Foreword

Symposium on Bulk Metallic Glasses—XI

Bulk metallic glasses (BMGs) have been discovered and studied extensively over a 20-year development. The defect-free microstructure (without dislocations and grain boundaries) makes BMGs exhibit many unique properties, such as superior strength, excellent scratch and wear resistance, good corrosion resistance, etc. Although BMGs can be considered as potential structural and functional materials to be used in new industrial products with high performance, such as microgears, yokes for linear actuators, golf-club heads, and electronic casings, it is of significance to find more new applications for BMGs. Recently, catalytically-active BMGs were found to be formed with nanometer-sized features, which would be excellent for applications in fuel cells, batteries, and sensors. For example, the BMG micro-fuel cell demonstrates excellent performance and fabrication capability, compared to traditional micro-fuel cell designs.

In order to strengthen the communication in the community of BMGs, Bulk Metallic Glasses Symposia have been held successfully at The Minerals, Metals & Materials Society (TMS) Annual Meetings since 2004. The TMS Structural Materials Division and the TMS/American Society for Metals (ASM): Mechanical Behavior of Materials Committee, kindly sponsored our Bulk Metallic Glasses Symposia. The Bulk Metallic Glasses XI Symposium was successfully held at the 2014 TMS Annual Meeting & Exhibition, San Diego, CA, February 16 to 20, 2014. The topics of the Bulk Metallic Glasses Symposium involved a wide range of BMG research areas, such as the alloy development and application, mechanical behavior, microstructural characterization, fatigue and corrosion, and simulation and modeling.

We would like to express our sincere appreciations to all the attendees for contributing to the success of our Bulk Metallic Glasses Symposium. We want to acknowledge the sponsorship from TMS and ASM. All submitted manuscripts were subjected to the standard peer-review procedures in the journal of *Metallurgical and Materials Transactions A*. A total of 9 papers were accepted for publishing in the current issue. We are very grateful to all the key readers, the reviewers, and the staff of *Metallurgical and Materials Transactions A*, especially Ms. Dora Moscatello, Ms. Kathleen Streiff-Gualtieri, and Prof. David E. Laughlin, for their kind help in the preparation and approval of the Symposium publication. We would like to thank Chan ho Lee for his kind help.

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