RDCH 702
Homework 4: Assigned Wednesday 14 October, Due Wednesday 21 October

1. Using Chess and kaleidigraph (or other suitable program) provide the following. Correct any parameters as needed.
   1.1. Speciation of Pu at pH 5 from -500 to 1500 mV
   1.2. Speciation of Pu at pH 5 from -500 to 1500 mV with 1 mM F⁻
   1.3. Speciation of Pu at pH 2 from -500 to 1500 mV
   1.4. Speciation of Pu at pH 2 from -500 to 1500 mV with 1 mM F⁻
   1.5. 1 micromole/L Np(V) speciation from pH 1 to pH 12
   1.6. Tc(IV) from 1 nM to 100 mM in 1 mM sulfate at pH 3.
   1.7. Eh-pH diagram of the following (pH 2-10, Eh -500-1500)
       1.7.1. Np
       1.7.2. Pu
       1.7.3. U
       1.7.4. Tc
   1.8. Select a system of 2 metals and 2 ligands in a pH range of your choosing.