



Advances in Materials Science and Engineering

Special Issue on  
**Mechanical Properties and Nondestructive Testing  
of Advanced Materials 2014**

CALL FOR PAPERS

Advanced materials refer to all new materials and modifications to existing materials to obtain superior performance in one or more characteristics that are critical for the application under consideration. This kind of materials includes ceramic materials, coatings, composites, metal alloys, plastic polymers, and biological materials. Advanced materials are a critical enabling technology for a wide range of industries, including aerospace, automotive, construction, defense, electronics, biotechnology, packaging, and telecommunications. In research areas of advanced materials, the properties and the measuring methods of advanced materials are more important. Particularly for mechanical properties and nondestructive testing methods, the investigations of the above-mentioned ways were developed rapidly in the last decade. The research of properties mainly focuses on discovery of fundamental principles of chemistry, mathematics, and physics that can be applied to control the mechanical properties of advanced materials. The various nondestructive testing methods for advanced materials concentrated on ultrasonic, radiographic, remote visual inspection, eddy-current testing, various optical measurement methods, and so forth.

We are pleased to invite authors to submit original articles and review papers on research and development of advanced materials. The special issue is soliciting all articles that will highlight recent major breakthroughs, progress, and challenges in properties and measuring methods of advanced materials.

Potential topics include, but are not limited to:

- ▶ Mechanical properties, fatigue, creep-resistance, fracture mechanics, wear resistance, and nondestructive testing methods

**Lead Guest Editor**

Yan Yang, Ministry of Education,  
Chongqing, China  
[yangyan@cqut.edu.cn](mailto:yangyan@cqut.edu.cn)

**Guest Editors**

Xing Chen, The University of British  
Columbia, Vancouver, Canada  
[chenxingmems@hotmail.com](mailto:chenxingmems@hotmail.com)

Young Soo Choi, University of  
Washington, Seattle, USA  
[chys0413@nate.com](mailto:chys0413@nate.com)

Bo-Seon Kang, Chonnam National  
University, Gwangju, Republic of Korea  
[bskang@jnu.ac.kr](mailto:bskang@jnu.ac.kr)

**Manuscript Due**

Friday, 19 September 2014

**First Round of Reviews**

Friday, 12 December 2014

**Publication Date**

Friday, 6 February 2015