Contents

1 Lab 1

1.1 Experimental Setup

Procedure

1.

2.

3.

Variables

1. Voltage on function generator: 10V. (control)
2. Probes 180^o from each other. Sense leads 30^o from the probe; 180^o from each other(control)
3. Gain $\frac{15k}{150} = 100$ (control)
4. liquid volume 250 ml, 60mm height measured from inside the cup(control)
5. Frequency (independent)
6. Voltage peak-to-peak (dependent)

1.2 Raw data

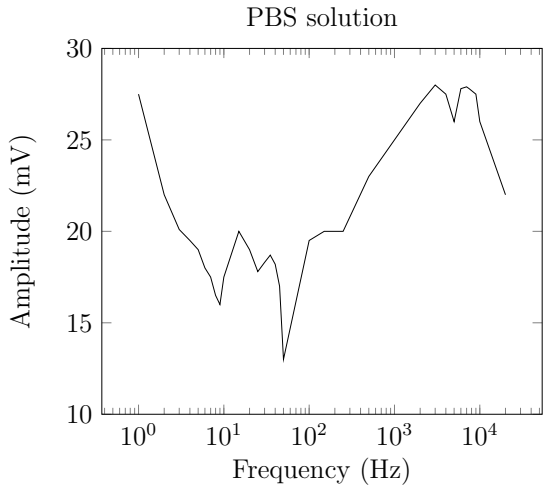

Figure 1: Amplitude based on frequency. Notice the dip at 50 Hz due to the filter.

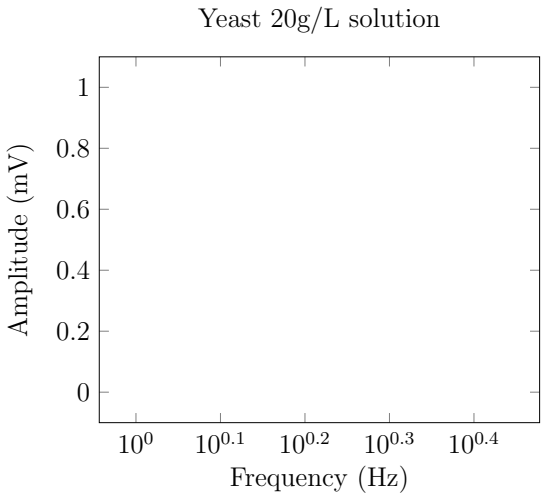

Figure 2:

1.3 Analysis

PBS numbers must be compared to yeast to tell us something meaningful regarding the frequency. At the moment, there is not much we can do.

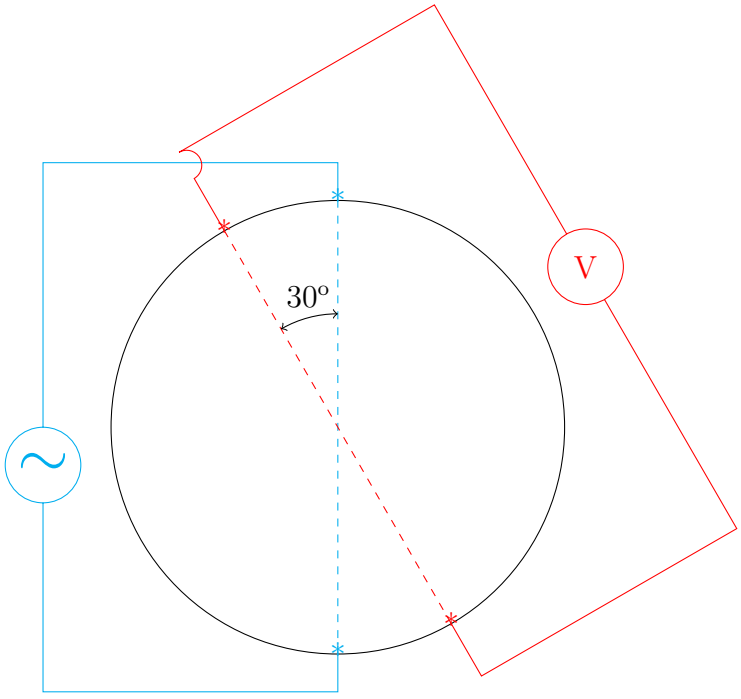

Figure 3: Orientation of electrodes

2 Lab 2

1. Amplitude vs Frequency: 20g/l solution

2. Calibrate amplitude with yeast solutions (1%, 2%, 4%, 10%, 20%)

3 Lab 3