



MS0501 Computational Geomechanics EMI/PMC 2024

Organizers: Qiushi Chen (Clemson University); Craig Foster (University of Illinois at Chicago); Xiaoyu Song (University of Florida); Shabnam Semnani (University of California San Diego); Fushen Liu (Zhejiang University); Ronaldo Borja (Stanford University)

This mini-symposium will provide a forum for presentations and discussions of the state-of-the-art and state-of-the-practice in computational geomechanics. Topics of interest include but are not limited to (1) development, implementation, and validation of advanced constitutive models in geomechanics; (2) particle-based numerical methods (DEM, MD, etc.); (3) computational models and algorithms for multiscale and multiphysics problems; (4) numerical modeling of fracture, damage, and fragmentation processes in geomaterials; (5) local/nonlocal theories and models (mesh-based and mesh-free); (6) applications and case studies of numerical methods in geo-energy and earthquake engineering; (7) validation and verification of numerical models and algorithms in geomechanics; (8) deep learning and data-driven approaches in geomechanics; (9) new challenges and opportunities (geomechanics in extraterrestrial exploration, nature-inspired geomechanics, metamaterials, etc.).

Abstract Submission:

Deadline: **December 31, 2023**

Link: <https://submissions.emi-pmc2024.org/>

Conference Information:

Engineering Mechanics Institute Conference and Probabilistic Mechanics & Reliability
Conference (EMI/PMC 2024)

Chicago, Illinois | May 28-31, 2024

<https://www.emi-conference.org/>