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# Joint ICTP-IAEA International School on Nuclear Waste Vitrification | (smr 3325)

## Monday 23 September 2019

**Fundamentals of nuclear waste immobilisation in vitreous materials and modelling of nuclear glass structures - Adriatico Guest House - Giambiagi Lecture Hall (08:30-22:00)**

| time  | title  | presenter                                    |
|-------|--|--|
| 08:30 | REGISTRATION   |  |
| 09:00 | Introduction. Organising committee & Participants introduction.          | M. OJOVAN, W. MEYER, E. REGNIER, S. SCANDOLO |
| 09:45 | LECTURE:Nuclear waste glass formulation.                                 | E. REGNIER                                   |
| 10:30 | COFFEE BREAK   |  |
| 10:45 | Talk: Conditioning of HA/ILW, statistical approach of glass formulation  | D. PERRET                                    |
| 11:30 | Talk: Nuclear waste immobilisation using glass and crystalline materials | M. OJOVAN                                    |
| 12:15 | LUNCH BREAK  |  |
| 13:30 | For Administrative formalities   | CHARLIE R. SCALES                            |
| 14:15 | Talk : In situ vitrification of nuclear wastes                           | CHARLIE R. SCALES                            |
| 15:00 | COFFEE BREAK   |  |
| 15:15 | Participant Talk   | E.EALES                                      |
| 15:35 | Participant Talk   | G. CASTAGNOLA                                |
| 15:55 | Participant Talk   | L. GALAI                                     |
| 16:15 | Participant Talk   | S. KUPRIANCHUK                               |
| 16:40 | Participant Talk   | Z. HAMNABARD                                 |
| 18:00 | SOCIAL EVENT   |  |

## Tuesday 24 September 2019

### **Technological approaches of nuclear waste vitrification - Adriatico Guest House - Giambiagi Lecture Hall (09:00-16:35)**

| time  | title  | presenter        |
|-------|--|------------------|
| 09:00 | Lecture: International experience on vitrification.      | M. OJOVAN        |
| 09:45 | Lecture: Fusion cast refractories: roles of containment. | K. SELKREGG      |
| 10:30 | COFFEE BREAK   |                  |
| 10:45 | Talk: Overview on French vitrification processes         | C. LADIRAT       |
| 11:30 | Use of ion beams for radiation damage and analysis       | M. KARLUSIC      |
| 12:15 | LUNCH BREAK  |                  |
| 13:30 | Talk. Vitrification programme in China                   | K. XU            |
| 14:15 | Talk: UK vitrification programme                         | N. GRIBBLE       |
| 15:00 | COFFEE BREAK   |                  |
| 15:15 | Participant Talk   | K. LOVE          |
| 15:35 | Participant Talk   | A. MAGHSOUDIPOUR |
| 15:55 | Participant Talk   | C. NIU           |
| 16:15 | Participant Talk   | B. ORUMO         |

## Wednesday 25 September 2019

### **Chemical durability of vitreous wasteforms and long term performance modeling - Adriatico Guest House - Giambiagi Lecture Hall (09:00-16:35)**

| time  | title  | presenter                   |
|-------|--|-----------------------------|
| 09:00 | Lecture: Chemical durability of nuclear waste glasses.           | J. RYAN                     |
| 09:45 | Talk: interaction of HLW glass with cement or cement waters      | K. LEMMENS                  |
| 10:30 | COFFEE BREAK   |                             |
| 10:45 | Talk: Uranium immobilisation in glasses                          | W. MEYER                    |
| 11:30 | Lecture : Lecture: Chemical durability of nuclear waste glasses. | J. RYAN                     |
| 12:15 | LUNCH BREAK  |                             |
| 13:30 | Talk : Vapor hydratation of nuclear waste glass                  | A. ABDELOUAS                |
| 14:15 | Talk: Cold cap modelling in waste vitrification                  | R. POKORNY                  |
| 15:00 | COFFEE BREAK   |                             |
| 15:15 | Participant Talk   | PARAISO KOLANI              |
| 15:35 | Participant Talk   | PATEL JEET                  |
| 15:55 | Participant Talk   | PEREIRA MACHADO NORMA MARIA |
| 16:15 | Participant Talk   | RAUTIYAL PRINCE             |

## Thursday 26 September 2019

### **Radiation damage effects in vitreous wasteforms (including modelling) - Adriatico Guest House - Giambiagi Lecture Hall (09:00-16:35)**

| time  | title   | presenter      |
|-------|---|----------------|
| 09:00 | Lecture: Radiation damage   | M. PATEL       |
| 09:45 | Talk: Radiation damage in single crystals                                     | P. SENGUPTA    |
| 10:30 | COFFEE BREAK  |                |
| 10:45 | Talk: Nuclear glass modelling and Irradiation damage modelling                | M. BAUCHY      |
| 11:30 | Talk: Glass crystal irradiation damage modelling                              | P. FOSSATI     |
| 12:15 | LUNCH BREAK   |                |
| 13:30 | Talk: Irradiation damage (experimental)                                       | ANAMUL HAP MIR |
| 14:15 | Talk: Radiation effects of ions and gamma rays on sodium borosilicate glasses | M. PENG        |
| 15:00 | COFFEE BREAK  |                |
| 15:15 | Participant Talk  | J.RIGBY        |
| 15:55 | Participant Talk  | A. YADOLLHAI   |

## Friday 27 September 2019

### **Interaction of vitreous wastes and repository and geological environments and modeling of aging processes - Adriatico Guest House - Giambiagi Lecture Hall (09:00-12:15)**

| time  | title  | presenter       |
|-------|--|-----------------|
| 09:00 | Lecture: Genetic features of volcanic glasses of different composition   | V. PETROV       |
| 09:45 | Talk: The nature of the behaviour of uranium in the processes of transformation of volcanic glasses of different composition | V. PETROV       |
| 10:30 | COFFEE BREAK   |                 |
| 10:45 | Talk : ageing of nuclear glass natural analogous, A. Verney Carron   | V. VERNEY-CARON |
| 11:30 | CLOSURE SESSION / FEEDBACK   |                 |