Symposium: Refractory Metals and Hard Materials

Refractory Metals and Hard Materials session to be chaired by Prof. Young Do Kim (ydkim1@hanyang.ac.kr) is designed for original publications concerned with all aspects of refractory metals and hard materials. The refractory metals comprise selected metals with melting points around 2000°C and higher, with similar powder metallurgical production and application. This includes the following metals and their alloys: Tungsten, Molybdenum, Chromium, Tantalum, Niobium and Rhenium. In addition to advances in hard materials, this session deals with the production, uses and properties of the carbides, nitrides and borides of these metals and those of titanium as well as tools of ceramics, the superhard boron nitrides and diamond, and related compounds. Publications are also covered on the technologies of powder production (including their precursor materials), milling, granulation, cold and hot compaction, sintering, hot isostatic pressing, pulsed and other assisted consolidation, additive manufacturing, injection molding, as well as coatings on refractory metals, hard metals and hard materials. However, this does not include intermetallics and coatings on steel substrates. The characterization, testing, quality assurance and applications are also contained.

Selected papers will be peer-reviewed and published in a special issue of The International Journal of Refractory Metals and Hard Materials (SCI journal, I.F. 1.858). All papers are judged usually by two members of the Editorial Board according to originality, novelty, quality of scientific content and contribution to existing knowledge. There is no strict page limit but we advise a maximum length of up to 30,000 characters including 20 to 30 references, plus 4 to 6 figures and 1 to 3 tables. Extensive tables, computer programs or animated graphics should be presented in form of Electronic Supplementary Material.