



CENTER FOR INTELLIGENT
MULTIFUNCTIONAL MATERIALS
& STRUCTURES
TEXAS A&M ENGINEERING EXPERIMENT STATION



MATERIALS SCIENCE
& ENGINEERING
TEXAS A&M UNIVERSITY



TEXAS A&M
UNIVERSITY

Summer School on Computational Materials Science Across Scales College Station, Texas, USA July 23rd - August 4th, 2023

The 12th Summer School on Computational Materials Science, CMS³, will take place on the Texas A&M University campus in College Station, Texas and will also be offered online. It is organized by the Center for intelligent Multifunctional Materials and Structures (CiMMS), Department of Materials Science & Engineering (MSEN), Data-enabled Discovery and Design of Energy Materials program at Texas A&M University (D³EM), Laboratory for Molecular Simulation (LMS), and High Performance Research Computing (HPRC) facility.

Purpose: To provide a platform for knowledge exchange and for academics as well as training for graduate students interested in the area of Computational Materials Science across multiple scales of space and time.

Objectives: At the end of this course, attendees should have a thorough overview of some of the most important tools currently in use to investigate materials phenomena at multiple scales, ranging from the continuum to the electronic structure level.

Structure: The School is organized in thematic sessions focused on different computational techniques. The themes will be organized in a bottom-up manner, starting with simulation tools at the atomistic (Module 1), mesoscale (Module 2) and continuum (Module 3), with a final integrative module on informatics/data Science (Module 4). The **final program** will be updated on the website by **March 30th**, but it is expected to be very similar and with the same set of instructors as previous editions, found at the CMS³ website for last year's edition. The course duration will be 10 days over two weeks. Morning sessions will consist of an overview of the method, with the afternoon sessions **dedicated to hands-on** computational laboratory activities.

Who should attend: The course should appeal to graduate students in the broader field of materials science with an interest in learning more about computational materials science.

This year the course will be offered on-site and remotely: For on-site participation, please bring your own laptop. You may choose your own preference in the application form. While for remote participation, good internet connection is required.

Financial Support: A limited number of fellowships will be made available to qualified applicants, as follows:

International participants:	Registration fee + Accommodation
Domestic non-TAMU participants:	Registration fee + Limited travel & Accommodation
Domestic TAMU participants:	Registration fee

Standard Registration Fee: Academic: \$500.00 Industry: \$1,000 per module.

How to Apply: Please visit <http://cms3.tamu.edu>

Deadline: April 15th, 2023.

(TAMU students should apply by April 1st 2023)

Contact Information: Shelly L. Harms (slharms@tamu.edu)

Main Organizers: Amine Benzerga (benzerga@tamu.edu), Raymundo Arróyave (arroyave@tamu.edu), Ankit Srivastava (Ankit.sri@tamu.edu), Xiaofeng Qian (feng@tamu.edu), Lisa Perez (perez@tamu.edu), Honggao Liu (honggao@tamu.edu), Darren Hartl (darren.hartl@tamu.edu), Aitor Cruzado (aitor.cruzado@tamu.edu).

Support is generously provided by the National Science Foundation under Grant No. OAC-1829799: *CyberTraining: CIC: The Texas A&M University Computational Materials Science Summer School (CMS3)*, as well as CIMMS, D³EM and TAMU-MSEN.