Editorial

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Biographical notes: Valeria Cannillo is an Associate Professor of Materials Science and Technology at the University of Modena and Reggio Emilia. Her research focus on the study of computational methods and experimental investigation for the design and optimisation of innovative materials, including advanced ceramics, composites, Functionally Graded Materials (FGM), coatings and biomaterials. Her scientific activity is documented by about 70 papers published in scientific journals.

Ceramics are widely used as high-performance materials for several applications. Structural and functional ceramic materials are increasingly utilised to work under new demanding conditions. Advanced ceramics are being used in several fields such as engineering materials (e.g. composites), biomaterials (e.g. orthopaedic prostheses such as hip implants and dentistry), coatings (e.g., for wear applications and as thermal barrier coatings), just to cite some examples; moreover, with the advent of nanoscience and nanotechnology, ceramic nanostructured materials have drawn a great attention for their potential applications.

The aim of this Special Issue of the *International Journal of Materials and Product technology* is to outline the state-of-the-art in advanced ceramics. The authors have contributed to discuss various aspects related to the development and investigation of innovative ceramics, including bio-ceramics, ferroelectric films, nanocomposites and coatings; moreover, modelling and innovative computational tools, new experimental production and characterisation techniques have been presented. The result is a useful collection of papers that could be a source of information for researchers and engineers.

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