Announcements
Lab Quiz
Pre-lab Lecture
  ECD System
  Today in Lab, FNT
Announcements

- BE Seminar this week is Prof. Matt Lang on biophysics, cytoskeletal proteins
- Proposal presentations next Friday
- Tuesday, Dec. 9th
  - Discussion + evaluations during lecture
  - Lab party afterward (food, games, etc.)
Electrochromic Device

- close ion flows → change oxidation state of Ir

Li enmeshed in a gel

(D_L > D_A > D_S)

D = diffusion

ITO (trans. cond.)

phase - reaction

"nano wires"

Original image from Yoon Sung Nam
Future Areas of Research

ITO drawbacks:

• high cost
• limited supply of iridium
• fragile and inflexible
• costly deposition under vacuum

Carbon nanotubes as possible replacement?

Slide content from N. Kuldell
Status of phage and IrOx particles

- Phage
  - Low PFU → use for TEM
  - Supplement with high PFU φ for ECD
    (from AB lab)

- IrOx
  - Ir compound + sodium citrate
    - Wait 24 hrs
    - Ion exchange, H₂O₂
      - Supplemented w/ AB lab materials
Today in Lab

• Prepare pattern on a slide
  - Must etch on the ITO side → use multimeter (in SL’s)
  - Ensure that pattern is connected to ITO!
  - Which side part will be dark in the ECD?

• Etch slide with aqua regia, clean and expose

• Today, FNT continue work on proposal