

PROCESSING AND CHARACTERISATION OF YTTERBIUM SILICATE ENVIRONMENTAL BARRIER COATINGS

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This talk will present a novel technique on manufacture of ytterbium silicate environmental barrier coatings with use of electrophoretic deposition (EPD) and sintering. In addition, steam degradation of ytterbium silicate environmental barrier coatings (EBCs) has been examined to study the EBC degradation including phase transformation behaviour. Various characterisation tools have been used to understand how EBCs degradation at high temperature environment and comparison of the EBCs produced using EPD and air plasma spray will be made.