# Special Issue

# MAX Phases and MXenes: Synthesis and Applications

## Message from the Guest Editors

MAX phases are novel structural and functional ceramics with a layered structure. MXenes are 2D materials with graphene-like structures made by exfoliating MAX phases. MAX phases represent a new class of solids that combine some of best attributes of metals and ceramics that result in fascinating properties. As such, MAX phases are creep, fatigue, fracture, thermal-shock and corrosion resistant, in addition to displaying good machinability, high electrical conductivity and ultra-low friction. These ceramics can find applications in nuclear research, metallurgy, mining and spaceflight fields. Similarly, MXenes are endowed with the rare combination of good electronic conductivity and hydrophilicity which render them particular suitable for a wide range of potential applications, such as energy storage, polymer nanocomposite fillers, water purification, transparent optical conductive coatings, electromagnetic shielding/absorption, and electronic devices. It is our pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews that cover all aspects of MAX phases, MXenes, and their composite materials are all welcome.

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## Deadline for manuscript submissions

closed (30 November 2018)

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