METHODS AND MATERIALS

PART 1: AR94 AQUEOUS CONCENTRATION ([AR94])

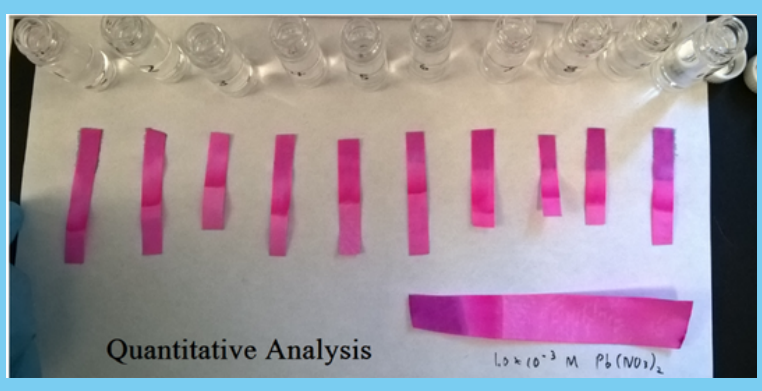
- Determine [AR94] that yields the greatest difference in maximum fluorescence intensity.

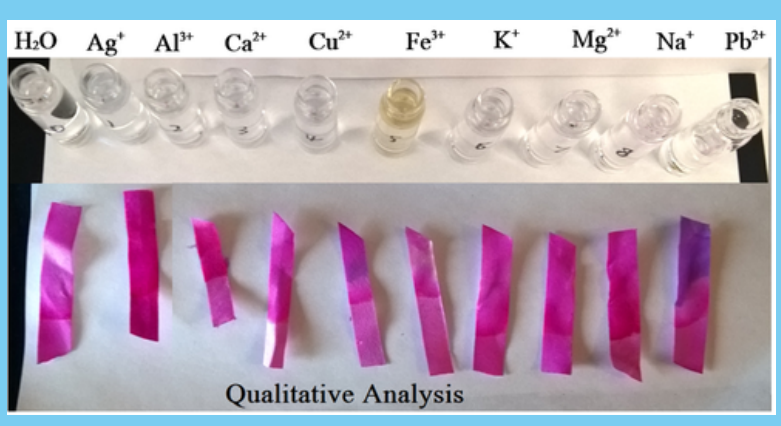
PART 2: LEAD CONCENTRATION VS. FLUORESCENCE

- Measure the fluorescence intensity for
  - Constant [AR94]
  - Increasing lead concentration

PART 3: SELECTIVITY AND SENSITIVITY

- Compare AR94 soaked filter paper strips dipped in
  - dI water
  - same concentration of different metals
  - different concentrations of lead
- Take several fluorescence intensity measurements for [AR94] from part 1.





PART 4: COMPLEX STRUCTURE

- Vary mole fractions of AR94 and lead in aqueous solution.
- Measure the fluorescence intensity of each solution.