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# **Agenda of the 1<sup>st</sup> Annual Meeting of the DisCo Project**

May 15<sup>th</sup> – 16<sup>th</sup>, 2018 - Sheffield, UK

EURATOM

Horizon 2020 Collaborative Project

DISCO - Grant Agreement: 755443

**Tuesday, 15<sup>th</sup> April 2018**

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- 10:00 – 12:00    **ExCom Meeting**  
*(restricted to ExCom members: i.e. Coordination Team, WP leaders and EUG representative)*
- 12:30 – 13:30    Lunch**
- 13.30 – 13:40    **Welcome**  
*(N. Hyatt, USFD and L.Z. Evins, SKB)*
- 13:40 – 15:10    **WP Overviews**
- 13:40    WP1 Overview – *L.Z. Evins (SKB), P. Christensen (SKB) and A. Valls (A21)*
  - 14:00    WP2 Overview – *I. Farnan (UCAM)*
  - 14:15    WP3 Overview – *E. Gonzalez Robles (KIT-INE)*
  - 14:30    WP4 Overview – *D. Bosbach (JUELICH)*
  - 14:45    WP5 Overview – *L. Duro (A21)*
- 15:10 – 15:30    Coffee break**
- 15:30 – 17:50    **Individual talks**
- 15:30    JRC – WP2 + WP3  
Status of SNF sample preparation and <sup>79</sup>Se solution production – *D. Serrano-Purroy, P. Carbol, L. Aldave de las Heras, S. Millet, G., Montagnier, D. Papaioannou, A. Pell Lorente, G. Rasmussen, M. Sandow, S. Van Winckel and D.H. Wegen,*
  - 15:50    KIT-INE – WP2 + WP3  
Description of leaching experiments with KIT's MOX irradiated fuel. – *E. González-Robles, M. Herm, N. Müller, E. Bohnert, V. Metz.*
  - 16:10    CTM – WP2 + WP3  
High Burnup Spent Fuel dissolution under highly alkaline conditions. – *L. Iglesias, D. Serrano-Purroy, A. Martínez-Torrents, F. Clarens, J. de Pablo and I. Casas*
  - 16:30    Studsvik – WP3  
Aqueous leaching of spent nuclear fuel under H<sub>2</sub> atmosphere – A comparison between ADOPT and standard UO<sub>2</sub>. – *A. Barreiro, O. Roth, A. Puranen, L. Evins and K. Spahiu*

- ▶ 16:50 CIEMAT – WP2 + WP4  
Manufacture and characterization of CIEMAT fuel samples used for leaching tests in DISCO project. – *N. Rodríguez-Villagra, S. Fernández, L.J. Bonales, L. Gutiérrez, J.M. Elorrieta and J. Cobos*
  
- ▶ 17:10 JUELICH – WP2 + WP4  
Synthesis of doped UO<sub>2</sub> model materials for single effect studies to understand the long-term matrix dissolution of modern LWR fuels. – *F. Brandt, E.V. Alekseev, S. Lange, A. Bukaemskiy, P. Kegler, S.C. Finkeldei, A. Baena, G. Deissmann, M. Klinkenberg, K. Lemmens, C. Cachoir, R. Delville, G. Leinders, T. Mennecart, M. Verwerft and D. Bosbach*
  
- ▶ 17:30 SCK·CEN – WP2 + WP4  
WP4: Model systems dissolution experiments. Dissolution experiments with Cr-(Pu) doped UO<sub>2</sub> at FZJ and SCK.CEN – *F. Brandt, E.V. Alekseev, S. Lange, A. Bukaemskiy, P. Kegler, S.C. Finkeldei, A. Baena, G. Deissmann, M. Klinkenberg, K. Lemmens, C. Cachoir, R. Delville, G. Leinders, T. Mennecart, M. Verwerft and D. Bosbach*

**18:10 Coaches Depart for Workshop Dinner**

*Dinner to be held at the Kelham Island Museum of Steelmaking*

**Wednesday, 16<sup>th</sup> April 2018**

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**9:00 – 10:40**     Individual talks (continuation)

- 09:00     CEA – WP2 + WP4  
Effect of metallic iron on the oxidative dissolution of an homogeneous MOX fuel. - *V. Kerleguer, C. Jégou, L. De Windt and C. Martin*
- 09:20     VTT – WP2 + WP4  
Dissolution of alpha-doped UO<sub>2</sub> with and without Cr in the presence of corroding Fe, in model and natural groundwater. – *E. Myllykylä and K. Ollila*
- 09:40     UCAM – WP2 + WP4  
Model approaches (WP2) to spent fuel dissolution (WP4). – *I. Farnan, A. Popel and B.-T. Tan*
- 10:00     USFD – WP2 + WP4  
Synthesis and characterisation of Cr<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub> UO<sub>2</sub> doped fuel. – *H. Smith, T. Cordara, M. Stennett, N. Hyatt and C. Corkhill*
- 10:20     A21 – WP5  
Integrated spent fuel alteration model. Methodology and first results. – *O. Riba, E. Coene, O. Silva and L. Duro*

**10:40 – 11:00**     **Coffee break**

**11:00 – 12:00**     Individual talks (continuation)

- 11:00     Armines – WP5  
Modelling of the oxidative leaching of U<sub>1-x</sub>Pu<sub>x</sub>O<sub>2</sub> under environmental conditions – first results. – *L. De Windt, V. Kerleguer and C Jégou*
- 11:20     PSI – WP5  
Effect of Cr-doping on UO<sub>2</sub> spent fuel thermodynamics: preliminary data and results. – *E. Curti and D. Kulik*
- 11:40     NNL – WP2 + WP5  
WP2: Examination of WAGR Fuel After Extended Storage & WP5  
Modelling of UO<sub>2</sub> Fuel Dissolution within Storage Containers – *D. Hambley*

**12:00 – 13:00**     **Lunch**

12:00     *EUG meeting (with Lunch) – (restricted EUG members)*

**13:00 – 13:30**     **General Assembly (GA)**

13:30 – 13:45 EUG feedback – *V. Cloet (NAGRA)*

**13:45 – 14:45 Webinar (1h)**

The influence of the fuel composition and of the content of various non-uranium cations on the oxidative fuel dissolution. – *K. Spahiu (SKB)*

**14:45 End of the 1<sup>st</sup> Annual Workshop**