INTERNATIONAL CONFERENCE ON MARTENSITIC TRANSFORMATIONS

"Martensite by Design"

July 9-14, 2017

Chicago, Illinois, USA

The next ICOMAT meeting will be hosted by the Chicago-based CHiMaD (*Center for Hierarchical Materials Design*) in metropolitan downtown Chicago. Located on the shores of Lake Michigan in the heart of the Great Lakes Region of North America, the city of Chicago is truly the epitome of the "melting pot" reputation of the USA. This is evidenced by a diverse array of cultural, economic, and social experiences that draw tourism, science and technology, arts, and music to its streets year-round. The "*Chicago School*" represents a unique tradition of innovation across many fields, notably materials, as the birthplace of Materials Science in the 1950s and Materials Design in the 1990s. With the US Materials Genome Initiative (MGI) in full swing by a White House mandate, the next ICOMAT meeting will be organized around the central theme of **Martensite by Design**. Symposia will include design for microstructures, properties, advanced manufacturing, and performance.

Confirmed Speakers

Charles J. Kuehmann, *SpaceX/Tesla*
Pedro Rivera, *University of Cambridge*
Wenzheng Zhang, *Tsinghua University*
Thomas Antretter, *University of Leoben*
Alexander Zhilyaev, *Russian Academy of Science*
Valery Levitas, *Iowa State University*
John Speer, *Colorado School of Mines*
Yuji Sutou, *Tohoku University*
Xiaobing Ren, *NIMS*
James Monroe, *TAMU*
Waltraud M. Kriven, *University of Illinois at Urbana-Champaign*
Long-Qing Chen, *Penn State University*
Kaushik Bhattacharya, *Caltech*
Alexander Roytburd, *University of Maryland*
Marc DeGraef, *Carnegie Mellon University*
Shigekazu Morito, *Shimane University*
Antoni Planes, *University of Barcelona*
Yasukazu Murakami, *Kyushu University*
Jan Van Humbeeck, *Catholic University of Leuven*
Eckhard Quandt, *Christian Albrechts University, Kiel*
Tom Duerig, *Confluent Medical Technologies*
Hanus Seiner, *Czech Academy of Sciences*
Ibrahim Karaman, *TAMU*
Annika Borgenstam, *KTH Royal Institute of Technology*
Dana Frankel, *QuesTek Innovations LLC*
George Krauss, *Colorado School of Mines*
Turab Lookman, *Los Alamos National Lab*

Important Dates

January 18th, 2017	*Abstracts Accepted*
	Registration Opens
May 1st, 2017	*Final Announcement*
July 9th, 2017	*Conference Opens*

Abstract Topics

1. Theory & Methods for Martensite Design
2. Interactions of Phase Transformations and Plasticity
3. Quenching and Partitioning of Martensite and Other Advancements in Steels
4. Novel Shape Memory Alloys
5. Novel Functional Behaviors: Beyond Shape Memory Effect & Superelasticity
6. Martensitic Transformations in Non-Metallic Materials
7. Size Effects in Martensitic Transformations
8. Advanced Characterization of Martensite-3D & High Resolution
9. Quasimartensitic Modulations
10. Advanced Processing Techniques: Additive, Porous, and Others
11. Engineering Applications and Devices
12. MSMnet: Magnetomechanics of Magnetic Shape Memory Alloys

Email: icomat2017@northwestern.edu | Website: icomat2017.northwestern.edu
Abstract Submission: www.programmaster.org/icomat2017