

This conference will focus on thermally non-equilibrium ceramic processes and their applications that contribute to the synthesis of new functions and new materials for the reduction of environmental burden, and discuss the possibility of elucidating the physicochemical phenomena enabling them. Discussing the scientific and technological foundations to accelerate the advanced ceramics and manufacturing developments for sustainable engineering practices.

The processes discussed here range from conventional thin film technologies such as PVD, CVD, and sol-gel methods, through to new coating technologies such as aerosol deposition, nanosheets, suspension/solution precursor spray, and cold spray. Additionally new powder and densification low temperature processes-related technologies such as cold sintering, nanocubes, WASSR method, and mechanochemical & biochemical reactions are of great interest as developing sustainability process methods.