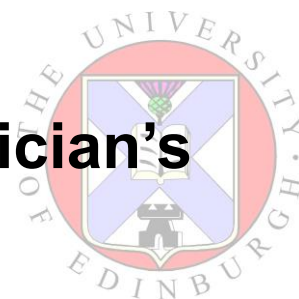


# Disappearing Solution – Technician's Notes



## Advance Preparation

### **Chemicals**

Iron(II) Sulfate ( $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ )

20 % sulphuric acid

Lauth's Violet (thionine)

Water

### **Equipment**

Large jar (500 cm<sup>3</sup>)

300 W lamp

Kitchen foil

### **Preparation Instructions**

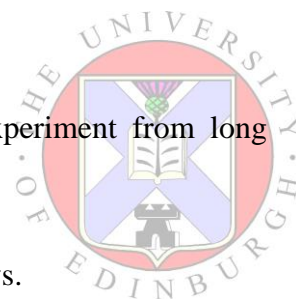
1. Make up solutions as follows...
  - a. 2 g  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$  in 480 ml water
  - b. 0.01 g Lauth's Violet (thionine) in 20 ml water
2. Add all of the  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$  solution to the jar along with 10 cm<sup>3</sup> 20 % sulphuric acid
3. Add enough of the thionine solution to make the solution blue (few drops – do not overdo it!).
4. Shine the light on the solution (you may need to shake the solution).

**The solution should turn from purple/blue to clear**

5. Take the jar away from the light.

**The solution should turn blue again**

6. Shine the light on the solution again – you can keep doing the experiment from long enough!
7. Wrap the jar in foil to keep it dark. The solution will keep for a few days.



## Preparation for Demo

### ***The Teacher Will Need...***

Large jar prepared as above

300 W lamp