

DEPARTMENT OF

ME

3:30-4:20pm, Friday, September 13, 2013  
Frank H. Walk Design Presentation Room

by **Shengmin Guo**\*

Gas turbines are typically subjected to significant temperature extremes and consequently severe degradation of the material properties. Currently the GE MS7001FA (200MW rating) gas turbine has a firing temperature of 2420 °F and the hot passage must be protected by thermal barrier coatings (TBCs). One measure of the substantial

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