

## Hand Specimen Mineralogy Lab – Sulfates, Phosphates and other minerals with anisodesmic groups

In this lab you will continue your examination of minerals with various anisodesmic functional groups. As before, only minerals that are underlined will be on a quiz or an exam - you should know the elemental constituents for each of these minerals (and the precise formulas that are in bold) . Your unknown set of minerals will contain the following:

### Sulfates

Barite  $\text{BaSO}_4$

Celestite  $\text{SrSO}_4$

Anglesite  $\text{PbSO}_4$

Anhydrite  **$\text{CaSO}_4$**

Gypsum  **$\text{CaSO}_4 \cdot n\text{H}_2\text{O}$**

### Phosphates

Apatite  $\text{Ca}_5(\text{PO}_4)_3(\text{F}, \text{Cl}, \text{OH})$

Amgbygonite  $\text{LiAlFPO}_4$

Turquoise  $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 5\text{H}_2\text{O}$

### Tungstates

Scheelite  $\text{CaWO}_4$

Wolframite  $(\text{Fe}, \text{Mn})\text{WO}_4$

### Molybdenates

Wulfenite  $\text{PbMo}_4$