



Nina Orlovskaya, Assistant Professor
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Research:

- Hard and Tough Ceramic Laminates
- Boron Rich Solids
- Electrochemically Active Ceramics Oxides
- Ferroelasticity and Time Dependent Properties of Mixed Ionic Electronic Conducting Perovskites
- Solid Oxide Fuel Cells and Oxygen Separation Membranes

Teaching:

Introduction to Ceramics, Science and Technology of Fuel Cells , Experimental Techniques in Mechanics and Materials, Senior Design, Selection and Design of Materials, Fundamentals of Materials Science and Engineering.

Laboratory of Ceramic Materials:

Micro-Raman Spectrometer, Probostat, Potentiostat, Tape Casting, Screen Printing, Uniaxial Press, Three Roll Mill, Cold Isostatic Press, Viscometer, HIP, Powder Mixing, Air Pressureless Furnaces (up to 1800°C)

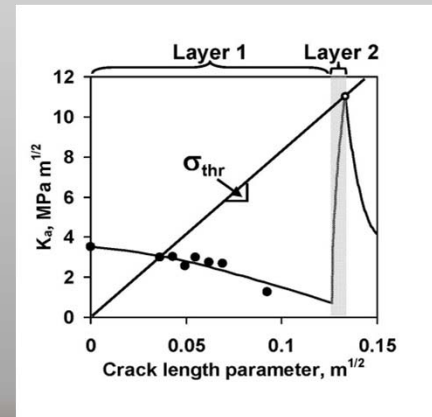
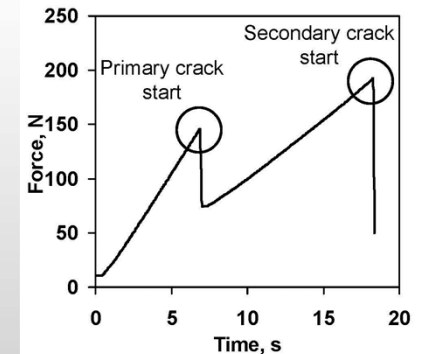
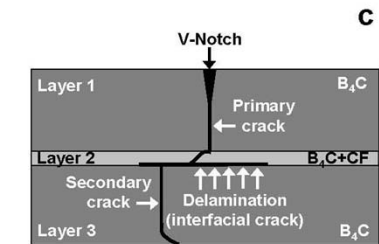
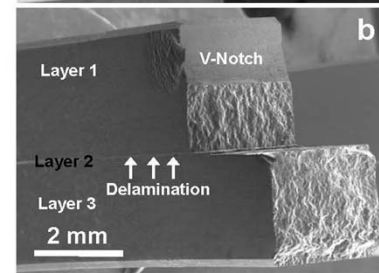
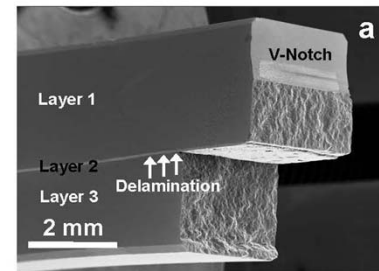
Research Group - 2011:

PhD Students: Yan Chen, Zhilin Xie, Jonathan Torres, Maximo Navaro, Amjit Aman, Richard Stadelmann

MS Students: Kyle Mueller, Zichao Xia

Undergraduate Students: Nathan Fist, Connie Griemester

CAREER: Hard and Tough Boron Rich Ceramic Laminates Designed to Contain Thermal Residual Stresses - DMR- 0748364



B₄C/B₄C – Carbon Nanofibers Three Layered Hot Pressed Composite – Failure Behavior and Apparent Fracture Toughness