



## BIOGRAPHICAL SKETCH

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Zbib is the Director of the School of Mechanical and Materials Engineering since Aug 2003. He received his doctor of philosophy in Mechanical Engineering and Engineering Mechanics from Michigan Technological University (MTU) in 1987 in the area of solid mechanics. At MTU, he also served for one year as a visiting assistant professor. He was appointed to his present post at the School of Mechanical and Materials Engineering at Washington State University (WSU) in 1988, and was promoted to the rank of Professor in August 1998.

Zbib's research focuses on investigating the thermo-mechanical behavior of materials, and addresses engineering and scientific phenomena at various length scale (nano to macro) extreme conditions, with emphasis on plasticity, damage and fracture, fuel cells, material instabilities, dislocation theory, simulations of dislocations structures, and applications to manufacturing processes. On the smaller end of the length scale spectrum, his work includes understanding the physical characteristics and mechanical performance of metals and composites at the nanometer and micrometer scales with implications to nano-layered structures, thin films and nano-composites, such as those used in micromechanical systems, microelectronics, and medical diagnostics. On the larger end of the scale, he investigates the behavior of metals and geological materials under extreme conditions, such as shockwaves, metal forming and high speed machining, superplastic forming, as well as earthquake and soil engineering. His research work has been funded by many agencies, including the US National Science foundation, the US Army Research Office, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Pacific Northwest National Laboratory, ALCOA, the US National Institute of Standard and Technology, Sandia National Laboratory, the US Department of Energy, and the Washington Technology Center.

Zbib's service record includes, chairing and organizing many conferences such as the SES'98 Annual Technical Meeting, and organizing and chairing numerous symposia and sessions at ASME, MRS, SES, IUAM and other national and international meetings. He is the Chief Editor of the ASME Journal of Engineering Materials and Technology. He is a member of the Advisory Board of the International Journal of Plasticity, Member of the Board of Review of Metallurgical and Materials Transactions A, 2000-, Member of the International Advisory Board: Materials Science Research International, Japan 2001-. *Review Committee Member of the "Revue de Mecanique Appliquee et Theorique, Morocco Society of Mechanics Science"*. He was the chair of the joint ASME MD-AMD committee on constitutive equations and currently serves on the ASME-MD Executive Committee.

Zbib's awards include, Fellow of the ASME, Member of the Academy of Mechanical Engineering and Engineering Mechanics of Michigan Tech Univ., recipient of the 2003 Computational Mechanics Achievement Award from the Japanese Society of Mechanical Engineers, the 1994 Research Excellence Award from the Collage of Engineering, the 1994 and 2000 Research award from the School of MME at WSU, two Japanese fellowships, the 1994 Research Award from the MME Department, and he was invited to deliver many Keynote lecturers. He received the NSF Research Initiation Award, was nominated for the ASEE Dow Young Faculty Award, and received a NATO Fellowship. Zbib is a member of the American Academy of Mechanics, the American Society of Engineering Education, the ASME, the Society of Engineering Mechanics, the ASME-AMD-MD Joint Committee on Constitutive Equations, and the ASME committee on Instabilities in Solids and Structures Zbib's record includes 12 edited books and over 180 technical articles.