

March 15-19, 2015 • Walt Disney World
Orlando, Florida, USA

Connecting the global minerals, metals, and materials community.



Plan Now to Attend:

Bulk Metallic Glasses XII

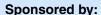


In the last decade, new approaches to fabricating metallic glasses [i.e., by utilizing unique combinations of elements to form metallic-glass alloys] have resulted in the required cooling rate dropping from 10⁵ C/s to as low as 1 C/s, and the specimen size increasing from 0.05 mm to as large as 80 mm. Because of the large sizes possible with this exciting technology, the metallic glasses are called Bulk Metallic Glasses (BMGs).

Mechanical behavior of BMGs is among the new, exciting fields of research that are fully illustrating their advantages over crystalline alloys. Generally, BMGs have higher fracture strengths, fracture toughnesses, and elasticities than their crystalline counterparts. There is great interest in BMGs for use in biomedical, structural, and mechanical applications.



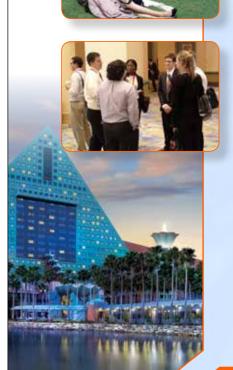
- Material fabrication and processing
- Nanocrystalline materials and composites based on BMGs
- Mechanical behavior
- Shear band formation, fatigue, deformation, and fracture mechanisms
- Corrosion, physical, magnetic, electric, thermal, and biomedical behavior
- Theoretical modeling and simulation
- Industrial applications



- TMS Structural Materials Division
- Mechanical Behavior of Materials Committee



Peter K. Liaw, University of Tennessee (USA) Gongyao Wang, University of Tennessee (USA) Hahn Choo, University of Tennessee (USA) Yanfei Gao, University of Tennessee (USA)



For more information on how to participate, visit:

www.tms.org/TMS2015

Questions? Contact programming@tms.org