

Marc Andre' Meyers, Professor of Materials Science, UC San Diego, received his Ph. D. at the U. of Denver. He has carried out research since 1972 in a broad range of areas within Materials Science, ranging from dynamic processing (explosive consolidation, synthesis, welding, shock- and shear induced reactions, and combustion synthesis), dynamic fracture and fragmentation, dynamic and shock response of materials. Additionally, he has made contributions in martensitic transformations, twinning, constitutive equations, the effect of grain size on the strength of metals, and mechanical properties of conch and abalone shells. He is a co-founder of the Center for Explosives Technology Research (Associate Director, 1983-1988), in Socorro, New Mexico, and was co-founder and co-chair of the EXPLOMET conference series (1980, 1985, 1990, 1995, 2000). He served as Advisor to the Director, Materials Science Division, US Army Research Office (1985-1987). In that capacity, he was actively engaged in stimulating and directing research in the dynamic behavior of materials. He was Associate Director and Director, Institute for Mechanics and Materials (1992-1997). Through a 30-year effort, he has unified the field of mechanical behavior of materials and significantly enhanced its visibility in the materials community.

He is a Fellow of ASM International, Humboldt Award recipient, and received the Structural Materials Division (TMS) Distinguished Scientist/Engineer Award. He is the author or co-author of 250 research papers, three books; he co-edited seven books.

Books

M. A. Meyers and K. K. Chawla (authors), *Mechanical Metallurgy: Principles and Applications*, Prentice-Hall, N. Y. 761 pages, (1984) (translated into Chinese, 1992).

M. A. Meyers (author), *Dynamic Behavior of Materials*, J. Wiley, 668 pages (1994) (translation into Chinese in progress).

M. A. Meyers and K. K. Chawla, (authors), *Mechanical Behavior of Materials*, Prentice-Hall, 680 pages (1999).

M.A. Meyers, R.W. Armstrong, and H.O.K. Kirchner, (editors), Mechanics and Materials: Fundamentals and Linkages, J. Wiley, 613 pages (1999).

Representative Publications

M.A. Meyers, O. Vöhringer, and V.A. Lubarda, "The Onset of Twinning in Metals: Constitutive Description," *Acta Mat.*, 49(2001)4025-4039

R. Menig, M.H. Meyers, M.A. Meyers, and K.S. Vecchio, "Quasi-Static and Dynamic Mechanical Response of Haliotis Rufescens (Abalone) Shells," *Acta Mat.*, 48, (2000)2383-2398.

H.H. Fu, D.J. Benson, and M.A. Meyers, "Analytical and Computational Description of Effect of Grain Size on Yield Stress of Metals", *Acta Mat.* 49(2001) 2567-2582.

Q. Xue, M.A. Meyers, and V.F. Nesterenko, "Self-Organization of Shear Bands

in Titanium and Ti-6% Al-4% V Alloy, Acta Mat., 50(2002)575-596.