Figure 2. Electronics setup.

**Time-Count Switch** (shown in Time position) ON/OFF for constant current generator

**Time Position**: SWITCH point S connected to Time and timer input connected to 60 Hz

**Count Position**: SWITCH point S connected to Off and timer input connected to Count socket.

**“Control” Relay** (shown in NC)
- If $V_{control} < 2.5$ V, RELAY point S connected to NC (normally closed)
- If $V_{control} > 2.5$ V, RELAY point S connected to NO (normally open)

**OA 1 Current Source**
- INITIALLY $R_{cell}$ is a 1000 ohm resistor dummy cell
- For experiment, the 1000 ohm resistor dummy cell is removed & replaced by the real cell.

**OA 2 Comparator**
- + input connected to variable voltage source which should be set to $+0.85$ V with DMM
- - input INITIALLY connected to $+5$ V and then GND; for experiment connected to PMT output.

**Shown in “dummy cell” configuration; see caption for hookup to test cell.**