

Mod 3 Day 3: TEM

11/19/2013

Groups

① Red, Green, Purple

② Orange, Blue, Gray

③ Yellow, Pink, White

Today

➤ **TEM!**

➤ **Proposal and FNT reflection**

Next Time: Quiz!

Reminder: Mod 2 Report revisions
due 11/27 at 5pm

Today

- TEM *3 groups*
 - You will be going in groups/shifts to view TEM of your sample.
 - For the FNT – TAKE NOTES!
- Rest of class:
 - Discuss this weekend's FNT (research proposal papers), find common ground
 - Be prepared to “pitch” your idea in 1 week
 - Feedback will be given

Overview: Construction and Evaluation

• Construction Phase

- Use phage to assemble Au-TiO₂ or SWNT-TiO₂
- Nanocomposites integrated into solar cell

Rapid
Biote mp ↘
To slow rxn & improve "smoothness" of images →
EtoH + -40°C

Remind { SWNT → e⁻ path
Au → light collection

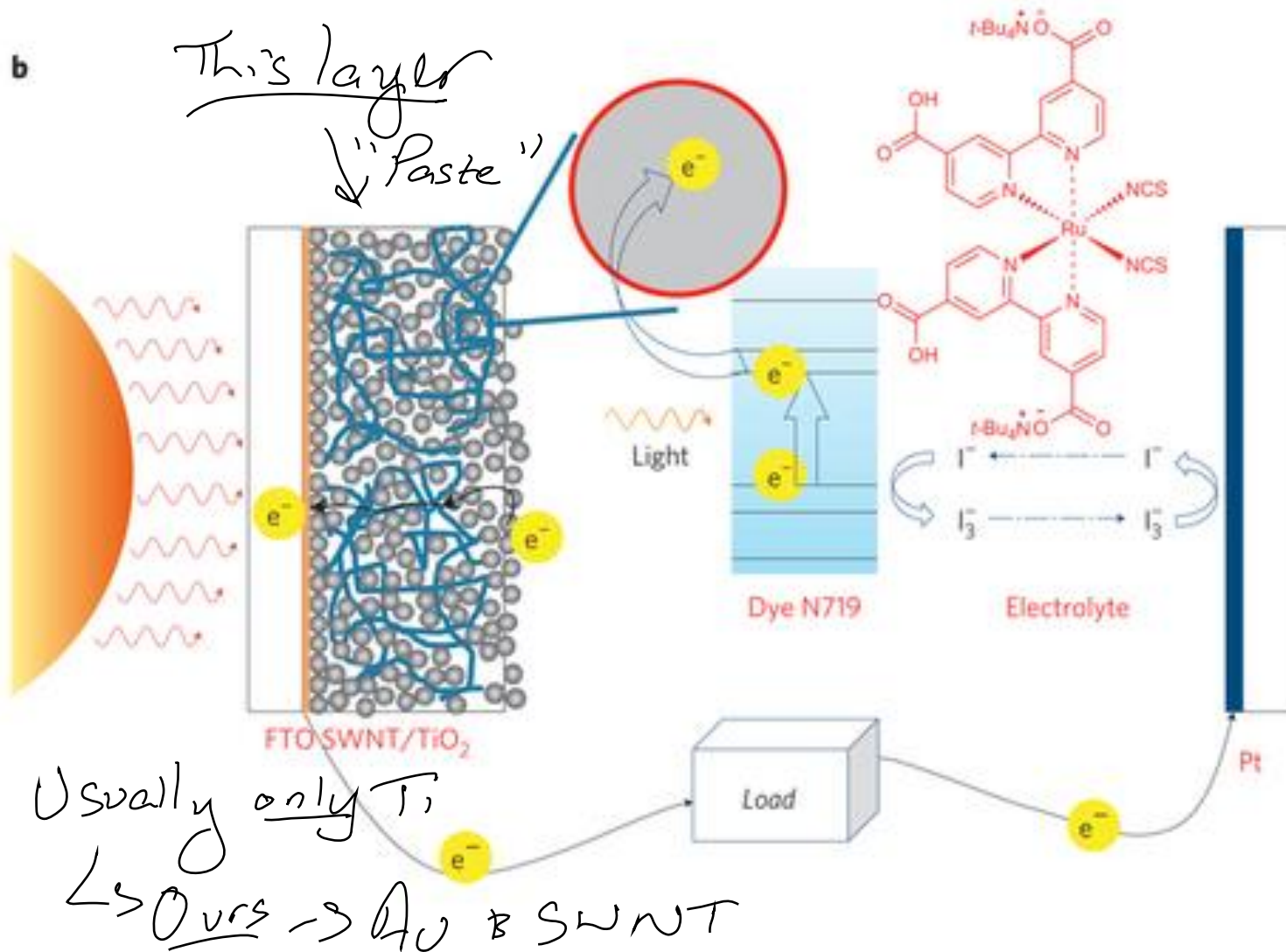
• Evaluation Phase

- TEM Morphology & Composition
- Test efficiency

Conduction & photon/e⁻ conversion

b

This layer
↓ "Paste"



Usually only Ti
↳ Ours → Au & SWNT

Useful animation: <http://youtu.be/3KRHJSOgzcw>