

# **Technical Meeting on Compatibility Between Coolants and Materials for Fusion Facilities and Advanced Fission Reactors**



**Monday, 30 October 2023 - Friday, 3 November 2023**

**Vienna, Austria (virtual participation possible)**

## **Scientific Programme**

## **1 Material coolant interactions: experiments and modelling**

**Corrosion and mass transfer, codes for mass transfer simulation**

**Corrosion mitigation strategy**

**Impact on material behaviour**

## **2 Irradiation effects in cooling environments**

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## **3 Chemistry and coolant quality control, in-service online monitoring**

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## **4 Thermal-hydraulics, magnetic field, and other effects on material behaviour**

**Thermal-hydraulics**

**Magnetic field**

## **5 Tools for characterization of materials behaviour: corrosion, mechanical behaviour, effect of neutrons-ions**

**Devices for corrosion, loops for mass transfer, corrosion test standardization**

**Mechanical tests, small-scale specimen testing**

**Irradiation capability and hot labs for testing and characterization**

**Advanced characterization for corrosion kinetics and interface reaction**

**Codes and standards to support design**

## **6 Behaviour and characterization of additive manufacturing material in presence of harsh environment**

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