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**UAlx Phase Analysis on the LEU Dispersion Targets with  
Changing the Composition of Atomized UAlx Powders**

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**ABSTRACT**

KAERI has been developing the LEU dispersion target for its supply to new research reactor which will be constructed at Kijang site in Korea. For LEU dispersion target, we fabricated two kinds of atomized UAlx powders having different contents of UA12 and UA13 phase. With using these two kinds of atomized UAlx powders, dispersion targets having an uranium loading of 2.6gU/cc were fabricated and inspected. In order to convert UA12 phase to UA13 phase for Mo-99 extraction, heat-treatments were conducted to two kinds of dispersion targets. In this paper, we investigate the optimal condition of heat-treatment by using XRD analysis.