

# ➤ Nuclear Medicine: Separating Radionuclides

<b>Activity</b>	Separating Radionuclides	<b>Demonstrator(s):</b>	STEM ambassador(s)
<b>Date</b>		<b>Venue:</b>	
<b>Event Organiser</b>		<b>Audience:</b>	15 – 18-year-olds and their parents / carers/ teachers
<b>Activity Description</b>	This activity simulates how we separate radioisotopes for their use in medical treatments and diagnostics.		

Hazards	Control Measures
Allergies	Ambassador(s): Ambassador(s) should check they are not allergic to any of the materials used for the experiment. Audience: This is a spectator activity with no major allergens, so minimal risk to the audience.
Manual handling	Ambassador(s): No heavy lifting is involved in experiments to help mitigate the risk of damage to property and person. Audience: Present in only a spectator capacity, should not be hands-on during the demonstration No heavy lifting is to be carried out and experiments carried out in the appropriate environment.
Glassware hazards (glass column)	Evacuate audience from the area. Broken glassware is to be swept up disposed of appropriately, <i>via</i> glass bin or however is specified by the venue. Appropriate PPE is worn (including safety glasses and cut-proof gloves).
Spillages	Ambassador(s) to ensure the clamp and stand are sturdy, and the column is securely attached, before performing the activity. Should the contents of the column spill, clean it up quickly using the tissues provided. None of the contents are hazardous. The bucket provided can be used to clean the spill then dispose of the waste <i>via</i> household waste or the route approved by the venue.
Waste	If running the activity multiple times, the bucket provided can be used to store the waste after each run, before disposing of it in bulk. Dispose of the waste <i>via</i> household waste or the route approved by the venue.
General hygiene	Hand wash stations should be available or the nearest handwash point be known. Antibacterial wipes and hand sanitizer are provided.

Hazards	Control Measures
Slips, trips and falls	Good housekeeping to be maintained to remove potential trip, slip and fall risks. This activity requires movement. Ensure there is large enough area to perform the activity and there are no hazards nearby.

In addition to the above control measures, the following standard safety requirements should also be in place:

- Appropriate ventilation and hygiene facilities should be present.

Signature: .....

Print Name: .....

Date: .....