#### Announcements

- Turn on the Clicker (the red LED comes on).
- Push "Join" button followed by "20" followed by the "Send" button (switches to flashing green LED if successful).
- No clicker questions today.
- Last Exam 1 week from today.
- Chemistry Roast: 6 P Friday at The Underground.
  - Celebrate finishing general chemistry.
  - Should Dr. G come?
- Don't forget to come to lab check out next week to get your belongings and artwork.

### Review

- -----Chapter 17-----
- Fuel Cells
- ----Chapter 18-----
- Metals
  - Physical properties
  - Work hardening
  - Electronegativities
  - Refining/Smelting (oxidize to oxide then reduce with CO)

### Review

- Al processing
  - Separate from ore with NaOH
  - Acidify and heat to get Al<sub>2</sub>O<sub>3</sub>
  - Electrolytically reduce dissolved in molten cryolite (Na<sub>3</sub>AlF<sub>6</sub>)
- Alloying
  - Usually makes metal harder
  - Substitutional versus Interstitial Alloys
  - Can reduce corrosion (Ni and Cr w/Fe)

# Clays

Silicate Layer (Figure 10.16)

Alumino silicate sandwich as in kaolinite (Figure 18.6)

# **Band Theory**

