

MRS2017 - Scientific Basis for Nuclear Waste Management Symposium 2017

Wednesday 01 November 2017

Ceramic and Glass-Ceramic Wasteforms: Session Chairs Stéphanie Szenknect & Yingjie Zhang (08:30-10:15)

time	[id] title	presenter
08:30	[24] Hot isostatic pressing of ion exchange materials, from the Fukushima and Sellafield sites, to produce ceramic wasteforms.	Prof. HYATT, Neil
09:00	[94] Synthesis and Structure of Novel Oxide Compounds Containing RE = Y, Yb, Gd, Sm, and La and M = Zr, Ti, and Sn	Dr LUMPKIN, Greg
09:15	[47] Synthesis and characterization of brannerite UTi_2O_6	Dr MESBAH, adel
09:30	[55] Synthesis and characterisation of rare Ce_3NbO_7 compounds for use as nuclear space batteries by neutron powder diffraction and X-ray absorption spectroscopy	Mr BARLOW, Sean
09:45	[83] Partitioning of Ce, as a Simulant for Pu, in a Multiphase Ceramic Nuclear Waste Form	Dr ZHANG, Zhaoming
10:00	[95] The Fabrication and Characterisation of Novel Complex Ceramic Oxides (Ln_2TiO_5) For Polyphase Ceramic Waste-Forms.	Mr AUGHTERSON, Robert

Ceramic and Glass-Ceramic Wasteforms: Session Chairs Massey De Los Reyes & Eugenia Kuo (10:45-12:00)

time	[id] title	presenter
10:45	[50] Solubility of the rhabdophane, $LnPO_4 \cdot 0.667 H_2O$ ($Ln = La$ to Dy): implications for the long-term stability of monazite matrices.	Dr SZENKNECT, Stéphanie
11:15	[46] Preparation of $Ln_{1-2x}Ca_xTh_xPO_4 \cdot nH_2O$ rhabdophane-type as low precursors to monazite-Cheralite ceramics	Dr MESBAH, adel
11:30	[34] Structural incorporation of Cm^{3+} and Pu^{3+} in phosphate ceramics with monazite structure.	Dr NEUMEIER, Stefan
11:45	[48] Thorium incorporation in phosphates matrices: the case of xenotime	Dr MESBAH, adel

Ceramic and Glass-Ceramic Wasteforms: Session Chairs Zhaoming Zhang & Maik Lang (13:30-14:45)

time	[id] title	presenter
13:30	[110] U-rich ceramics for Spent Fuel or Acidic $99Mo$ Production ILW	Dr VANCE, Eric R
13:45	[82] Current advances on titanate-based glass-ceramics for actinide immobilization	Dr ZHANG, Yingjie
14:00	[29] The development of zirconolite glass-ceramics for the immobilisation of Pu-residues in the UK.	Ms THORNER, Stephanie
14:15	[13] A New Method for Production of Glass- $Y_2Ti_2O_7$ Pyrochlore	Dr KONG, Linggen
14:30	[72] Atomistic simulation of interfaces in glass/crystal composites for nuclear waste forms	Dr FOSSATI, Paul C. M.

Ceramic and Glass-Ceramic Wasteforms: Session Chairs Lou Vance & Stephanie Thornber (15:15-17:15)

time	[id] title	presenter
15:15	[8] Efficient remediation of radiiodine with silver-functionalized silica aerogel	Dr MATYAS, Josef
15:45	[43] Sodalite waste forms for iodine	Prof. MCCLOY, John
16:00	[93] Radioactive Iodine-129 Capture in Mixed Cation Sodalites: ab initio modelling	Dr KUO, EUGENIA
16:15	[11] New aspects of U(V) chemistry in oxo-materials: from ambient to extreme conditions	Prof. ALEKSEEV, Evgeny
16:45	[76] Unique capabilities and methods for analysing nuclear waste form materials using ANSTO's landmark infrastructure	Mr MURPHY, Gabriel
17:00	[15] New route for synthesis of Synroc-like ceramic using non-selective sorbent LHT-9	Ms ZUBEKHINA, Bella