

CHARACTERIZATION & TESTING IN EXTREME, APPLICABLE ENVIRONMENTS

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In the past 60 years, Southern Research has worked with NASA and DoD to push the boundaries of space and propulsion system materials' performance in extreme environments via testing and analysis at a wide range of temperatures and conditions. SR takes great care in working with our partners/customers to ensure material properties are adequately used in analytical models and to develop test techniques to aid analysts in obtaining the data required for specific models. This is critical in the future as breakthrough material technology expands given the fruits of conducting research at extreme environments. This discussion will focus on unique thermo-mechanical facilities for evaluating breakthrough materials (i.e, TPS, C/C, CMCs and refractory metals) in applicable environments within a laboratory setting.