

# CALL # 2019-1-RD-EMMA- LILLA

The Joint Research Center of the European Commission (JRC) has opened access to its Liquid Lead laboratory (LILLA) allowing performance of mechanical tests in liquid lead with controlled dissolved oxygen concentrations up to 650°C.

**Opening of the call:** 2019-11-15

**Closure of the call:** 2020-01-31

**Location:** JRC, Petten, The Netherland

## The following equipment is available:

- ✓ The LILLA facility, with a range of temperatures in lead from 380°C to 650°C and oxygen concentrations in lead from saturation down to at least  $10^{-10}$  weight%;
- ✓ Two test sections with load or displacement control accomplished through pneumatic bellows-based system;
- ✓ A glovebox for cleaning of specimens.

## Priority topics:

- Safety and reliability of nuclear components for future nuclear systems
- Support to the development and adaptation of European Codes and Standards
- Characterisation of mechanical properties of candidate and new corrosion-resistant high-temperature materials, incl. surface modifications and welded joints
- Development of test and assessment methods as well as instrumentation to achieve easier and more reliable estimates of material properties using sub-size or miniaturised specimens
- Imaging techniques for opaque medium

**Details:** <https://ec.europa.eu/jrc/en/research-facility/open-access/relevance-driven/2019-1-rd-emma-lilla>