**Creating Concentrated Stimulation Solution**

Materials Needed:

* Scale
* Lab Grade Urea
* Ammonium Chloride
* Sodium Acetate
* Yeast Extract
* ½ teaspoon
* Weigh paper- fold a sheet in quarters to weigh the yeast extract and ammonium chloride
* Metal spatulas
* Small measuring cup to measure 60ml of water
* 50 mL tube
* Distilled water
* pH strips
* Container to collect column drainage
* Small container to collect small amount of drainage to measure the pH (a plastic weighing boat works well for this)

Checklist:

* Measure 25 ml distilled water and place in small screw cap bottle
* Add (in order) and shake into solution before adding the next chemical:
	+ 0.1 gm yeast extract (solution is golden & foamy)
	+ 5.35 gm ammonium chloride (solution gets cold – endothermic)
	+ 3.48 gm sodium acetate
	+ 21.02 gm urea (add 1/3 at a time and shake well)

[this takes time – 10 to 15 minutes]

pH of this solution is ~7.0

* Add ½ tsp of baking soda, shake into solution

pH of this solution is 7.5

* Pour this solution into small measuring cup and fill with distilled water to 50 ml mark
* Pour back into small bottle, using labeling tape – create a label for the bottle "concentrated stimulation solution" with the date of production
* Store in your refrigerator