# Tenth International Workshop on Spallation Materials Technology

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### **Book of Abstracts**

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#### Operation experiences of high power spallation targets

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#### European materials R&D activities for Gen-IV and ADS

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#### Developments in the design of the spallation target for MYRRHA

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### Positron annihilation lifetime measurements of austenitic stainless steels irradiated in the SINQ target irradiation program

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Corresponding Author: xu@rri.kyoto-u.ac.jp

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### SANS and TEM investigation of phase precipitation in HT-9 at high neutron irradiation dose levels

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### First principle studies of intrinsic defects in hexagonal tungsten carbide

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# Status of R&D on mitigating the effects of pressure waves for the spallation neutron source mercury target

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# Initial observations of cavitation-induced erosion of liquid metal spallation target vessels at the Spallation Neutron Source

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### Pulsed E-beams to improve Corrosion Barriers for Lead Alloy Cooled Reactors: overview and dedicated Mechanical Tests

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# Effect of cold working on the corrosion resistance of JPCA steel in flowing Pb-Bi at 450°C

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Breakthrough technology for measuring the electrical impedance of protective steel oxide scales in LBE at temperatures up to 600°C

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Impedance spectroscopy and microstructural characterization of the corrosion behavior of FeCrAl steel in lead-bismuth eutectic

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Corresponding Author: bolind@mx.ibaraki.ac.jp

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#### Fabrication of a tantalum-clad tungsten target for LANSCE

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# Optimization of the thermal characteristics of an oxide high power target for radioactive ion beam production

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#### A reevaluation of radiation damage cross sections

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#### The expected radiation damage of CSNS target

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#### Radiochemical aspects of liquid metal spallation targets

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# Overview of material R&D activities for advanced nuclear energy systems

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Advanced experimental techniques for assessing microstructural and mechanical changes induced by irradiation

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#### Current status of toughness enhanced W-1.1%TiC development

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# Development and analysis of diffusion bonding techniques for LBE-cooled spallation targets

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# Post-irradiation analysis of refractory metal foils irradiated at high temperature for EURISOL 100 kW targets

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#### Microwave sintering of W/Cu functional graded materials

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### Theoretical simulation of radiation effects on materials with energetic particles

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#### Materials R&D needs for the ESS target station

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#### Structural characterization of Lead Gold Eutectic: an x-ray thermodiffractometry study

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### Preliminary tests on the compatibility of LGE with T91 and SS316LN steels

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# Experience with a first LGE loop and proposal for further investigations in flowing LGE

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#### MHD technologies in spallation target related investigations

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