

## **Comparison of heavy ion and in-pile irradiation induced IDL growth in UMo/Al fuels**

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Heavy ion irradiation (out-of-pile irradiation) has been used to simulate uranium fission damage in monolithic U-Mo/Al layer systems on account of its time, simplified handling and cost savings compared to in-pile irradiation. After irradiation an amorphous layer (IDL) resulting from the interdiffusion effect is generated in the bilayer system, which has a similar structure as the one produced during in-pile irradiation. By studying of the IDL behaviour in U-Mo/Al fuels with different analytical methods, a comparison with in-pile irradiation regarding IDL growth is presented and the reliability of this technique is verified.

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