

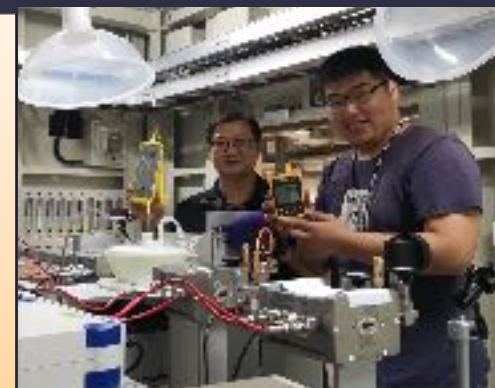
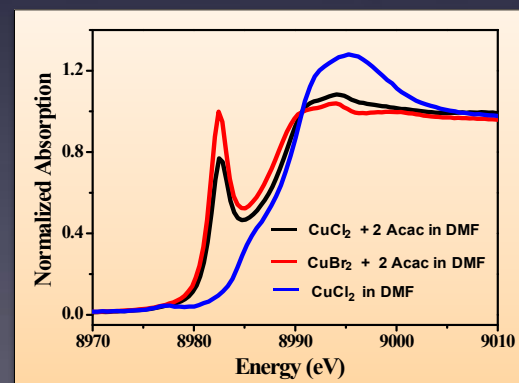
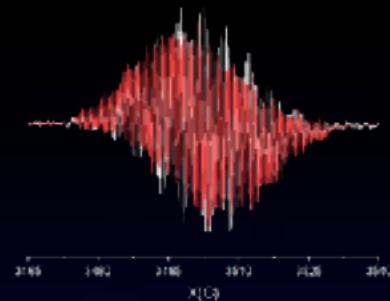
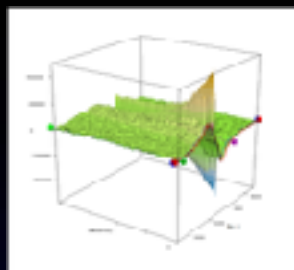


Alternating Current (AC) Electrolysis toward ORGANIC SYNTHESES
Alters Future



Green Dream



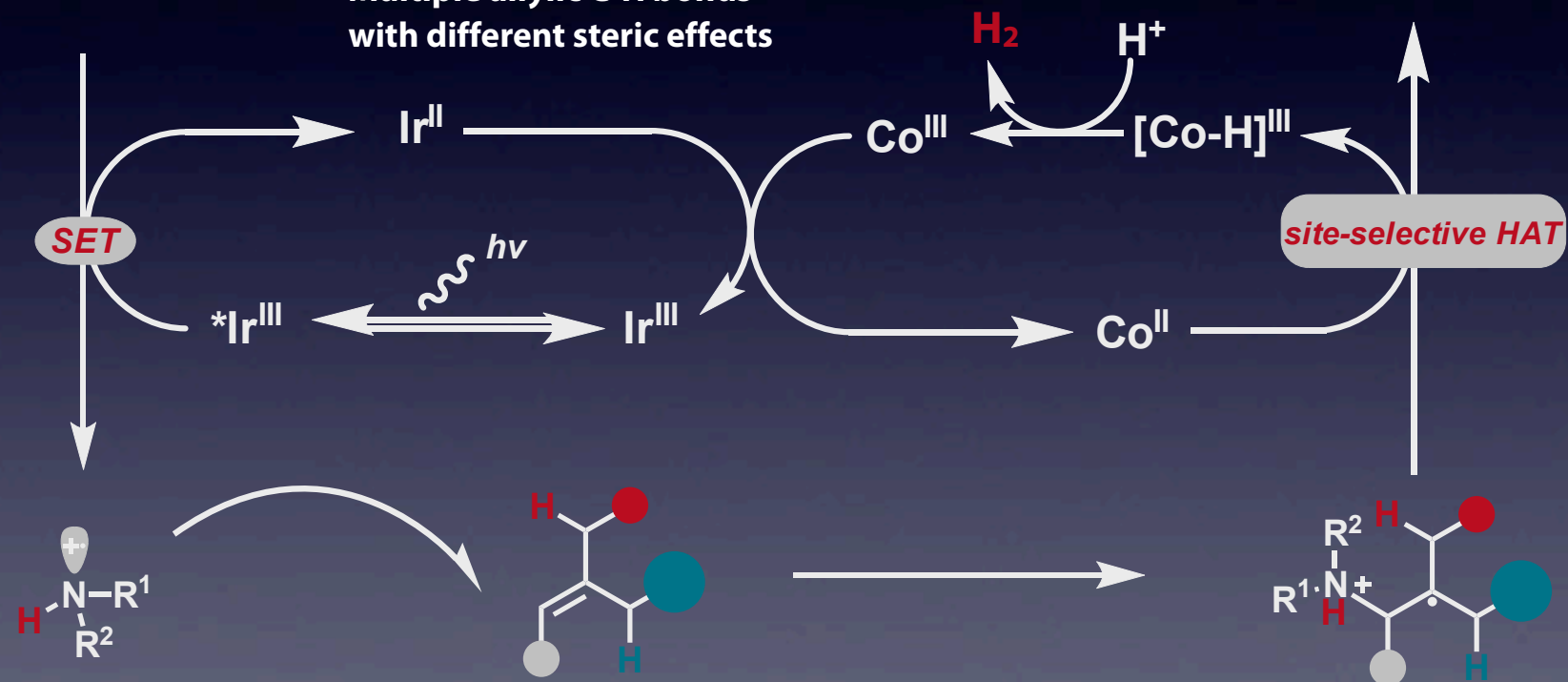


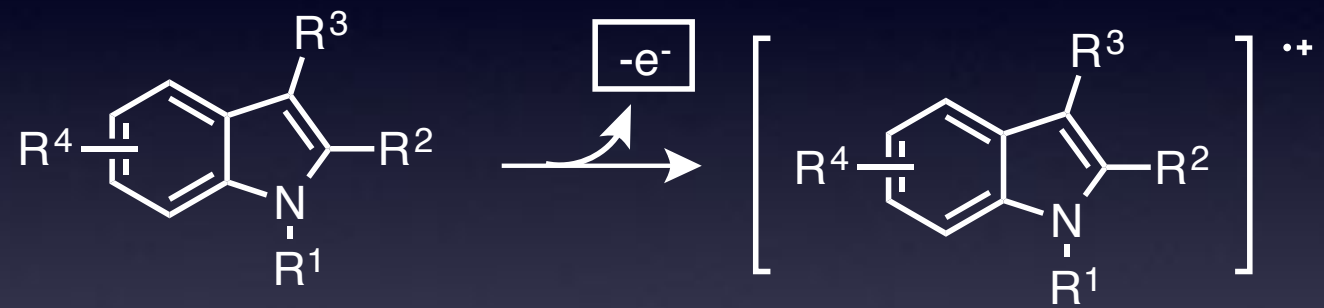
Ref.

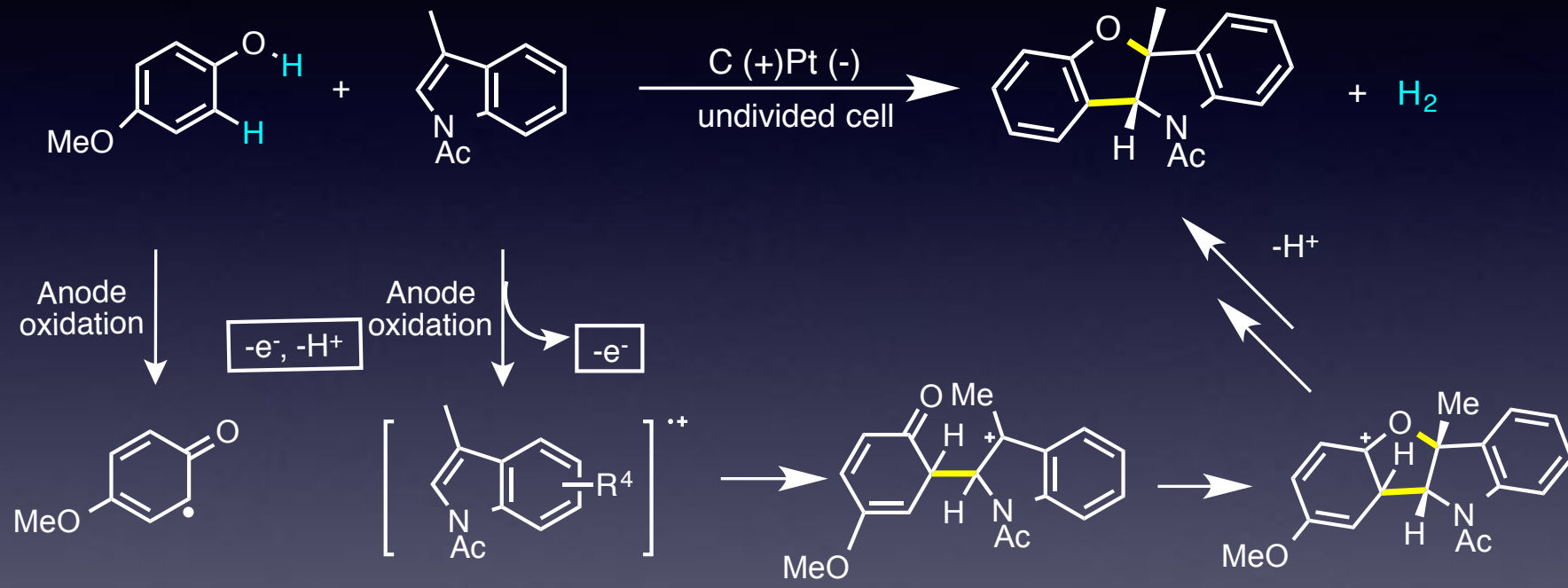
Chem. Rev. **2017**, 117, 9016 – 9085; Chin. J. Org. Chem. DOI: 10.1002/cjoc.20180010.

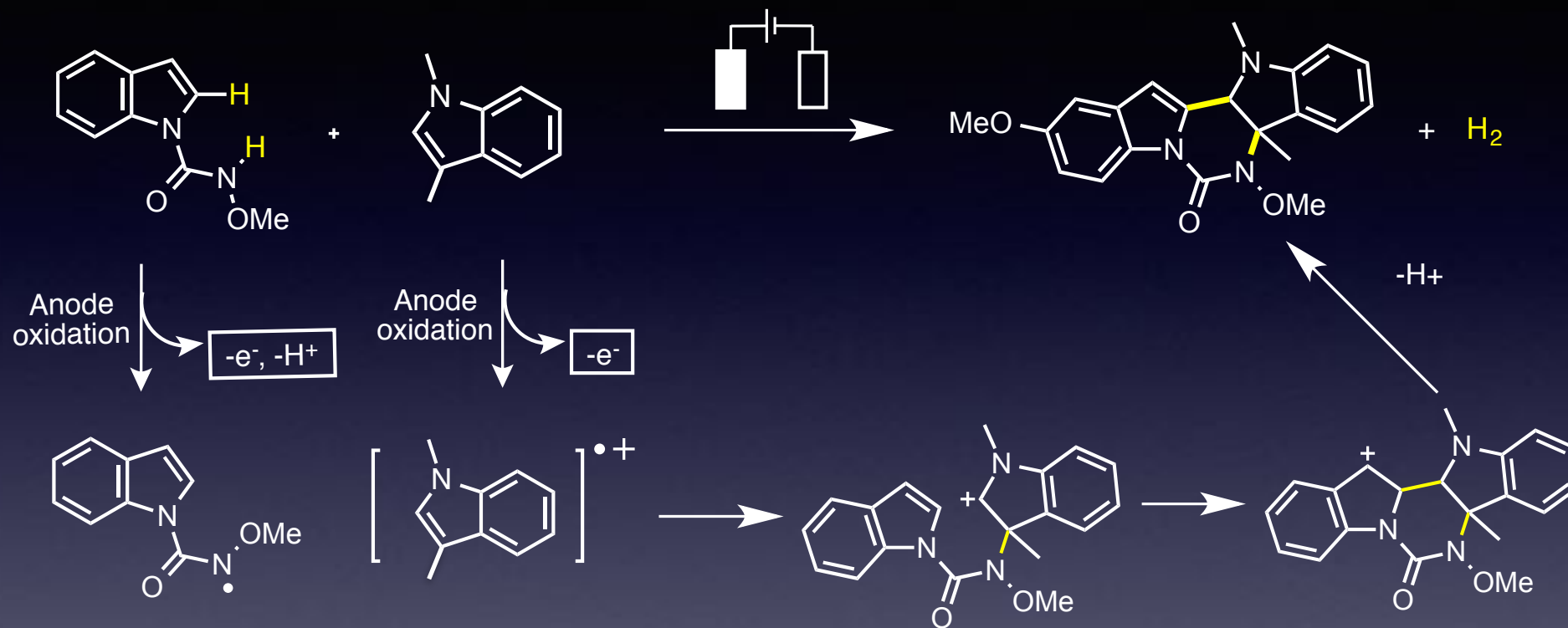


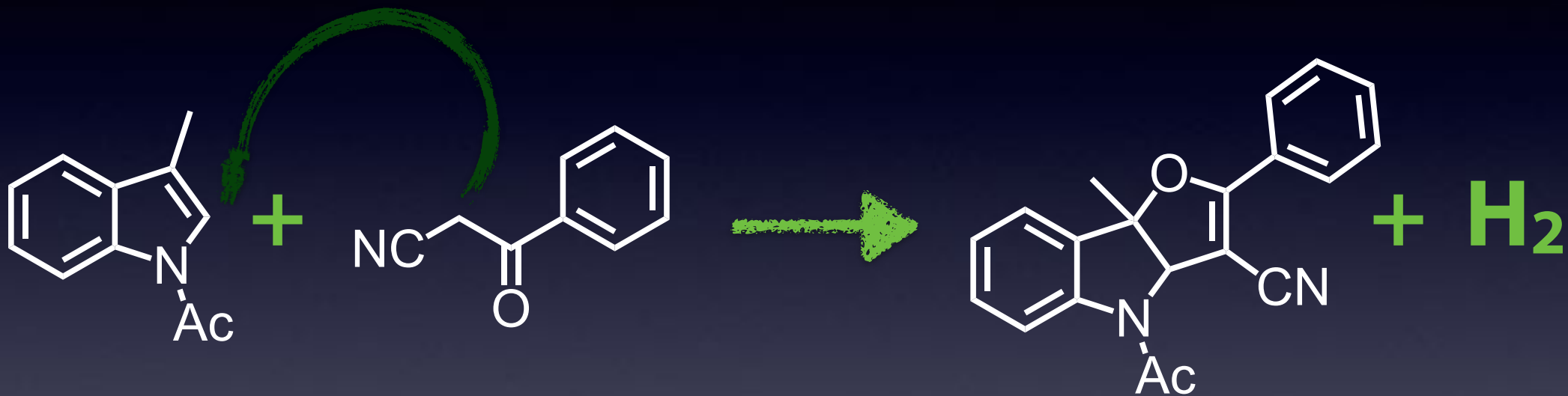
Multiple allylic C-H bonds with different steric effects

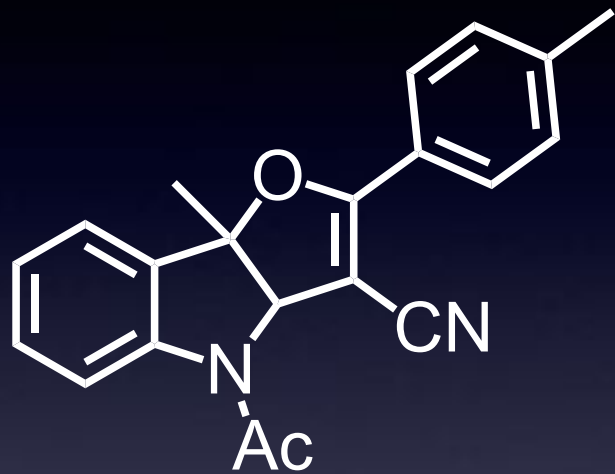




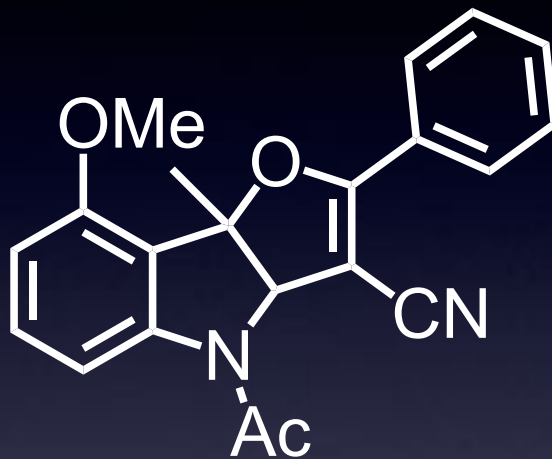




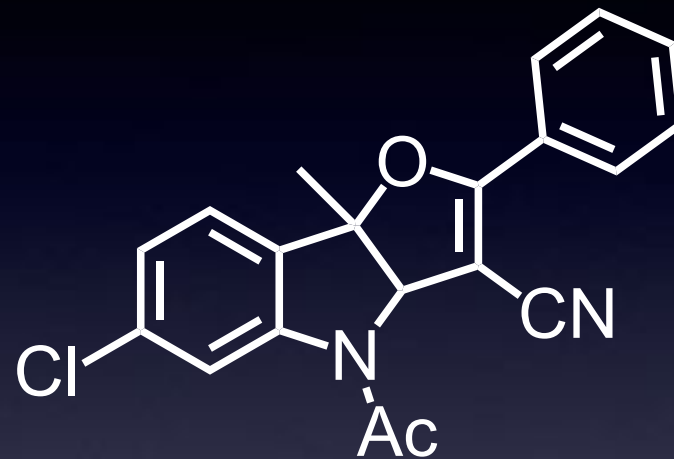




87%

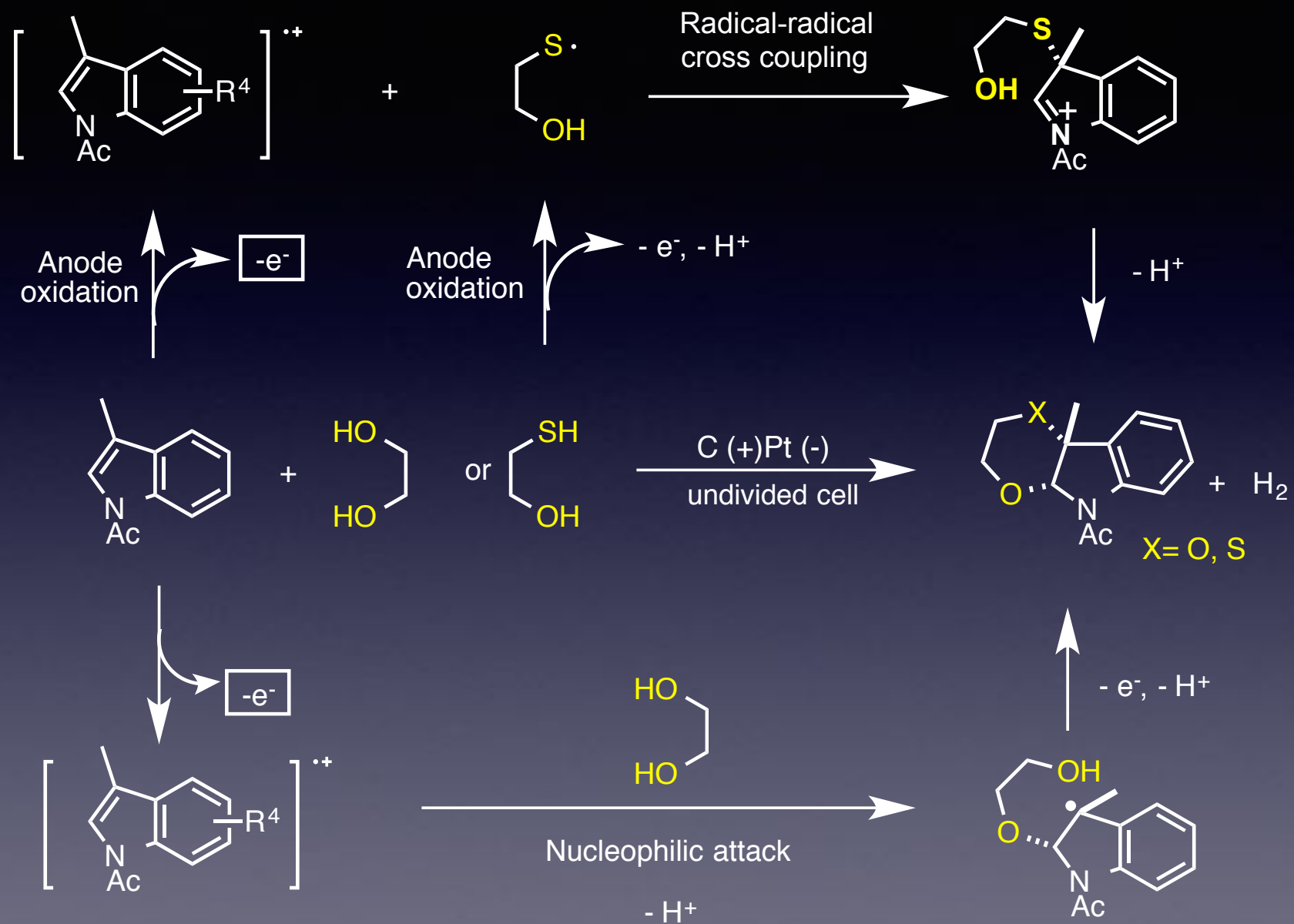


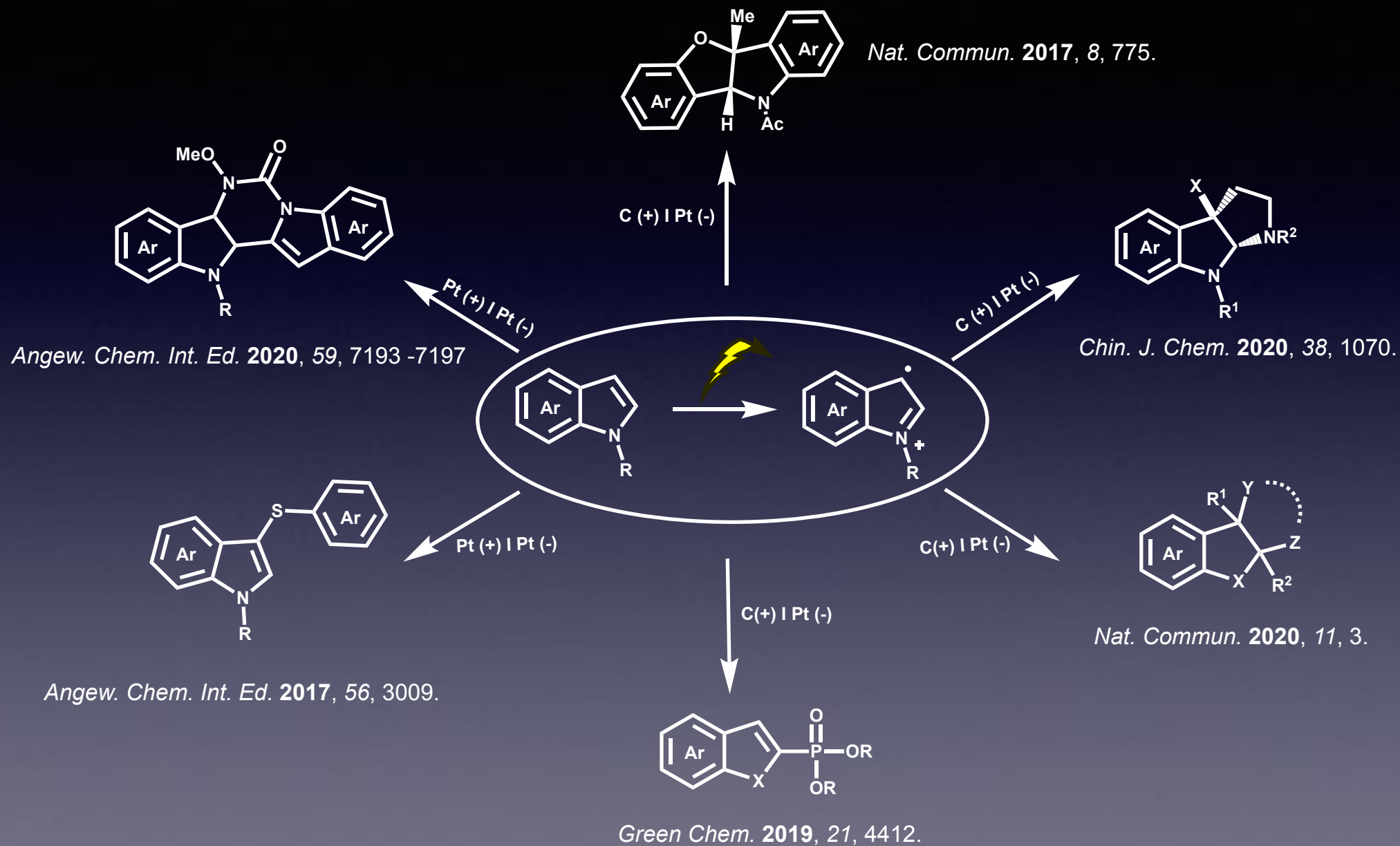
93%

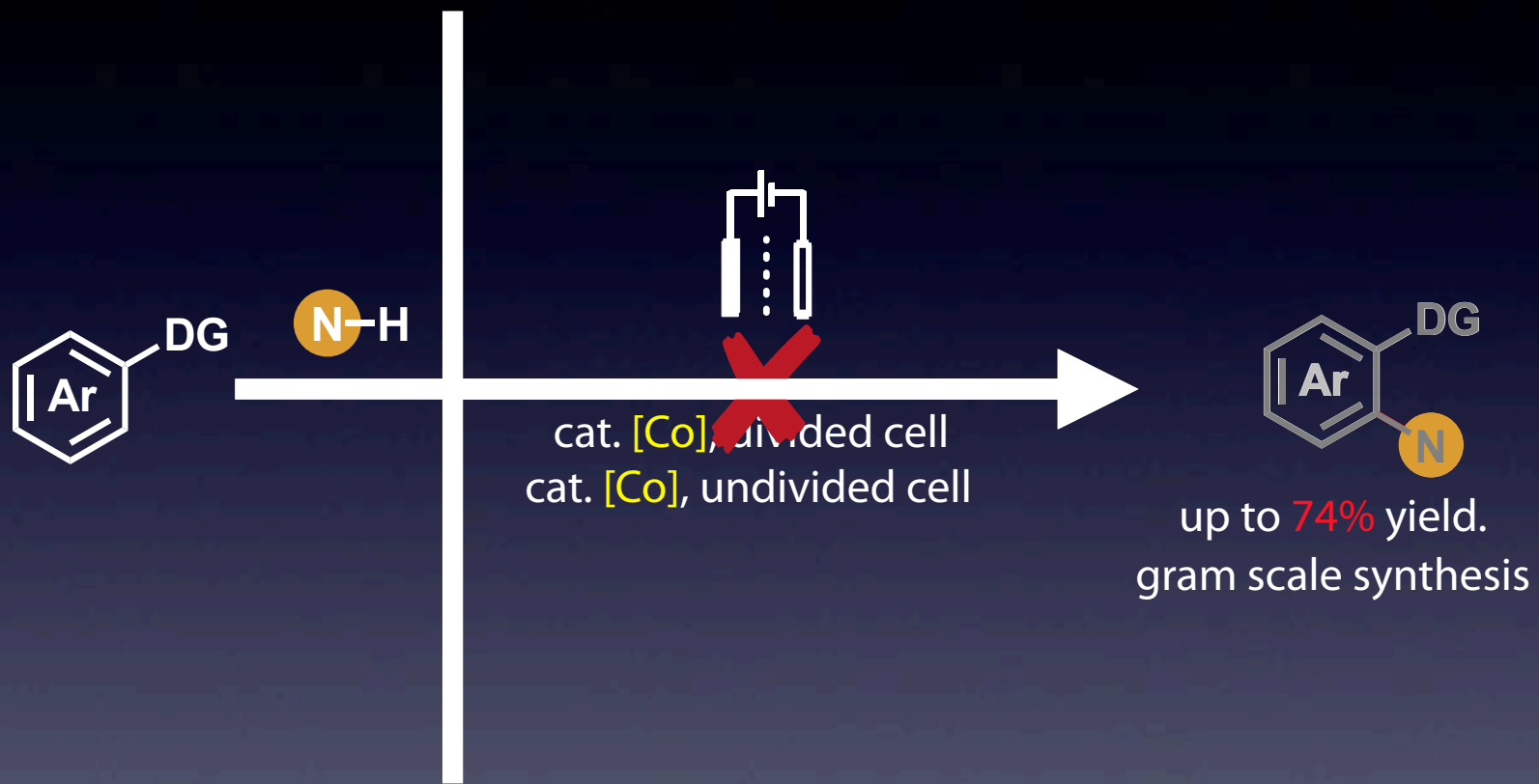


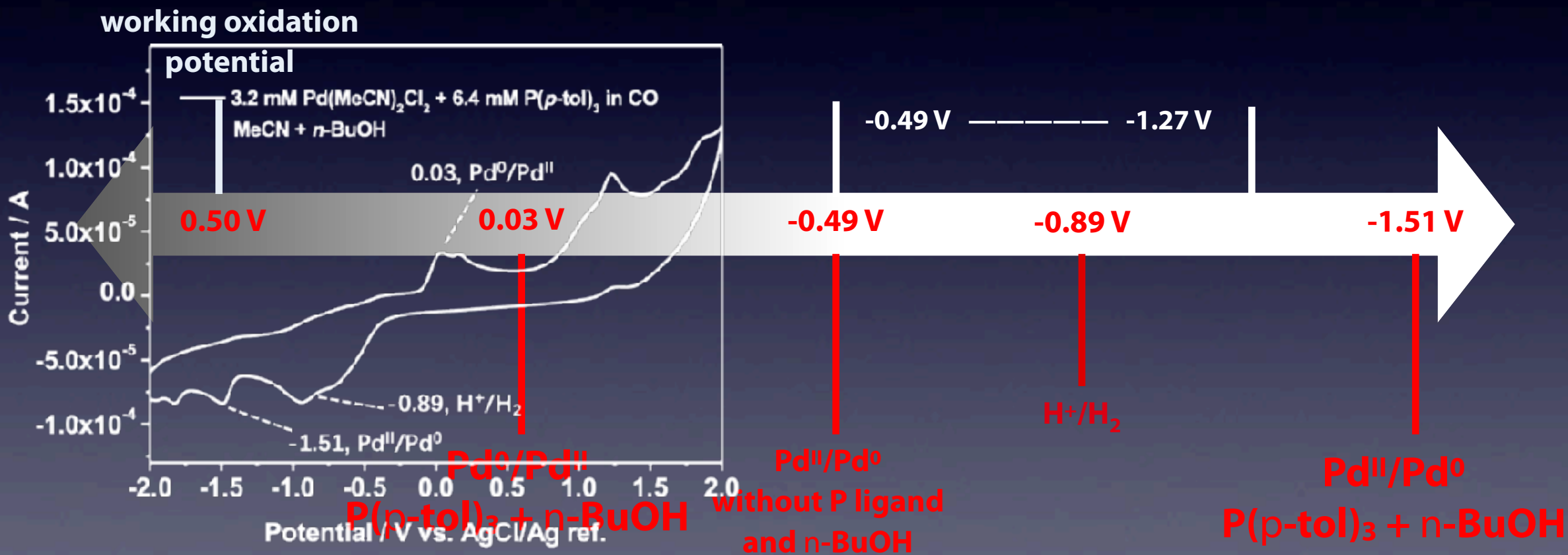
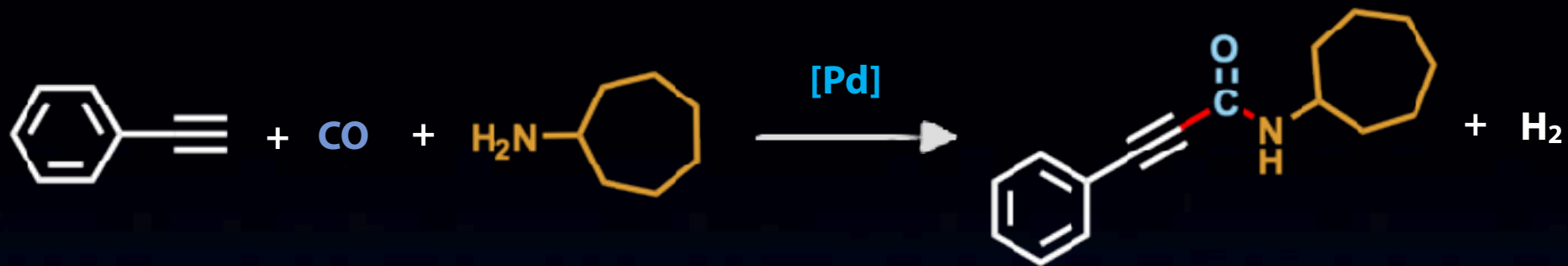
79%

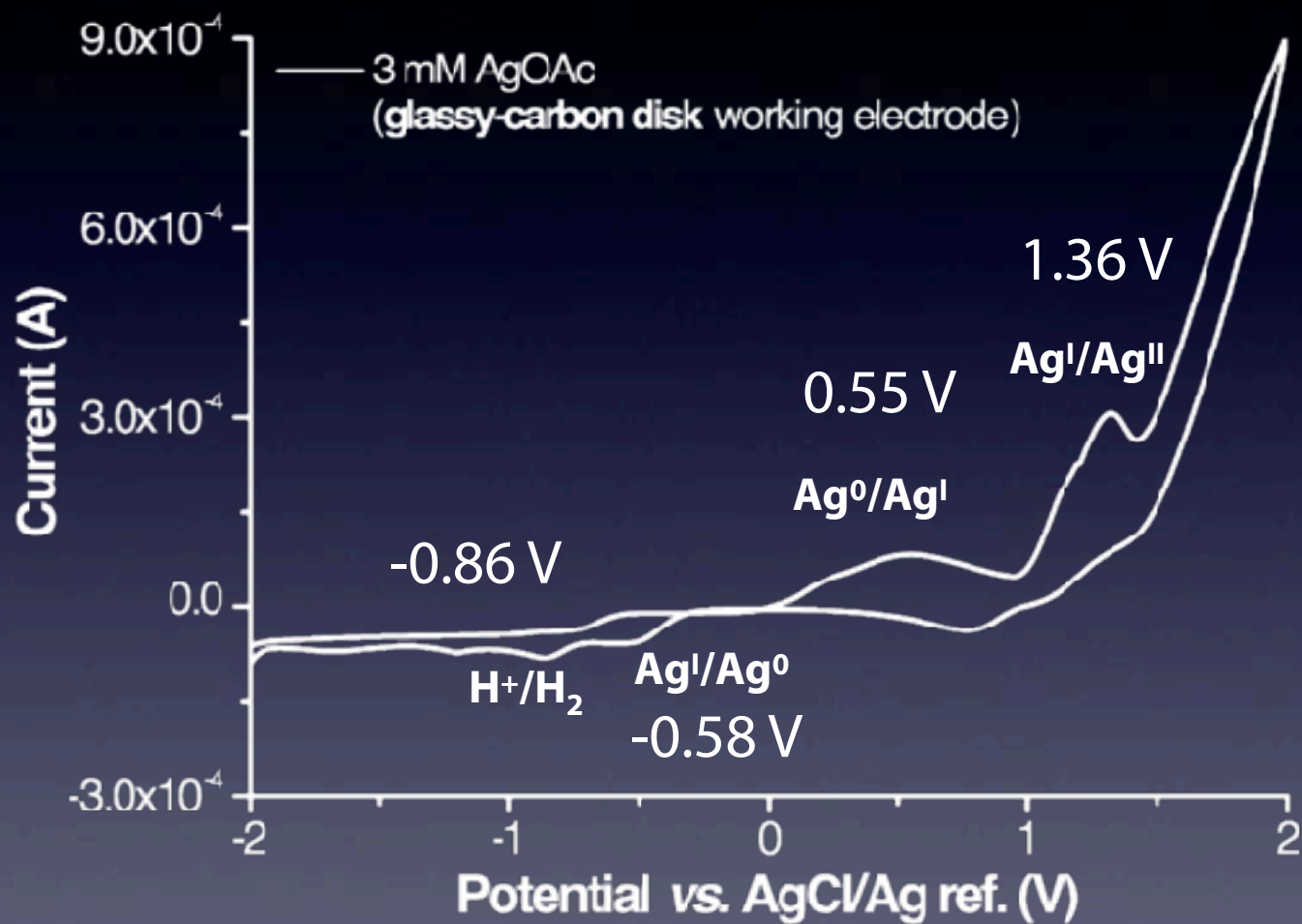
unpublished







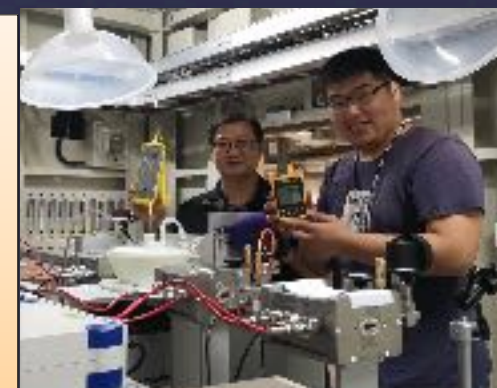
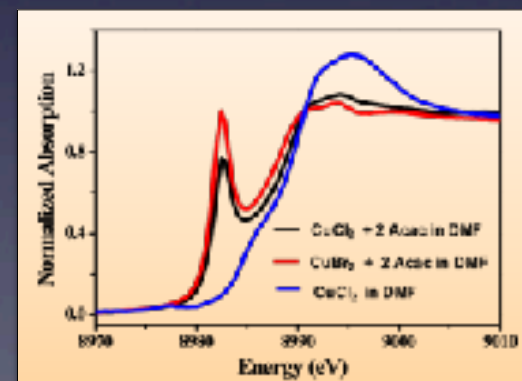
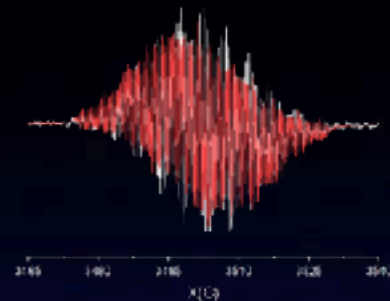
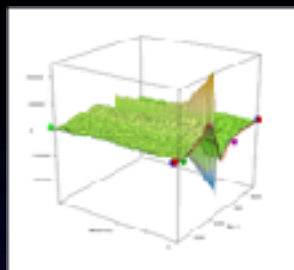


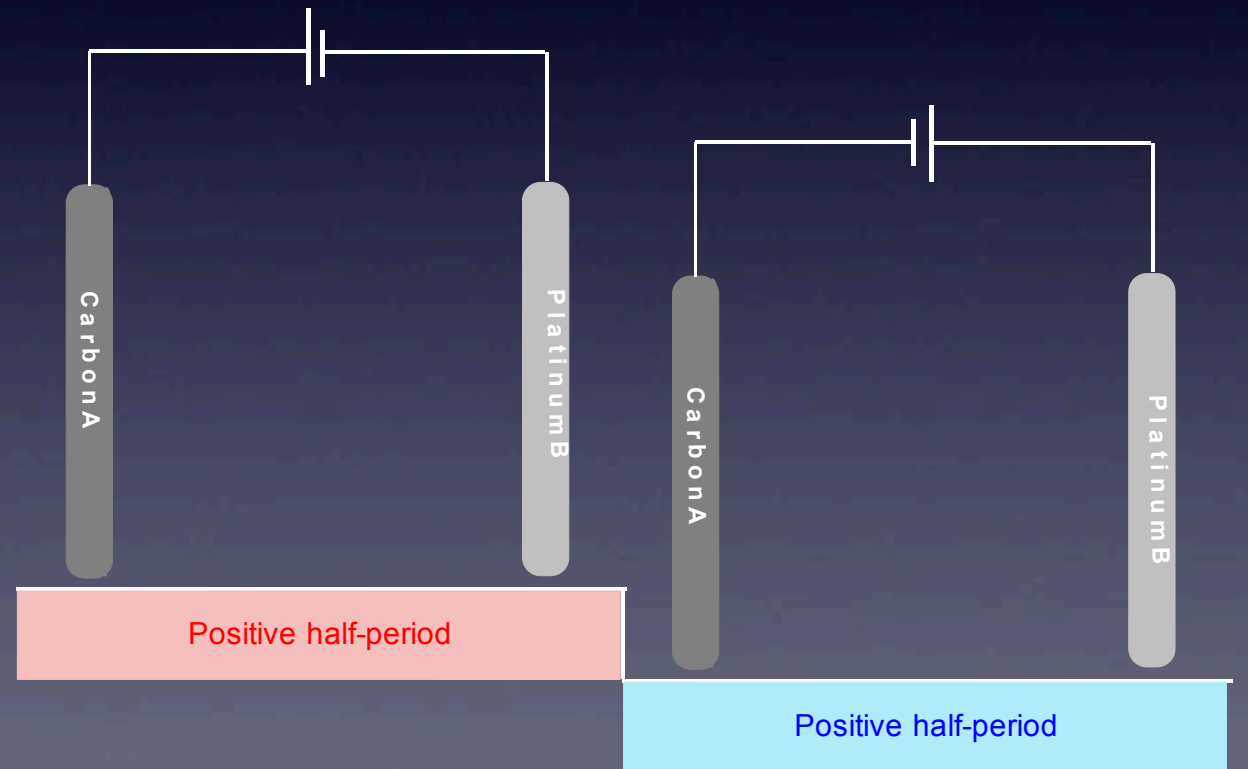
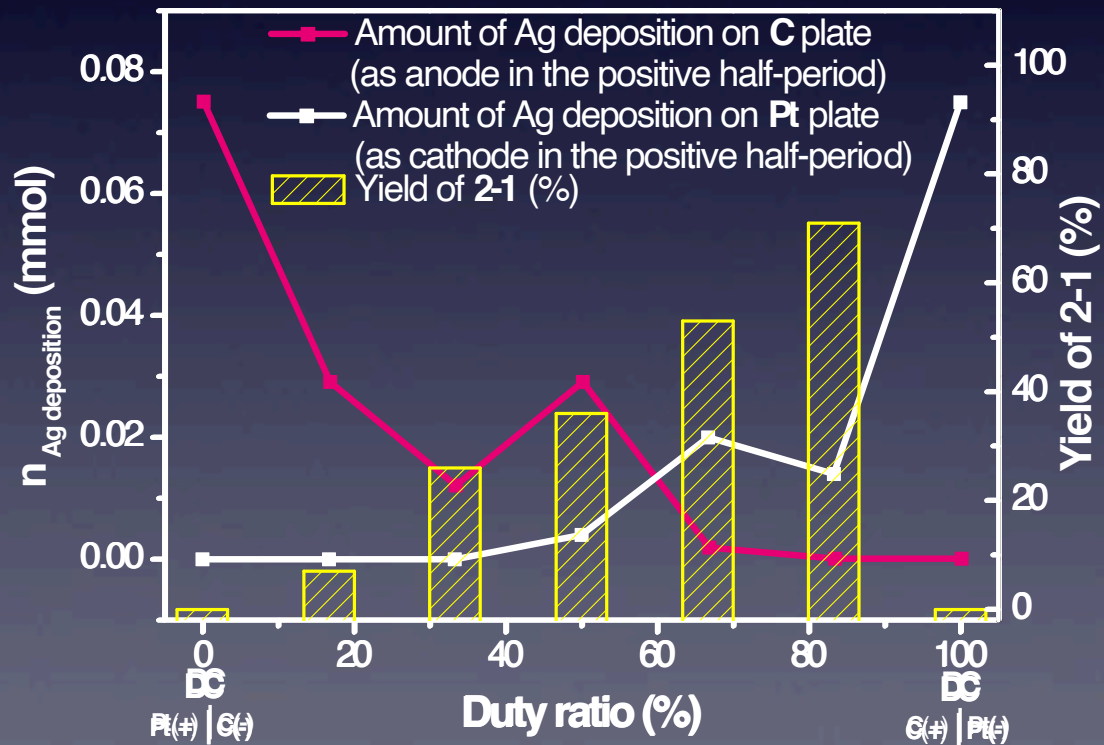
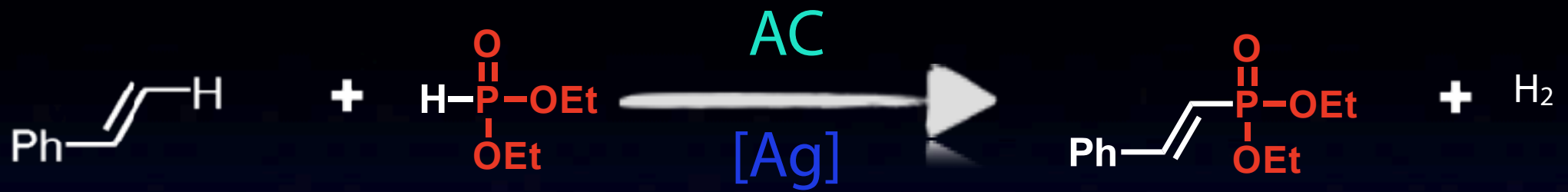


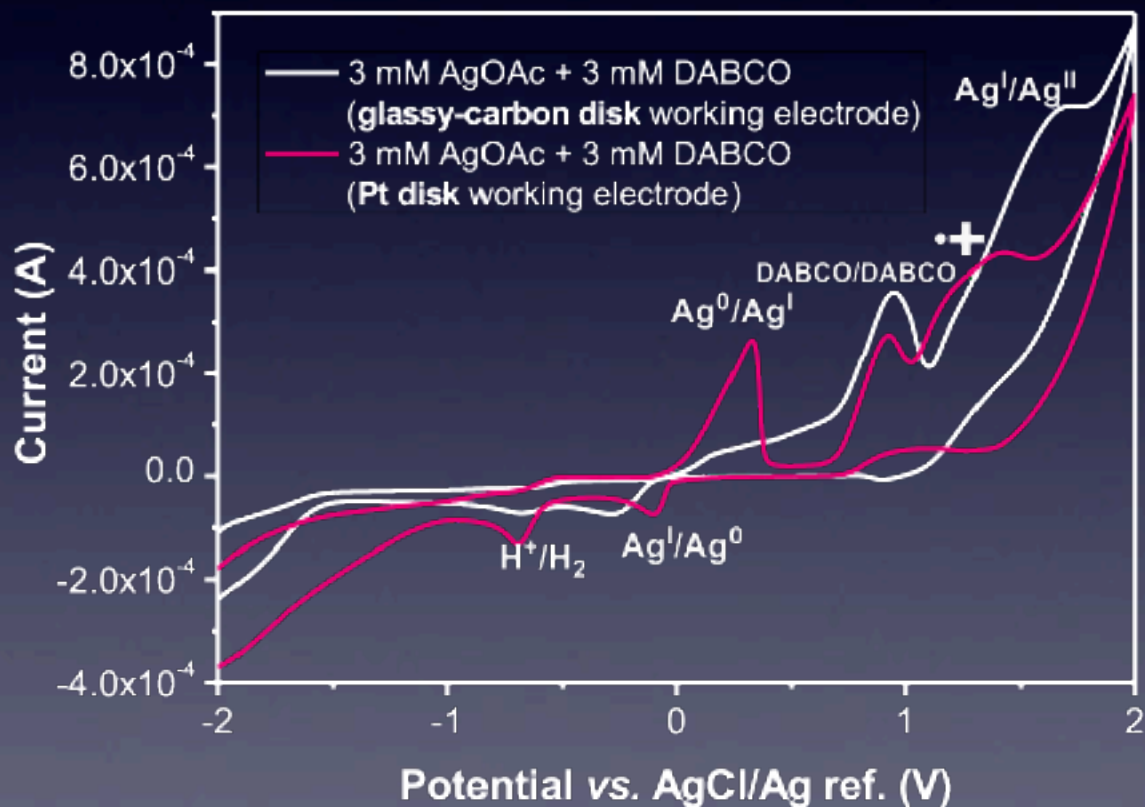
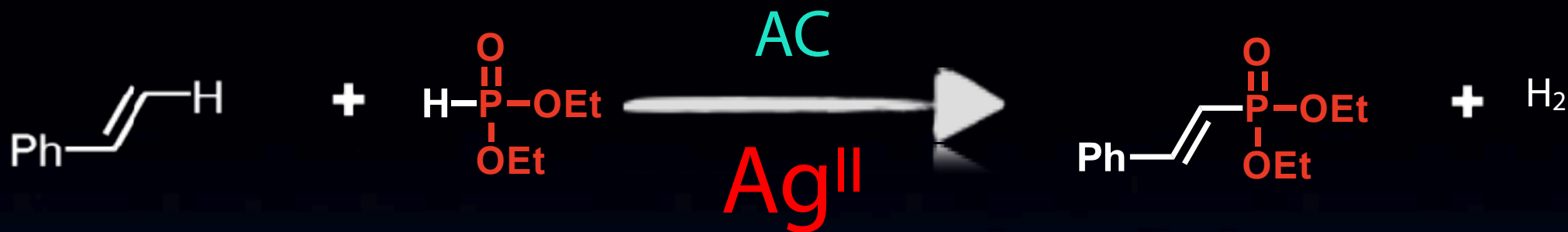
Ag =

M









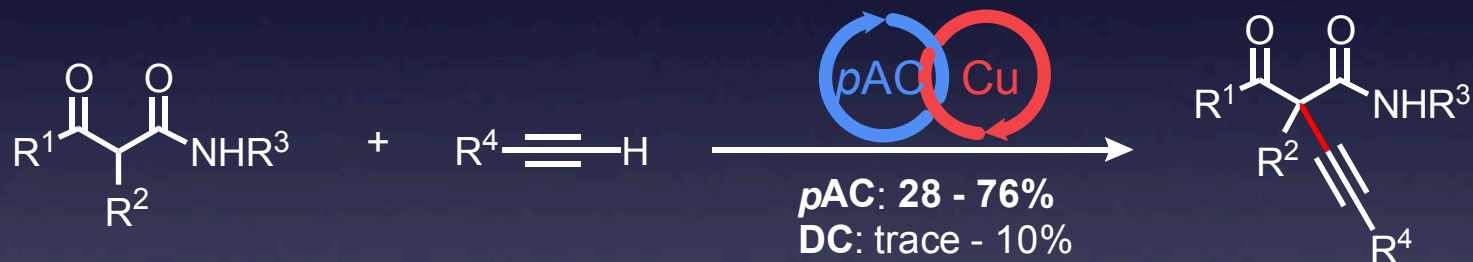
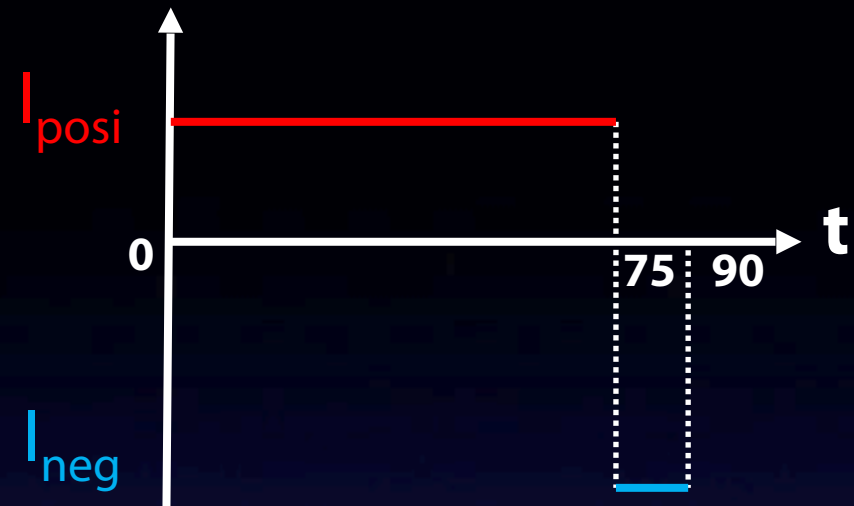
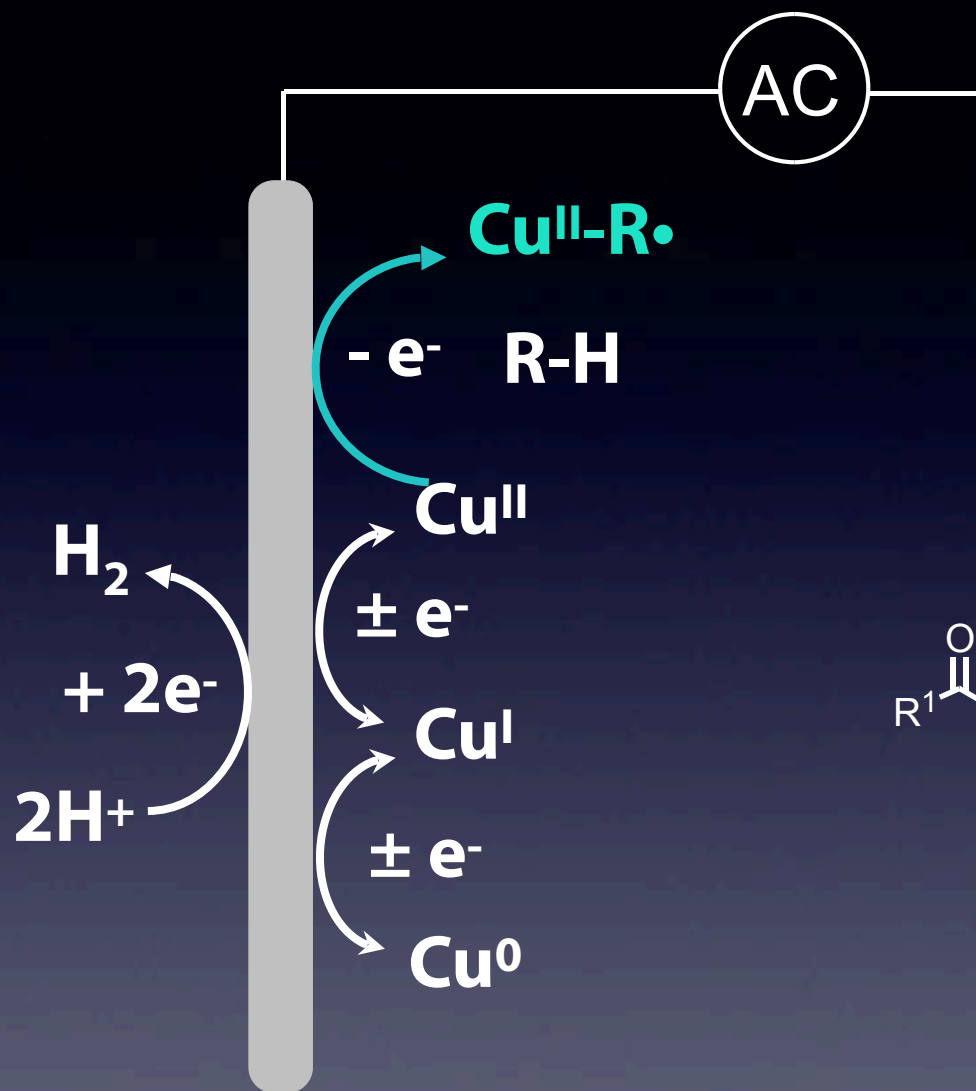
Alternant potential pattern

0.50 V: n.d. (oxidizing Ag^{0})

0.75 V: 4% (oxidizing Ag^{0})

1.00 V: 9% (oxidizing Ag^{0} and DABCO)

1.25 V: 42% (oxidizing Ag^{I} and DABCO)

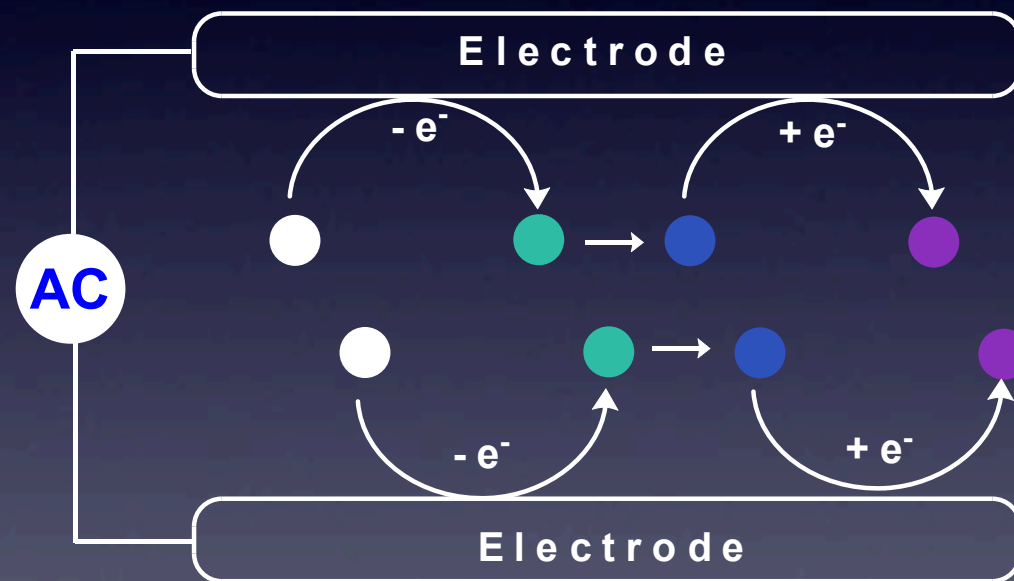
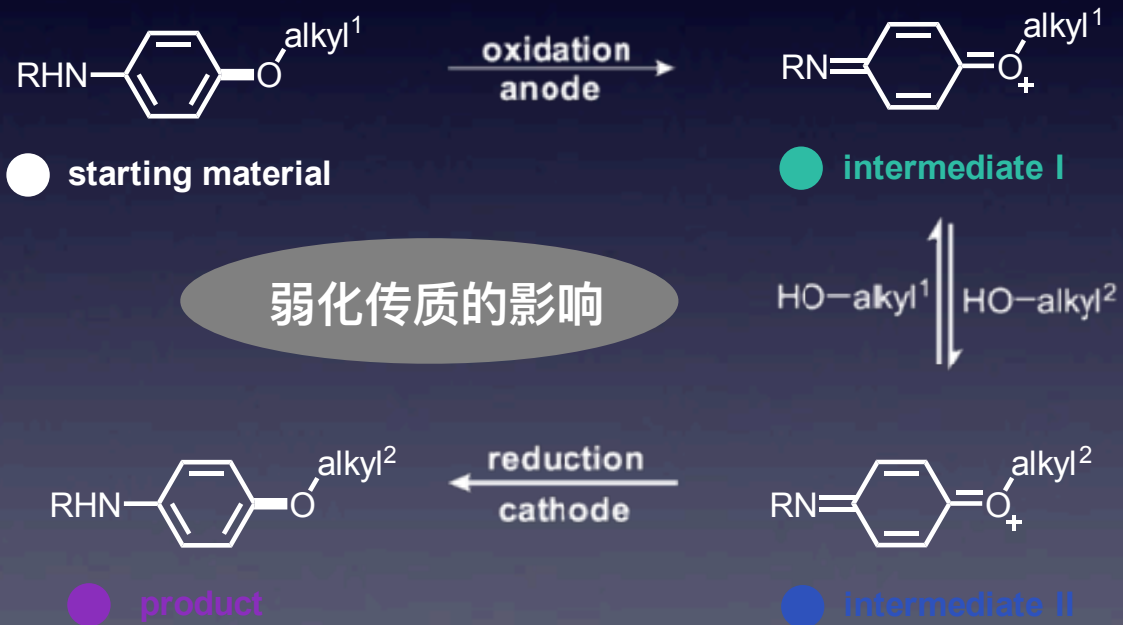


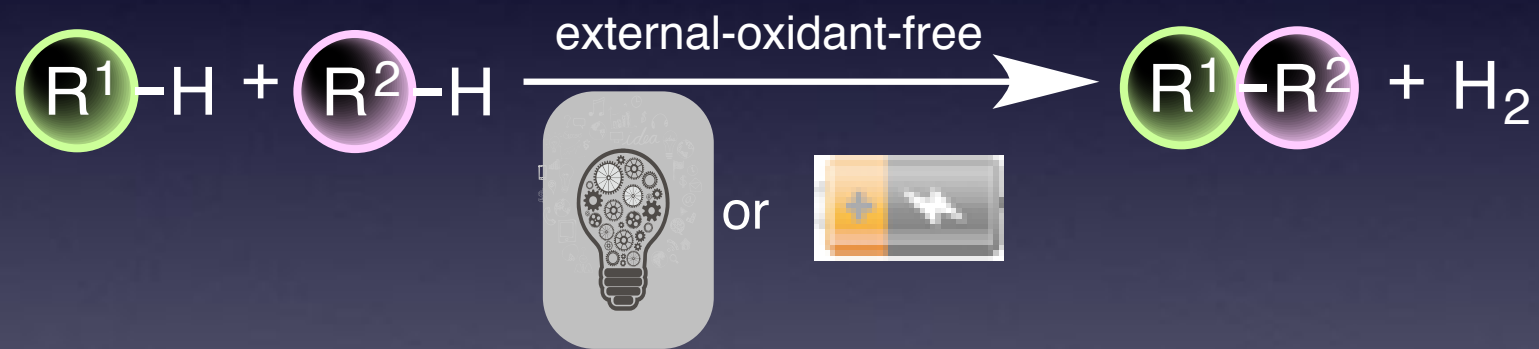
Cross-coupling

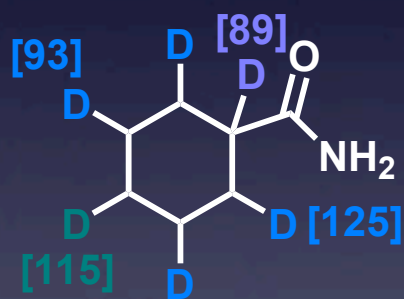
C and Pt couples

5-12 mA, $I_{\text{posi}} \leq I_{\text{neg}}$

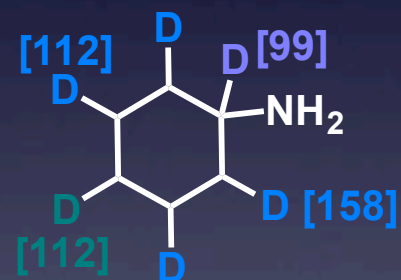
1/90 Hz, D = 83%



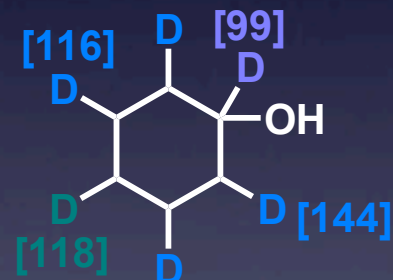




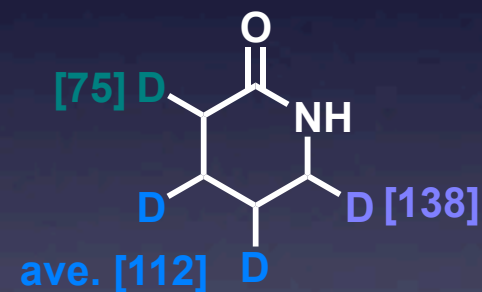
82%
6.4 D/molecule



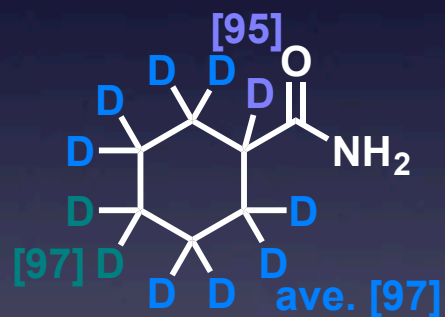
61%
7.2 D/molecule



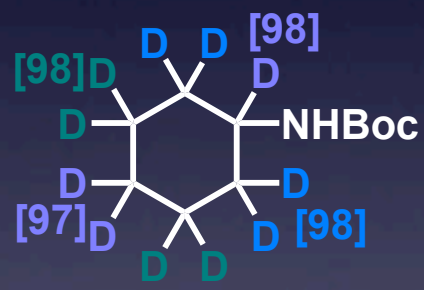
61%
7.2 D/molecule



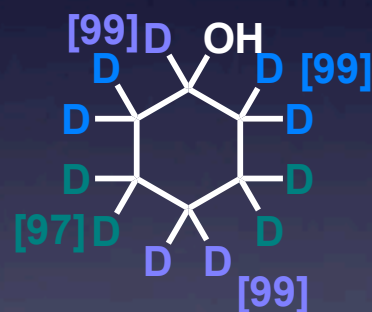
98%
4.4 D/molecule



85%
10.7 D/molecule



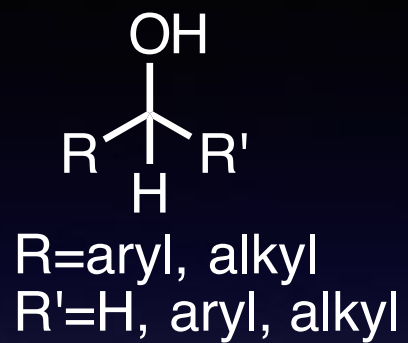
91%
10.7 D/molecule



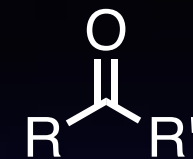
65%
10.8 D/molecule



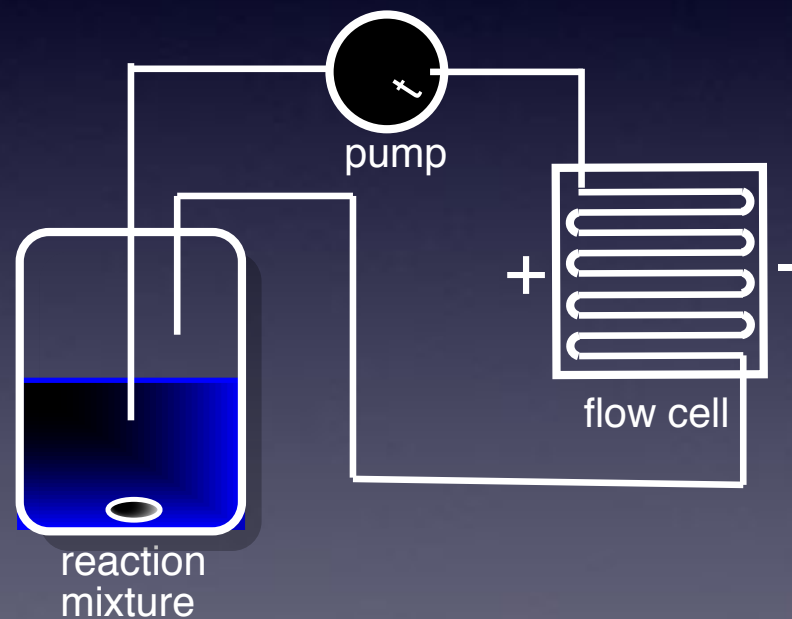
cov. > 99%
11.3 D/molecule



Flow electrochemistry \rightarrow



External oxidant free
High efficiency



A + B

C

Power to X +

Acknowledgement

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Acknowledgement

