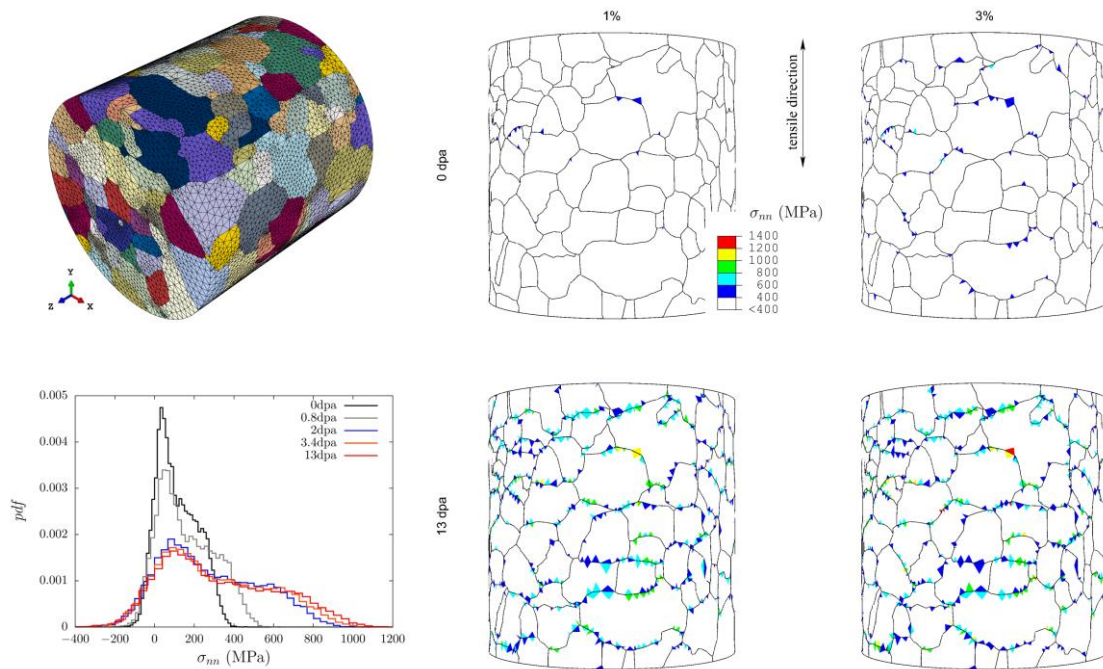


Young researcher (regular employment)

The [Reactor Engineering Division](#) at the [Jožef Stefan Institute](#), Slovenia, offers a four-year, full-time PhD position starting on October 2021.

We are looking for a PhD student to strengthen our research team in the field of computational structural mechanics, structural integrity and ageing of nuclear materials. Our research team is specialized in the development of multiscale computational simulation tools for polycrystalline metallic alloys. The research focuses on the explicit modelling and simulations of ageing effects at the level of microstructure to improve the understanding of local cracking conditions. Using statistical analysis of the simulation results, the goal is to identify critical parameters affecting the material integrity. The PhD research topic will be along these directions.



Example of the analysis of grain boundary normal stresses in the realistic wire model under irradiation and applied strain.

The position is funded by the Slovenian Research Agency within the Young researchers program. The PhD student will work at the Reactor Engineering Division at the Jožef Stefan Institute under the supervision of [dr. Samir El Shawish](#).

We are looking for a candidate with the master's degree in physics or similar field with good programming skills. Experience with finite element modelling is beneficial but not required. We expect a high level of motivation and diligence from the candidate, and we offer the possibility of conducting top scientific research and an excellent starting point for the development of a scientific career. The PhD student will be provided with a creative and stimulating research environment, access to a high-performance computing cluster and enabled training abroad.

Please submit your CV and motivation letter no later than June 30, 2021 to samir.elshawish@ijs.si.