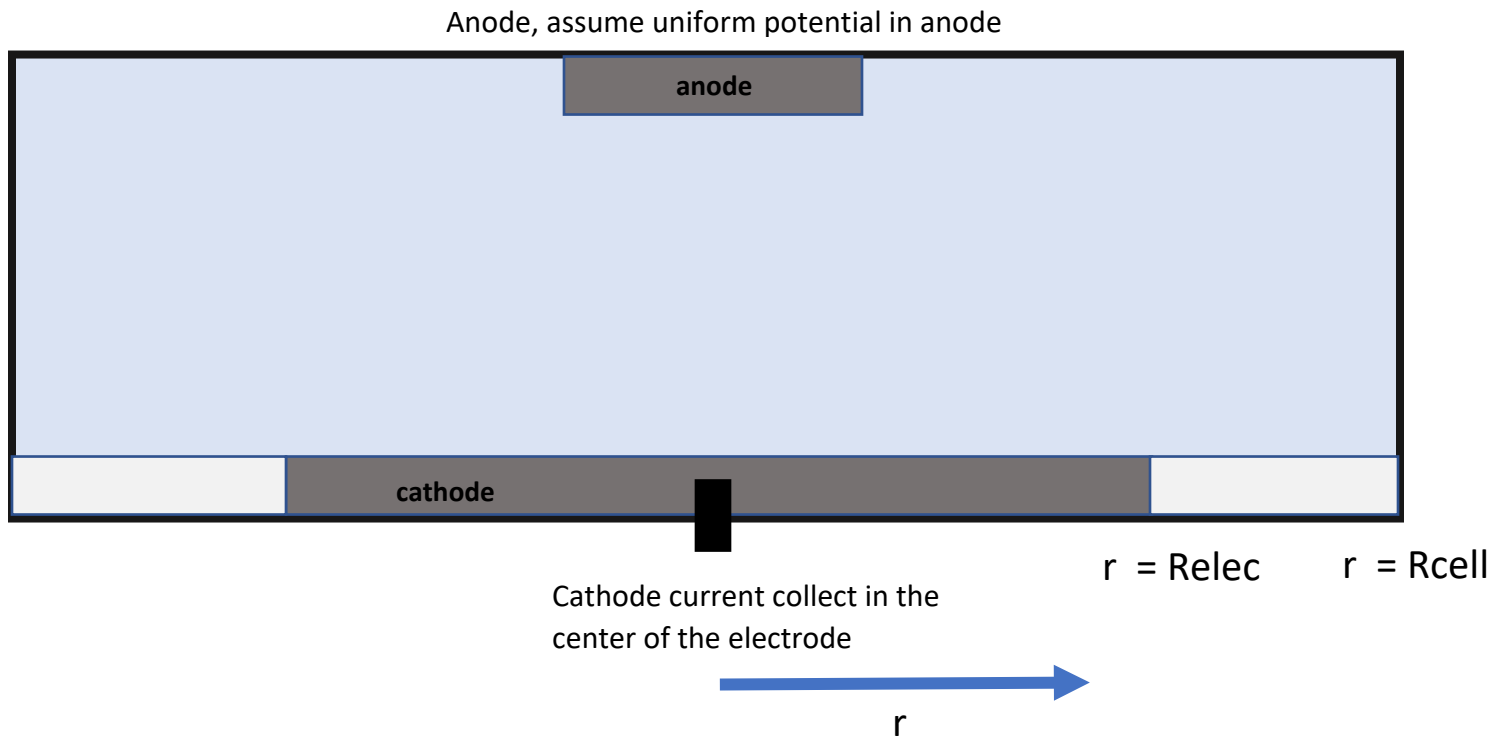


CH692 in class w5d1

Current distributions in electrodeposition.

Consider the following cell geometry. Sketch qualitatively the profile of electrodeposited material as a function of position r radially from the center of the cell for the following conditions. *Discuss exactly the physical reasoning you used to predict the behavior.*



- a) $W_a \gg 1$ and $\chi \gg 1$
- b) $W_a < 1$ and $\chi \gg 1$
- c) $W_a \gg 1$ and $\chi < 1$
- d) $W_a < 1$ and $\chi < 1$, $W_a = \chi$
- e) $W_a < 1$ and $\chi < 1$, $W_a \gg \chi$
- f) $W_a < 1$ and $\chi < 1$, $W_a \ll \chi$