

SPRING 2024

MSE 690 SEMINAR SERIES

MSEGS NATIONAL LAB PANEL

FRIDAY, APRIL 12TH | 3:30 SEMINAR | VIA ZOOM



Baishaki Bose

Dr. Baishakhi Bose is currently a Postdoctoral Scholar at Lawrence Berkeley Laboratory. Her current research is on life cycle and technoeconomic analysis of plastic recycling processes and bio-based building materials. She is passionate about teaching and mentoring, and is a Teaching Scholar and Lab Ambassador of the K-12 program at LBNL, where she helps with curriculum development and hosting events for K-12 students, in addition to being the chair of Empowerment Committee of Women's Support and Empowerment Council at LBNL.



Brenden Hamilton

Dr. Brenden Hamilton is a Staff Scientist in the Physics and Chemistry of Materials Group (T-1) in Theoretical Division at Los Alamos National Laboratory and was most recently a Director's Postdoctoral Fellow at LANL. His work involves simulating and assessing dynamic phenomena at the nanoscale for a variety of materials such as high explosives, polymers, and high strength metal alloys, typically assessing these materials at ultra-high strain rates. Additionally, his role at the lab involves directly interfacing with experimental and continuum modeling efforts with significant interplay with the machine learning community. His research interests involve learning the underlying, governing dynamics of extreme conditions materials processes in order to inform experimental design and parametrize engineering models.



Swapnil Morankar

Dr. Swapnil Morankar is a postdoctoral researcher in the Advanced Characterization and Post-irradiation Examination Division at the Idaho National Laboratory. His research focuses on the three-dimensional characterization of nuclear materials using X-ray microscopy, including structural materials and nuclear fuels. Dr. Morankar completed his Ph.D. in Prof. Nikhilesh Chawla's group at Purdue University.



Hannah Fowler

Dr. Hannah Fowler attended Purdue for both her undergraduate and PhD degrees in materials science engineering. During undergraduate at Purdue, she participated in undergraduate research and Engineers without Borders before beginning her work with Carol Handwerker and John Blendell during senior design. Hannah went on to pursue her PhD with Professor Handwerker and Professor Blendell through the study of low temperature solder alloy design and investigating the effects of antimony and silver additions to eutectic Sn-Bi solders. Hannah graduated from Purdue with her PhD in August 2023 and has been working at Sandia National Laboratories in Albuquerque, New Mexico ever since. In the Metallurgy and Materials Joining group at Sandia, she works on solder alloys, electronics packaging, and the joining of dissimilar materials as well as supporting the manufacturing and production arm of Sandia.