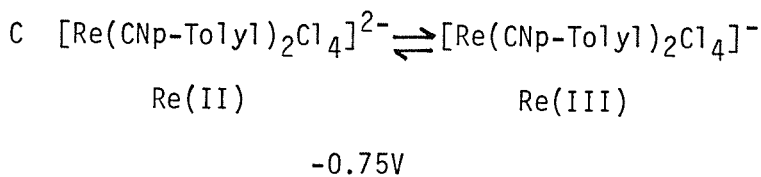
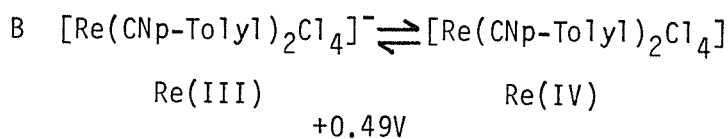
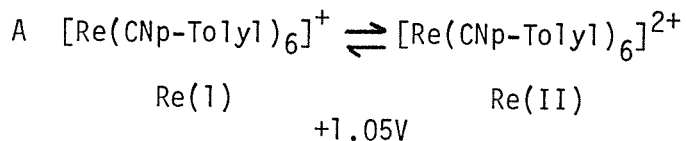
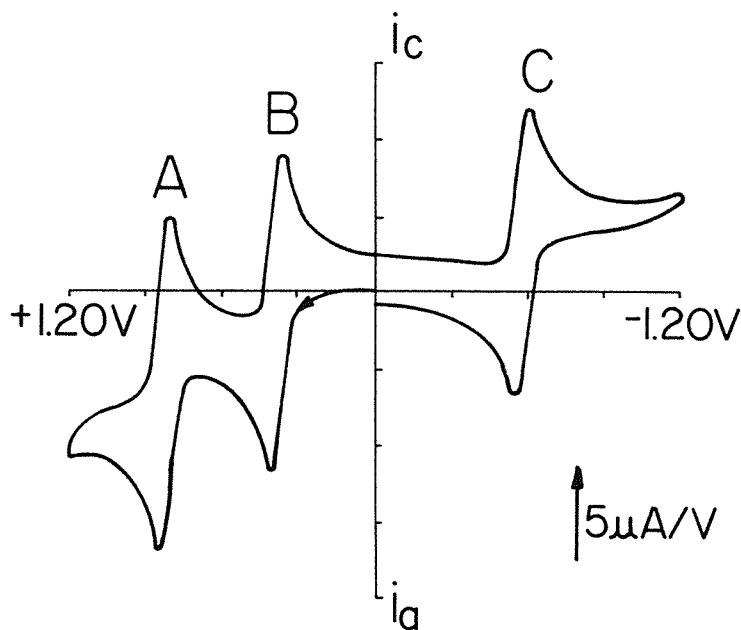
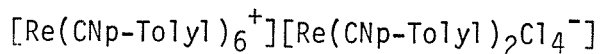


# C V NOTES

## RHENIUM ELECTROCHEMISTRY



CNp-Tolyl = p-Tolylisocyanide

SAMPLE:  $[\text{Re}(\text{CNp-Tolyl})_6]^+ [\text{Re}(\text{CNp-Tolyl})_2\text{Cl}_4]^-$

MEDIUM: 0.2M (n-butyl)<sub>4</sub>N<sup>+</sup>PF<sub>6</sub><sup>-</sup> in CH<sub>2</sub>Cl<sub>2</sub>

CONC:  $5.6 \times 10^{-4}\text{M}$  ( $7.8 \times 10^{-3}\text{g/9ml}$ )

RATE: 200 mV/sec

TEMP: 9°C

ETRODE: Pt BEAD

REF: SCE

MODEL: CV-1A

CELL: 3 CHAMBERED

THIS CYCLIC VOLTAMMOGRAM ILLUSTRATES THE USE OF CV IN THE IDENTIFICATION OF ORGANOMETALLIC SPECIES. FROM PREVIOUS CV WORK OF THE COMPOUND  $\text{Re}(\text{CNp-Tolyl})_6\text{PF}_6$ , A WAS IDENTIFIED. THE ANION, HOWEVER, WAS UNKNOWN. THIS QUICK EXPERIMENT, USING ONLY 7.8 mg OF SAMPLE, ENABLED US TO CONCLUDE THIS TO BE A RHENIUM (III) SPECIES. THIS INFORMATION AIDED US IN THE IDENTIFICATION OF THE ANION.

Submitted by:

Charlie Cameron and  
Prof. R.A. Walton  
Purdue Univ.



2701 Kent Ave  
West Lafayette  
Indiana 47906