## TC05 Waste Vitrification

### Tuesday 6th September

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|---|---|---|
| 900 | Ian Pegg | Glass Formulation Optimisation for Treatment of Nuclear Wastes |
| 940 | Richard Pokorny | Conversion of nuclear waste melter feed into glass: Development and application of the cold cap mathematical model |
| 1000 | Kunihiko Nakano | Investigation of volatile constituents migration during vitrification using small scale melter |
| 1020 | COFFEE | |
| 1100 | Toshiro Oniki | Development of glass melting process for LLW-Glass formulation testing to be compatible with composition changes |
| 1120 | Pavel Hrma | Feed-to-melt conversion process |
| 1140 | Hirohide Kofuji | Vitrification properties of MA adsorbents |
| 1200 | Stephane Lemonnier | Development of in-can melting process applied to the vitrification of high activity waste solutions (HAWS): Glass characterisation and process test results |
| 1220 | LUNCH | |
| 1320 | Damien Perret | Glass formulation approach for mixed waste treatment using PIVIC incineration-vitrification In Can process |
| 1340 | Shengheng Tan | Vitrification of intermediate level Magnox sludge nuclear waste containing metals |
| 1400 | Mike Harrison | Product quality assessment of alternative glass waste formulations for vitrification of nuclear waste streams containing high concentrations of sodium |
| 1420 | Katsushige Komatsu | Search of vitrification matrix with high-loading capacity-change of chemical durability and MoO3 solubility with B2O3 and Al2O3 contents |
| 1440 | Jack Clarke | Vitrification as a means of reworking problematic cemented nuclear waste forms |
| 1500 | Michael Ojovan | Fundamentals of the glass transition and vitreous materials for nuclear waste immobilisation |
| 1520 | COFFEE | |
| 1600 | Tetsuji Yano | Development of the aluminoborosilicate glass system with high-loading capacity of HLW using a new combinatorial approach |
| 1620 | Sean Barlow | Glass formulations for Magnox sludge immobilisation |
| 1640 | James Stevens | Underpinning the transition from MW to Ca/Zn glass frit for HLW vitrification on UK WVP |

### Wednesday 7th September

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| 900 | Laurence Galoisy | Zirconium as local probe for oxide glass and glass-ceramic structures |
| 940 | Olivier Pinet | Role of noble metals in nuclear glass properties |
| 1000 | Guillaume Barba Rossa | The transport and settling of platinum-group metal particles in glass melts |
| 1020 | COFFEE | |
| 1100 | Elise Regnier | Ag-solubility in borosilicate nuclear glass |
| 1120 | Maria Chromcikova | Thermodynamic model and selected physical properties of glasses for Chrompik vitrification |
| 1140 | Jamie Weaver | Chemometric Determination of the Localized Chemistry of 99Tc in Vitrified Nuclear Waste Glasses |
| 1200 | Jae-Young Pyo | Tellurite glasses for immobilization of Tc-99 from pyro-processing technology |
| 1220 | LUNCH | |
| 1320 | Nolwenn Chouard | Challenging elements incorporation in nuclear borosilicate glass : the French formulation experience |
| 1340 | Toshiaki Ohira | MoO3 solubility in alkali-borosilicate melts: Implications to yellow phase separation in high-level waste glass |
| 1400 | Michal Miekina | Immobilisation of Mo and Zr rich nuclear wastes in borosilicate glasses |
| 1420 | Shuchi Vaishnav | Multi spectroscopic characerisation of binary and ternary silicate glasses doped with sulphate and chloride ions |
| 1440 | Tsuyoshi Usami | Solidification of nuclear waste containing molybdenum and sulfur |
| 1500 | Miae Kim | Borate glasses with high rare-earth oxides waste loading |
| 1520 | COFFEE | |
| 1600 | John McCloy | In-Situ Crystallization Experiments of Nuclear Waste Glass Ceramics |
| 1640 | Victoria Brown (Oldfield Award 1st) | Immobilisation of actinides: a study on the effect of chlorine contamination on hot isostatically pressed zirconolite containing glass ceramics |
| 1700 | Magda Kosmal | The kinetics of fresnoite crystal growth in glass waste |

### Thursday 8th September

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| 900 | Marek Liska | Thermodynamic model and viscosity of glasses for Chrompik vitrification |
| 920 | Owen McGann | The application of novel 'Hazmelt' waste vitrification technology to the vitrification of 'Magnox Sludge' simulant waste and other ILWs. |
| 940 | Mariona Tarrago Aymerich | Incorporation of P and Ca in basaltic glass: application to waste management |
| 1000 | Ilyes Ben Kasem | The role of Al and Ca on properties and structural variation in lead silicate glasses and melts |
| 1020 | COFFEE | |
| 1100 | Claire Corkhill | An evaluation of the mechanisms and kinetics of UK simulant nuclear waste glass dissolution under high pH conditions |
| 1140 | Yoshiyuki Miura | Study for composition dependence of chemical durability of high waste loading simulated HLLW glass |
| 1200 | Daniel Backhouse | Is the International Simple Glass a Valid Analogue for the Dissolution of UK High-Level Waste Glass at High-pH? |
| 1220 | LUNCH | |
| 1320 | James Neeway | Recent Advances in the Understanding of Nuclear Waste Glass Durability through the Use of Stable Isotopes. |
| 1400 | Adam Fisher | Measurement of the forward dissolution rate of the International Simple Glass using the single-pass-flow-through method |
| 1420 | Colleen Mann | Interactions between simulant vitrified nuclear wastes and idealised cement leachates |
| 1440 | Jean-Marc Delaye | Structural and mechanical property changes under ballistic effects in borosilicate glases: a classical molecular dynamics study |
| 1500 | Nikos Galanakis | Using topological methods to characterize radiation damage effects in iron phosphate glasses |
| 1520 | COFFEE | |
| 1600 | Jamie Weaver | Application of Research into Ancient Glasses to the Development of a Long-Term Glass Corrosion Mechanism for Vitrified Nuclear Waste |
| 1620 | Elzbieta Greiner-Wronowa | Study of corroded glass-metal joints from archaeological excavation as well as from museum exposition |
| 1640 | Alexandra Rodrigues | The Glass Collection of King Ferdinand II Portugal: A ToF-SIMS study of glass corrosion |
| 1700 | Teresa Palomar | The role of marine ions in the aqueous alteration of silicate glasses |
| 1720 | Clare Thorpe | Leaching methodologies to evaluate the durability of Intermediate Low Activity Waste (ILAW) glasses |