

Session Program

28–31 Oct 2025

Technical Meeting on Advanced Technology Fuels: Progress on their Design, Manufacturing, Experimentation, Irradiation, and Case Studies for their Industrialization, Safety Evaluation, and Future Prospects

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Vienna International Center
IAEA Headquarters, Vienna, Austria (and virtual participation)

Tuesday 28 October

14:30

2: Experimental Testing of ATF Materials and Validation Database

Session | **Location:** Vienna International Center, IAEA Headquarters, Vienna, Austria (and virtual participation) | **Conveners:** Mr Martin Sevecek, Mr Robert Hansen

14:30–15:00 SEPARATE EFFECT TESTS WITH ATF CLADDING MATERIALS WITHIN IAEA ATF-TS CRP

Speaker

Mr Martin Sevecek

15:00–15:30

INTEGRAL TESTING OF ATF FUEL UNDER HIGH TEMPERATURE ACCIDENT CONDITIONS IN THE CODEX FACILITY

Speaker

Mr Zoltán Hózer

16:00–16:30

LEAD TEST RODS PROGRAM WITH CR-COATED CLADDING AT DOEL-4

Speakers

Dr JINZHAO ZHANG, Ms NURIA DONCEL

16:30–17:00

BEHAVIOUR OF BUNDLES WITH CR AND CR/CRN COATED ZR ALLOY CLADDING UNDER SIMULATING DESIGN EXTENTION CONDITIONS AT THE DEGREE FACILITY

Speaker

Kinya nakamura

17:00–17:30

ZIRCONIUM ALLOY CLADDING WITH CHROMIUM COATING: DIFFUSION-REACTION MECHANISMS AND STRUCTURAL DEGRADATION UNDER EXTREME TEMPERATURES

Speaker

Lili liu

18:00

Wednesday 29 October

09:00

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Session | **Location:** Vienna International Center, IAEA Headquarters, Vienna, Austria (and virtual participation) | **Conveners:** Mr Robert Hansen, Mr Martin Sevecek

09:00–09:25

Investigation of the temperature-dependent failure processes in a PVD Cr-coated ZIRLO nuclear fuel cladding material using real-time X-ray micro-tomography imaging

Speaker

Dr Guanjie Yuan

09:25–09:55

The study on the interdiffusion performance of Cr-Zr under high temperature in Cr-coated cladding

Speaker

Liang He

09:55–10:20

Integral Irradiations and Post-Irradiation Examinations of ATF Concepts Performed at Idaho National Laboratory

Speaker

Robert Hansen

11:00–11:25

CORROSION KINETICS OF AUSTENITIC STAINLESS STEEL UNDER WATER NORMAL OPERATION PWR CONDITION

Speaker

Vanessa Sanches Pereira da Silva

11:25–11:50 IAEA Fuel DB

Speaker

Ms Anzhelika Khaperskaia

11:50–12:15

AN OVERVIEW OF CEA LOCA SEPARATE EFFECTS TESTING APPLIED TO CHROMIUM-COATED ZIRCONIUM ALLOY CLADDINGS

Speaker

Ali Charbal

12:15–12:45

TESTING-SIMULATION OF PELLET-CLADDING MECHANICAL INTERACTION WITH ATF CLADDINGS

Speaker

Márton Király

14:00–14:25

High-Temperature Oxidation Behavior of Cr/CrN Multilayer Coatings on Zr–Nb Alloy for Accident Tolerant Fuels

Speaker

Mr Abdollah riahi

14:25–14:55 SEPARATE EFFECTS TESTS CONDUCTED WITH ATF FUEL CLADDING MATERIALS

Speaker
Márton Király

14:55–15:25 **Discussion**

15:30