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**TMS 2020**

**149<sup>th</sup> Annual Meeting & Exhibition**

February 23-27, 2020 • San Diego, California, USA



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## Special Topic

# Expanding the Boundaries of Materials Science: Unconventional Collaborations

As the demands on modern materials continue to intensify, the field of materials science must advance beyond its traditional capabilities and limitations. One way researchers are working toward this is by re-visiting classical problems in materials science from a new perspective through the lens of interdisciplinary collaboration.

Talks will feature examples of how significant materials advancement has resulted from collaboration with physicists, statisticians, computer scientists, chemists, and other disciplines. Speakers will include academic researchers who have successfully contributed to interdisciplinary research which has led to new routes for materials characterization and data processing, thereby expanding the boundaries of how we do research today. It will showcase successful advancements made through effective integration between modeling, computing and experimental groups, allowing development of high-throughput methods to accelerate materials discovery and development. A panel presentation featuring collaborative researchers will elucidate best practices on effective communication and strategies for making the most out of interdisciplinary research collaborations.

Solicited topics include:

- Unconventional and cross-disciplinary research from fields including but not limited to data science, informatics, genomics, cognitive science, public health, statistics, environmental engineering, geology, planetary science
- Scope and potential impact of interdisciplinary collaborations towards advancing materials discovery, development, and deployment
- Analytical techniques and methods from other disciplines and potential ways they can be applied to aspects of materials science
- Effective strategies for overcoming challenges in communication between professionals from disparate fields

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Abstract Deadline is July 1, 2019. Submit online at  
[www.programmaster.org/TMS2020](http://www.programmaster.org/TMS2020).

Questions?  
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