第 256 回応用セラミックス研究所講演会
開催のお知らせ

下記要領にて応用セラミックス研究所講演会を開催いたします。ご都合がつきましたら、お気軽にご参加ください。

記

開催日時：2013 年 9 月 30 日(月)　15:00−16:00
開催場所：応セラ研　Ｒ３棟　１Ｆ　会議室

講師：　Rishi RAJ 教授
　　コロラド大学　ボールダー　機械工学科

講演題目：Next Generation Ultrahigh Temperature Materials: Oxide-NonOxide Ceramics

Next generation ultrahigh temperature materials, which will increase the operating temperature of gas turbines by several hundreds of degrees Centigrade, are likely to draw upon two materials classes, silicon carbide and transition-metal/rare-earth oxides, as well as polymer-derived ceramics that combine Si-N-O-Metals at the molecular scale. The carbides impart resistance to deformation while the oxides provide resistance to oxidation. The silicon carbide fiber, which can be spun into net shapes and then infiltrated with an oxidation resistant matrix, sets the stage for the architecture of these ultrahigh temperature ceramic matrix composites (CMC). The elements of underlying science that couples microstructure design, processing and oxidation behavior with special emphasis on the hafnia-silicon carbide system will be discussed.

問合せ先:内線 5361、若井史博