International Institute for Materials for Energy Conversion IIMEC | TEES | CENTER FOR INTELLIGENT MULTIFUNCTIONAL MATERIALS & STRUCTURES, TEXAS A&M ENGINEERING EXPERIMENT STATION | NSF | TEXAS A&M UNIVERSITY

# Summer School on Computational Materials Science Across Scales

**College Station, Texas, USA**

**July 18-29, 2016**

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## Program Schedule

***Sunday – July 17, 2016***

6:00 PM – Welcome Reception Meet & Greet – Activity Center, Gardens Apartments (250 Calvin Moore Ave)

***Monday - July 18, 2016***

*Classes will be held in Room 202 of the Reed-McDonald Building*

8:30 AM – Introduction to the IIMEC Summer School

9:00 AM – Fodil Meraghni/Dimitris Lagoudas (ENSAM - ARTS ET METIERS ParisTech/Texas A&M University): Micromechanics of Heterogeneous Solids

12:45 PM – Lunch

*Instructional Labs will be held in Room 2109 of the Chemistry Building-Chan Wing*

2:00 PM – Instructional Lab

***Tuesday - July 19, 2016***

8:30 AM – Pedro Rivera/Raymundo Arroyave (University of Cambridge, UK/Texas A&M University): Computational Thermodynamics/Kinetics

12:45 PM – Lunch

2:00 PM – Instructional Lab

***Wednesday – July 20, 2016***

8:30 AM – Jacques Besson/Amine Benzerga (MINES ParisTech/Texas A&M University): Micromechanics of Fracture

12:45 PM – Lunch

2:00 PM – Instructional Lab

***Thursday – July 21, 2016***

8:30 AM – Jon Guyer (National Institute of Standards and Technology, USA): Phase Field Method

12:45 PM – Lunch

2:00 PM – Instructional Lab

***Friday – July 22, 2016***

8:30 AM – Moono Rhee (Lawrence Livermore National Laboratory, USA): Discrete Dislocation Dynamics
12:45 PM – Lunch
2:00 PM – Instructional Lab
6:00 PM – Sponsored dinner for participants and instructors – Razzoo's Cajun Cafe

***Saturday – July 23, 2016***

Day trip to NASA Johnson Space Center in Houston, Texas, for interested participants ($25/person)

***Monday, July 25, 2016***

8:30 AM – Anter El-Azab (Purdue University, USA): Continuum Dislocation Dynamics
12:45 PM – Lunch
2:00 PM – Instructional Lab

***Tuesday - July 26, 2016***

8:30 AM – Tahir Cagin (Texas A&M University, USA): Molecular Dynamics
12:45 PM – Lunch
2:00 PM – Instructional Lab

***Wednesday - July 27, 2016***

8:30 AM – David McDowell (Georgia Institute of Technology, USA): Basis for MD Simulations of Nanoscale Mechanisms and Nanostructured Materials/ Fundamentals of Multiscaling and Coarse Graining Methods
12:45 PM – Lunch
2:00 PM – Instructional Lab

***Thursday - July 28, 2016***

*Students will spend the day in the lab to revisit the practical of their choosing for additional practice*
8:30 AM – Lab time
12:15 PM – Group Photo (steps of the J.K. Williams Admin Bldg.)
12:45 PM – Lunch
2:00 PM – Lab time

***Friday - July 29, 2016***

8:30 AM – Peter Entel (University of Duisburg-Essen, Germany): Quantum Mechanics

12:45 PM – Lunch

2:00 PM – Instructional Lab

6:00 PM – Sponsored dinner for participants and instructors – Paolo's Italian Kitchen