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Nota di contenuto	Environmental Issues and Waste Management Technologies in the Ceramic and Nuclear Industries IX; Contents; Preface; Ceramics for Waste or Nuclear Applications; Uranium Valences in Perovskite, CaTiO ₃ ; Iron-Substituted Barium Hollandite Ceramics for Cesium Immobilization; Hollandite-Rich Titanate Ceramics Prepared by Melting in Air; Hyperfine Interaction Study of Short Range Order in Zircon; Scale-Up of Lithium Aluminate Pellet Manufacturing with a Flowable Powder; Melter Processing and Process Monitoring; Laboratory

Measurement of Glass Melting Rate; Analysis of Feed Melting Processes
Electron Equivalents Redox Model for High Level Waste
Vitrification Sulfate Retention During Waste Glass Melting; The
Characterization and Dissolution of High Level Waste Calcine in Alkali
Borosilicate Glass; Summary of Results from 786-A Minimelter Run with
Marcobatch 3 (Sludge Batch 2) Baseline Feed Using Frit 320; Numerical
Models of Waste Glass Melters Part I - Lumped Parameter Analyses of
DWPF; Numerical Models of Waste Glass Melters Part II - Computational
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Tailored Electrical Driving as a Means of Controlling Heat Distribution
and Convection Patterns in Joule-Heated Waste Glass Melters Effects of
Poly(Acrylic Acid) on the Rheological Properties of Aqueous Melter Feed
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Demonstrate Regulatory Compliance of Glass Waste Forms for
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High Sulfate-Containing Low Activity Waste; Glass Formulation and
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and Performance of Fluidized Bed Steam Reforming (FBSR) Product as a
Final Waste Form; Microstructure of Emulsion-Based Polymeric Waste
Forms for Encapsulating Low-Level, Radioactive and Toxic Metal Wastes
Leach Resistance of Encapsulated Salts in Polymeric Waste Forms
Fabricated Using an Aqueous-Based Route

Sommario/riassunto

In today's world of increasingly stringent environmental regulations, it is critical to identify and adequately address environmental issues in the ceramic industry to ensure success. In addition, ceramics and glasses play a critical role in the nuclear industry. Nuclear fuels and waste forms for low-level and high-level radioactive, mixed, and hazardous wastes are primarily either ceramic or glass. Effective and responsible environmental stewardship is becoming increasingly more important in the world. These proceedings detail the results of the ongoing effort in these areas.
