

Building Materials for Nuclear Safety, Security and Sustainability



- Refractory grade ceramic cements offer new paradigm for power plant design, proliferation prevention, radioactive waste disposal
 - Stronger than Portland cement
 - Long term stability, structural integrity
 - Fire/heat/freeze resistant
 - Nonpermeable containment and encapsulation matrix
- Enhanced radiation shielding
 - Augmentation with radiation-blocking materials
 - Effective against neutron and gamma radiation
 - Retains high physical integrity at extreme temperatures
 - Strong, fracture-resistant in radioactive environment
- Transport and storage containers
 - Extremely durable
 - Resistant to corrosion,, other forms of degradation
 - Suitable for surface and in-ground storage, including geologic disposal facilities
- Flexible applications
 - Suitable for most classes of radioactive materials
 - Encapsulate both solid and liquid wastes
 - Designed to meet stringent Gen IV requirements at lower cost
- U.S. and Russian partners will introduce new technology to U.S. and FSU public and private markets



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VNIIEF (Arzamas-16)
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VNIITF (Chelyabinsk-65)
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