

MAR05-2004-000496

Abstract for an Invited Paper
for the MAR05 Meeting of
the American Physical Society

Structural Amorphous Metals Amorphous Steels and Ultra-Strong Light Metals

JOSEPH POON, University of Virginia

Amorphous metals are multicomponent alloys and are naturally complex. In recent years, significant progress in the design of bulk amorphous metals and fundamental understanding of the amorphous state has been achieved. In this talk, we will report current interdisciplinary studies of structural amorphous metals, with a focus on the synthesis, properties, and basic knowledge. Recent results on amorphous steels and amorphous light-metals will be highlighted. * Work in collaborations with Professor Gary Shiflet, Drs. V. Ponnambalam, F. Q. Guo, J. Wang, and X. F. Gu. Research supported by DAPA, ONR, and AFOSR.