**Pinpointing the best glass former in Quaternary Fe-based alloy systems**

by Ms. Han Zheng

Date: 6th October 2006 (Friday)
Time: 12:00 to 12:30 pm
Venue: LT 3

Abstract

Fe-based bulk metallic glasses (BMGs) have been drawing increasing attention due to their excellent soft-magnetic properties, high fracture strength, high hardness and good corrosion resistance. To extend the potential applications of Fe-based BMGs, amorphous alloys with larger critical sizes and better processibility are required. My research focuses on quaternary Fe-based alloy systems with the aim of finding the best glass former. Up to date, good glass forming alloys have been found in Fe-B-Y-Nb system and Fe-B-Y-Mo system, with a critical size of 5 mm, which is the largest size reported for quaternary Fe-based alloy system so far. On the other hand, these alloys also show good soft magnetic properties, demonstrating their potential applications as soft magnetic materials.

Ms Han Zheng Speaker

Miss Han Zheng obtained her Bachelor's Degree from Beijing University of Aeronautics and Astronautics. She is now pursuing her PhD Degree in Department of Materials Science and Engineering, NUS.

Dr Xue Jun Min Host

ALL ARE WELCOME!