Copyright Form	March 28, 2025
Submission of final paper	

- Submissions will only beaccepted via the conference website: https://event.asme.org/MSEC/.
- No papers are to be submitted to the organizers.
- Only industry presenters are allowed to present without a paper.
- The presenting author must <u>register</u> by April 10, 2025 or the paper will be withdrawn from the conference proceedings.
- High quality MSEC 2025 papers will be channeled to an ASME journal for fast-tracked review and publication.
 Accepted papers can be submitted for review to any ASME journal, such as the prestigious ASME Journal of ManufacturingScience and Engineering or the ASME Journal of Micro and Nano Manufacturing.

Additional Symposium Activities

To highlight advancements in this technical area, symposium organizers will:

- Work to attract a high-profile international keynote speaker.
- Work to attract the members in clean energy and E-Mobility manufacturing to broaden the manufacturing community.

Organizers

- Dr. Alessandro Ascari, University of Bologna, Bologna, Italy; a.ascari@unibo.it
- Dr. Lei Chen, University of Michigan-Dearborn, Dearborn, MI, USA. 313-593-5122; leichn@umich.edu
- Dr. Jianlin Li, Argonne National Laboratory, Lemont, IL, USA. 630-252-4051; jianlin.li@anl.gov
- Dr. Erica Liverani, University of Bologna, Bologna, Italy; erica.liverani2@unibo.it
- Dr. Wayne Cai, General Motors, Warren, MI, USA. 248-807-3949; wayne.cai@gm.com

The conference is collocated with NAMRI/SME's 53nd North American Manufacturing Research Conference (NAMRC53), which will have a separate call-for-papers. Please note that submission of the same paper to more than one conference is not permitted.