Dynamic Design: A Collection Process

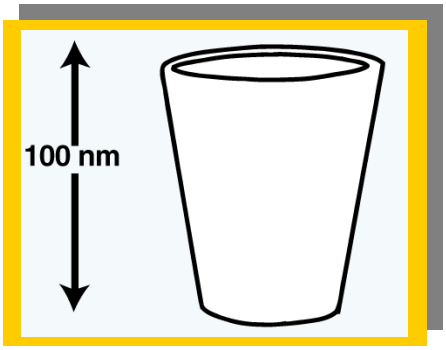
CAUTION: CONTAMINANTS!

STUDENT ACTIVITY

In this activity you will make a model of what solar wind particles might look like when embedded into the wafers if you had super magnifier eyes. The nucleus of an atom would look like the size of a pinto bean! It is important to note that this is a model of what the solar wind nuclei would look like. This does not model the process of how the solar wind particles get embedded into the collectors.

PROCEDURE:

1. Obtain the materials from your teacher.
2. Fill the plastic cup at least half full with pinto beans (representing collector material).
3. Add a small hand-full of rice (representing embedded solar wind). Then add 5-6 popcorn kernels (representing contaminants).
4. Shake the container until the rice settles about half way down the cup.
5. Draw a picture of your model below and label collector material, solar wind particles, and contaminants.



QUESTIONS:

1. What did the various parts of the model represent?

2. Where were most of the contaminants located in the model? Why?

3. Where were most of the solar wind particles located in the model?

4. How would you recommend the contamination be removed? List several removal methods.