# Special Issue

# Progress in Advanced High-Entropy Alloy Design and Applications: Microstructures, Mechanical, Electrochemical and Tribological Properties

## Message from the Guest Editors

About twenty years ago, a non-conventional multicomponent alloy system was proposed, known as the high-entropy alloy (HEA). It has since attracted intensive interest from the materials science and engineering community. An HEA contains five or more principal elements, rather than those with one or two principal elements with other minor elements. HEAs have been extensively studied and have been demonstrated to possess many superior properties over conventional alloys. Although the HEA was initially considered to be in a state of single-phase solid solution, most HEAs actually have multi-phase microstructures, which are rather complicated. However, this also provide more opportunities for HEAs to be readily tailored for desired properties. HEAs have been found to be very promising for a wide range of applications. Thus, it is important to evaluate the performance of HEAs under various operation conditions and understand the responses of HEAs to different external actions or processes. The performance of HEAs during these processes is certainly related to their phase constituents and microstructures.

## Guest Editors

Dr. Anqiang He

Department of Chemical and Materials Engineering, University of Alberta, Edmonton, AB T6G 2R3, Canada

Prof. Dr. Dongyang Li

Department of Chemical and Materials Engineering, University of Alberta, Edmonton, AB T6G 2R3, Canada

## Deadline for manuscript submissions

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*Metals*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

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Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

## Editors-in-Chief

Prof. Dr. Hugo F. Lopez
Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

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