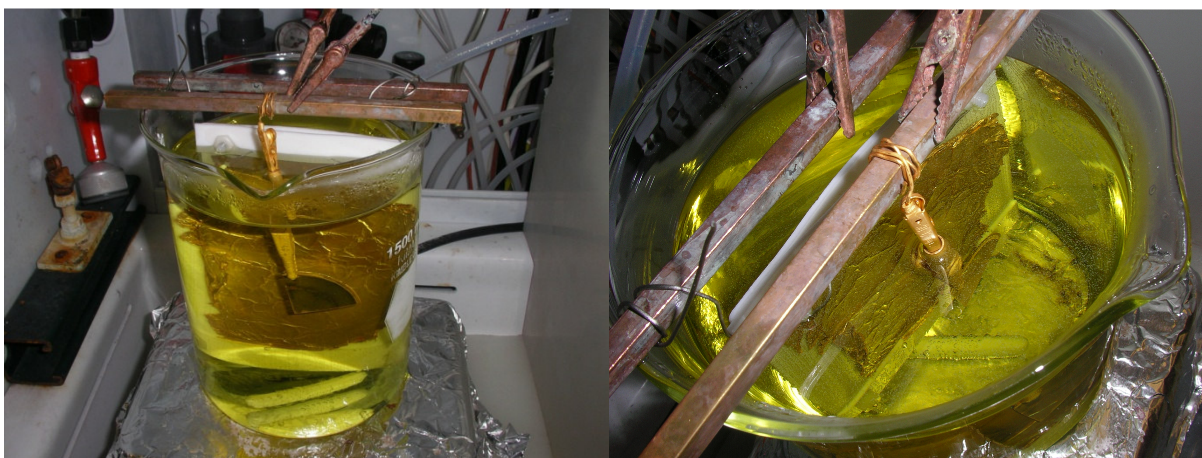
Electroplating Au

Document Last Updated: 10-11-2009 Ta-Ming Shih

SOP – Packaging room of ICL

1. Make sure all PPE are used when working at bench
2. Fill beaker with OROTEMP 24C RTU
3. Heat to 65°C (Turn hotplate to 4.5 heat, 2.5 stir, wait about 50min)
4. Remove thermometer
5. Insert Au foil plate attached to bar
6. Insert sample clipped to second bar
7. Connect electrodes (Red → Au foil plate, Black → Sample)
8. Set power supply forward pulse: 2ms/4ms (on/off)
9. Turn on power supply to begin plating



Plating data compilation

Jamie Simmons: 10nm Ti/ 50nm Au (seed layer)

Time (min)	1.5	10	35
Thickness* (um)	0.7	2	13
Rate (um/min)	0.47	0.2	0.37

*The edge is thicker (up to 10x)

Ta-Ming Shih: 80nm Au (seed layer)
5 min (13-15 mA, ~0.5V) → ~1um