



4th International Symposium on
Energy **C**hallenges & **M**echanics
- working on small scales

11-13 August 2015
Aberdeen, Scotland, UK

Keynote Speaker of Session 16

HETEROGENEOUS NANO-MATERIAL DESIGN FOR ENERGY CONVERSION AND STORAGE



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Prof. Kyle Brinkman's research has been in the areas energy materials including electronic ceramic materials for gas separation and processing in commercial (H₂, O₂, CH₄ and CO₂) and nuclear domains (hydrogen isotopes), structure/property relations in solid oxide fuel cell systems, radiation tolerant crystalline ceramics for applications in nuclear energy, and multifunctional ceramic thin film coatings. Kyle recently joined Clemson from the DOE's Savannah River National Laboratory (SRNL) where he was a Principal Engineer in the Science and Technology Directorate and Program Manager for the lab's Energy Efficiency and Renewable Energy (EERE) research portfolio. Prior to working at SRNL, he was a fellow of the Japanese Society for the Promotion of Science working in a Japanese "National Laboratory" the National Advanced Institute of Science and Technology in Tokyo, Japan. Kyle has been the co-P.I. or P.I. on over \$5 Million in sponsored research- primarily from the Department of Energy, and has authored or co-authored over 70 peer-reviewed technical publications and government reports. He was the recipient of the SRNL Laboratory Director's Early Career Exceptional Achievement Award in 2011, the DOE-NE Fuel Cycle Research and Development (FCR&D) Early Career Researcher Award in 2013, and the Minerals, Metals and Materials Society's (TMS) Young Leader International Scholar Award in 2014. Prof. Brinkman is a Graduate Faculty and Adjunct Professor at the University of South Carolina in the Mechanical Engineering Department's Solid Oxide Fuel Cell Program and serves as the Materials Advantage (MA) faculty advisor for Clemson's undergraduate students in Materials Science and Engineering.

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