

Contribution ID: 1 Type: Poster

The Materials Science group at Heinz Maier-Leibnitz Zentrum (MLZ)

Wednesday, 9 December 2020 14:30 (20 minutes)

The Materials Science group consists of more than 50 members recorded in the mailing list and working in a variety of fields related to the applied materials science. Members of this group belong to neutron scattering or positron spectroscopy instruments including the staff acquired through 3rd party funding and the group of fuel cell development. Each month a group meeting is organized to exchange the activities of the group members, especially their scientific work. In the meetings short presentations are given by group members or invited external scientists to introduce the methods and the scientific topics of their studies.

Typical tools applied in the group are diffraction, small-angle scattering, prompt gamma activation analysis, radiography/tomography, inelastic scattering with time of flight method and neutron depth profiling. Besides the development for neutron scattering instrumentation (neutron depth profiling at PGGA instrument, implementation of a testing machine for Stress-Spec and SANS-1 instrument, positron beam experiments, radiography and spectroscopy instruments at ESS) the topics of our scientific studies are: high performance alloys, energy related materials (batteries, hydrogen storage), electronic structure of correlated materials, fundamental properties of plasmas, archeological objects and last but not least the development of a future MEU fuel element for FRM II.

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Track Classification: UM: Materials Science