

— **Call for Papers** —
A Symposium on
Additive Manufacturing of Ceramics, Concretes, and Composites

Sponsored by the ASME Manufacturing Engineering Division's
Manufacturing Processes Technical Committee
2020 ASME International Manufacturing Science and Engineering Conference (MSEC)*
June 22 – 26, 2020
Cincinnati, Ohio
Hosted by the University of Cincinnati, College of Engineering and Applied Science

Technical Focus

The popularity of additive manufacturing of ceramics, concretes, and composites has gained a lot of impetus in recent years. These important engineering materials can significantly enrich the palette of additive manufacturing. Compared with metals and polymers, ceramics, concretes, and composites are usually more difficult to process due to their high melting point, complex chemistry, or multiple constituent phases. This symposium will focus on the research advances on additive manufacturing of ceramics, concretes, and composites. Specific topics of interest include, but are not limited to:

- Modeling and simulation related to additive manufacturing of ceramics, concretes, and composites
- Material design for additive manufacturing of ceramics, concretes, and composites
- Feedstock material preparation for additive manufacturing of ceramics, concretes, and composites
- Innovative additive manufacturing processes for ceramics, concretes, and composites
- Process optimization for additive manufacturing of ceramics, concretes, and composites
- Process monitoring and control for additive manufacturing of ceramics, concretes, and composites
- Microstructural characterization of additively manufactured ceramics, concretes, and composites
- Heat treatment of additively manufactured ceramics, concretes, and composites
- Surface finishing of additively manufactured ceramics, concretes, and composites
- Properties of additively manufactured ceramics, concretes, and composites
- Emerging applications of additively manufactured ceramics, concretes, and composites
- Sustainability and life cycle analysis of additively manufactured ceramics, concretes, and composites

Paper Submission

Authors are encouraged to submit an abstract and full manuscript for review by **November 15, 2019** via the conference website. Final revised manuscripts must be submitted by **March 26, 2020**. The copyright transfer form must be filled out by March 19, 2020 and the presenting author must pre-register by **April 15, 2020** or the paper will be withdrawn from the conference. **No papers are to be submitted to the organizers; submissions will only be accepted via the conference website at <https://event.asme.org/MSEC/>.**

All papers accepted by MSEC2020 can be further submitted to any ASME journals, such as the highly prestigious Journal of Manufacturing Science and Engineering, for consideration of archival publication. In addition, high quality MSEC2020 papers will be automatically channeled to relevant ASME journals for fast-tracked publications.

Additional Symposium Activities

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

- Work to attract a high profile international keynote speaker
- Organize a special issue in the ASME Journal of Manufacturing Science and Engineering
- Organize a state-of-the-art paper that will be the lead article in the special issue

Organizers:

Chao Ma, Assistant Professor, Texas A&M University, College Station, TX. (979) 458-4509, cma@tamu.edu.
Weilong Cong, Assistant Professor, Texas Tech University, Lubbock, TX. (806) 834-6178, weilong.cong@ttu.edu.
Xuan Song, Assistant Professor, University of Iowa, Iowa City, IA. (319) 335-5680, xuan-song@uiowa.edu

* The conference is collocated with NAMRI/SME's 48th North American Manufacturing Research Conference (NAMRC48) and LEM&P (Leading Edge Manufacturing / Materials and Processing) by The Japan Society of Mechanical Engineers (JSME), which will have a separate call-for-papers. Please note that submissions of the same paper to more than one conferences are not permitted.