1. While I understand the authors' decision not to distinguish between U and Mo in most parts of the study, this needs to be explained more clearly in the main text for the readers. In particular, the authors distinguish between U and Mo in the section of diffusion under pressure gradients. The rationale for treating them differently in that case, but not elsewhere, should be explicitly stated.  
  
2. According to Okamoto's phase diagram, phase separation occurs at high Mo concentrations. Assuming a uniform solid solution in such conditions is either hypothetical or indicative of a metastable state. While it is acceptable to simulate such hypothetical scenarios, the manuscript must clearly state that high Mo concentrations represent a virtual or unstable condition. Otherwise, readers may be misled. It should also be explicitly mentioned that phase separation is thermodynamically more stable at high Mo concentrations.  
  
3. I am not entirely convinced by the authors' definition of formation energy. Since formation energy varies depending on the choice of reference state and a clear definition is provided in the text, I think it's acceptable to leave the judgment to the reader. It would be helpful if the authors could explain more clearly why they chose this particular definition.  
  
4. I do not understand how the formation volumes were calculated. The authors claim that it is determined from the slope of the formation enthalpy, but formation volume is required to derive formation enthalpy from formation energy in the first place. The method of calculating formation volume is unclear and unconvincing. This point must be clarified before the manuscript can be accepted.  
  
5. Equation 5 appears to be valid under zero pressure. The manuscript mentions that pressure effects are subtracted, but it would be better to show explicitly how this was done, preferably with a concrete equation.