



LAS DISTINGUISHED CHAIR IN THE NATURAL SCIENCES

IN THE DEPARTMENTS OF
PHYSICS & CHEMISTRY

Russell J. Hemley

Russell J. Hemley received his B.A. from Wesleyan University, and M.A. and Ph.D. from Harvard University, all in chemistry. Previously, he worked at the Carnegie Institution, and has held positions at Lawrence Livermore National Laboratory, Cornell University, and George Washington University. He is a Member of the National Academy of Sciences, Fellow of the American Academy of Arts and Sciences, Corresponding Fellow of the Royal Society of Edinburgh, Honoris Causa Professor of the Russian Academy of Sciences, and is a recipient of the Balzan Prize and Percy W. Bridgman Award, among other honors. He is also a member (and former chair) of the JASON Advisory Group. He has authored approximately 650 scientific publications.

Professor Hemley explores the nature of materials under extreme pressure and temperature environments. His lecture will describe how these extreme conditions can profoundly alter the structure, bonding, and electronic character of atoms and molecules, molding matter to make new materials. Recent studies of a broad range of materials, from hydrogen – the simplest and most abundant element in the cosmos – to more complex systems, have uncovered a variety of transformations when subjected to both static and dynamic compression. The results are leading to altogether new structures, electronic and magnetic phenomena, with implications for fundamental physics and chemistry; new materials technologies; earth, planetary science, and astrophysics; and at more modest conditions even biology.

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The New World of Materials in Extreme Environments

MONDAY, NOVEMBER 4, 2019
3:30 – 5:30 P.M.

750 S. Halsted St., Chicago, IL
Cardinal Room, Student Center East

Please RSVP to lasevents@uic.edu no later than October 30.