



Contribution ID: 200

Type: poster

Application of Laser Induced Breakdown Spectroscopy to Electrochemical Process Monitoring of Molten Chloride Salts

Tuesday, 21 October 2014 09:50 (40 minutes)

Techniques for in-situ, near real-time analysis of molten salt chlorides used in electrochemical fuel treatment processes face several challenges including atmospheric isolation, high radiation fields, corrosive environments and high temperatures. Therefore, techniques that can operate in a stand-off manner will have a definitive advantage for implementation in a fuel treatment facility. Laser induced breakdown spectroscopy (LIBS), an elemental analysis technique, is being pursued as a near real-time process monitor of various process streams. LIBS can operate at stand-off distances and has been used in other industries as a process monitoring technique.

Country or International Organization

United States of America

Primary author: SMITH, Nicholas (Argonne National Laboratory)

Co-author: WILLIAMSON, Mark (Argonne National Laboratory)

Presenter: SMITH, Nicholas (Argonne National Laboratory)

Session Classification: Safeguards for Reprocessing and Pyroprocessing Facilities: E-Posters