LAMPIRAN A

CONTOH PERHITUNGAN

Lampiran A. Contoh Perhitungan

1. **Perhitungan Massa Seng Nitrat Tetrahidrat ($Zn(NO_3)_2.4H_2O$) untuk Larutan *Chemical Bath Deposition***

   Diketahui:

   Konsentrasi Molar (M) = 0,2 M

   Massa Molekul (Mr) = 261,44 gr/mol

   Volume Aquabides (V) = 30 mL

   Perhitungan:

   $$\text{Massa} = \frac{\text{M x Mr x V}}{1000}$$

   $$\text{Massa} = \frac{\text{0,2 M x 261,44 gr/mol x 30 mL}}{1000}$$

   Massa = 1,56864 gram

2. **Perhitungan Massa Heksametilentetramin ($C_6H_{12}N_4$) untuk Larutan *Chemical Bath Deposition***

   Diketahui:

   Konsentrasi Molar (M) = 0,2 M

   Massa Molekul (Mr) = 140,19 gr/mol

   Volume Aquabides (V) = 30 mL

   Perhitungan:

   $$\text{Massa} = \frac{\text{M x Mr x V}}{1000}$$

   $$\text{Massa} = \frac{\text{0,2 M x 140,19 gr/mol x 30 mL}}{1000}$$

   Massa = 0,84114 gram

3. **Perhitungan Massa Perak Nitrat (AgNO3) untuk Larutan *Chemical Bath Deposition***

   Diketahui:

   Konsentrasi Molar (M) = = 0,6 mM = 6 x 10^{-4} M

   Massa Molekul (Mr) = 169,87 gr/mol

   Volume Aquabides (V) = 30 mL

   Perhitungan:

   $$\text{Massa} = \frac{\text{M x Mr x V}}{1000}$$

   $$\text{Massa} = \frac{6 \times 10^{-4}\text{M x 140,19 gr/mol x 30 mL}}{1000}$$

   Massa = 0,00305766 gram

4. Perhitungan Massa Seng Nitrat Tetrahidrat ($Zn(NO_3)_2.4H_2O$) untuk Larutan *Spray Coating*

Diketahui:

Konsentrasi Molar (M) = 0,2 M

Massa Molekul (Mr) = 261,44 gr/mol

Volume Aquabides (V) = 10 mL

Perhitungan:

$$\text{Massa} = \frac{\text{M x Mr x V}}{1000}$$

$$\text{Massa} = \frac{0{,}2 \text{ M x } 261{,}44 \text{ gr/mol x } 10 \text{ mL}}{1000}$$

Massa = 0,52288 gram

5. Perhitungan Massa Heksametilentetramin ($C_6H_{12}N_4$) untuk Larutan *Spray Coating*

Diketahui:

Konsentrasi Molar (M) = 0,2 M

Massa Molekul (Mr) = 140,19 gr/mol

Volume Aquabides (V) = 10 mL

Perhitungan:

$$\text{Massa} = \frac{\text{M x Mr x V}}{1000}$$

$$\text{Massa} = \frac{0{,}2 \text{ M x } 140{,}19 \text{ gr/mol x } 10 \text{ mL}}{1000}$$

Massa = 0,28038 gram

6. Perhitungan Massa Perak Nitrat (AgNO3) untuk Larutan *Spray Coating*

Diketahui:

Konsentrasi Molar (M) = = 0,6 mM = 6×10^{-4} M

Massa Molekul (Mr) = 169,87 gr/mol

Volume Aquabides (V) = 10 mL

Perhitungan:

$$\text{Massa} = \frac{\text{M x Mr x V}}{1000}$$

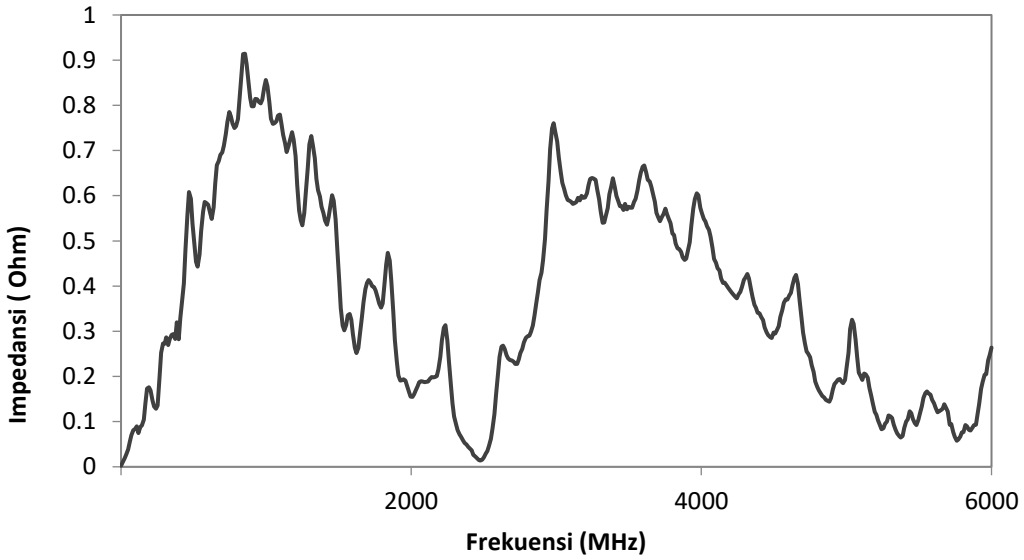
$$\text{Massa} = \frac{6 \times 10^{-4} \text{M x } 140{,}19 \text{ gr/mol x } 10 \text{ mL}}{1000}$$

Massa = 0,001922 gram

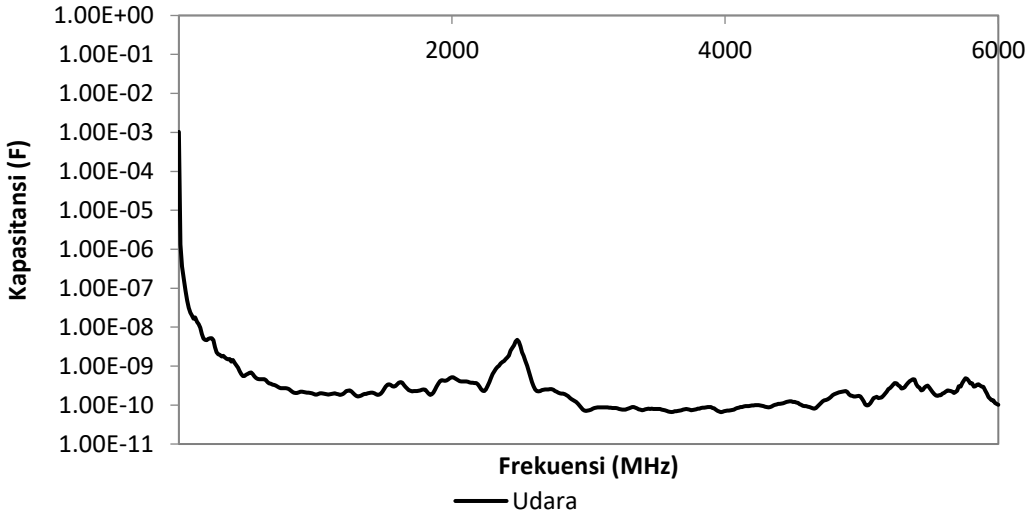
LAMPIRAN B
DATA PENELITIAN

Lampiran B. Data Penelitian

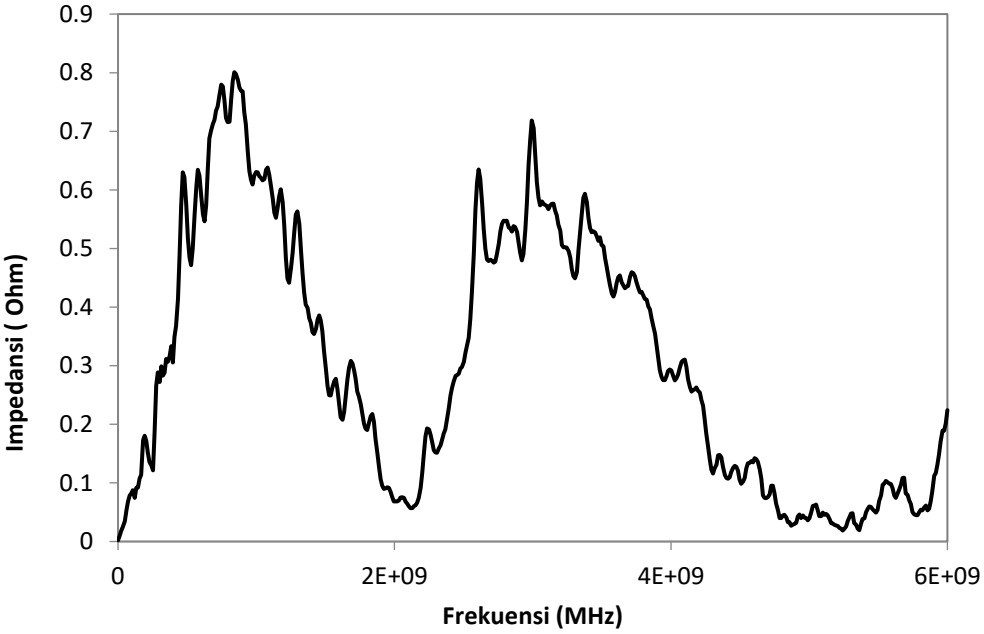
B.1. Data Hasil Uji Performa pada Udara



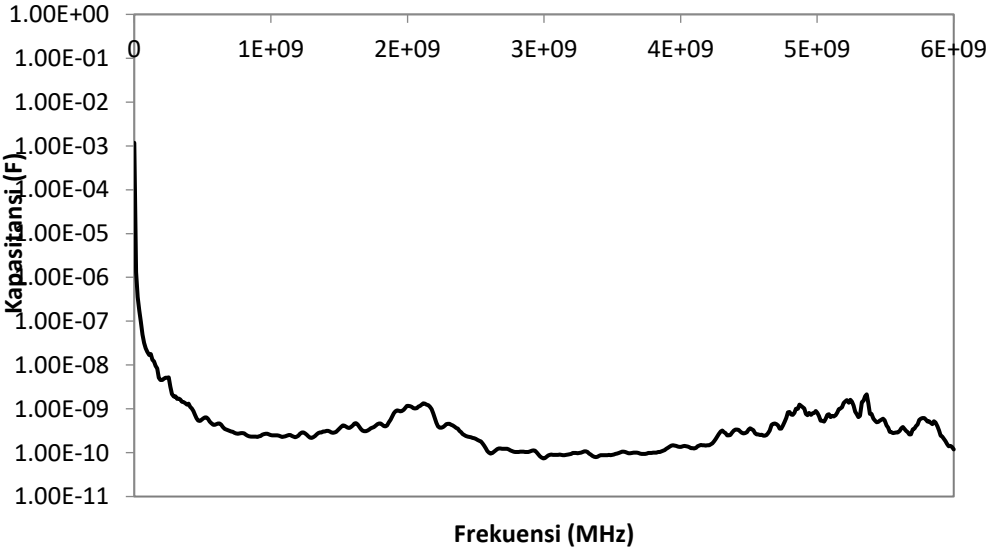
Gambar B.1. Nilai Impedansi Udara



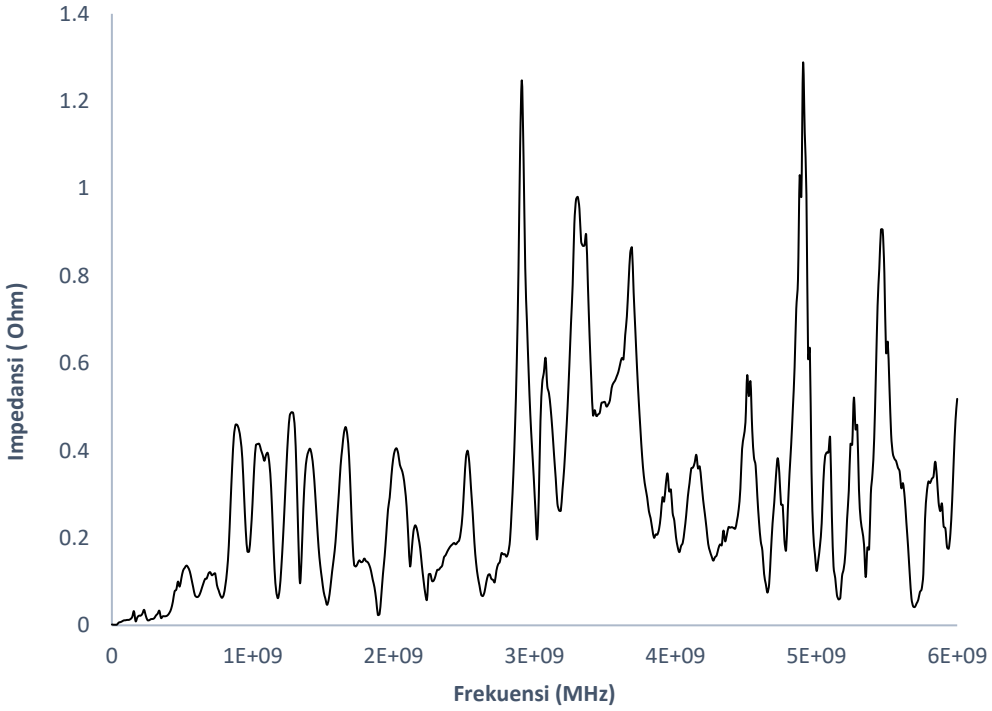
Gambar B.2 Nilai Kapasitansi Udara



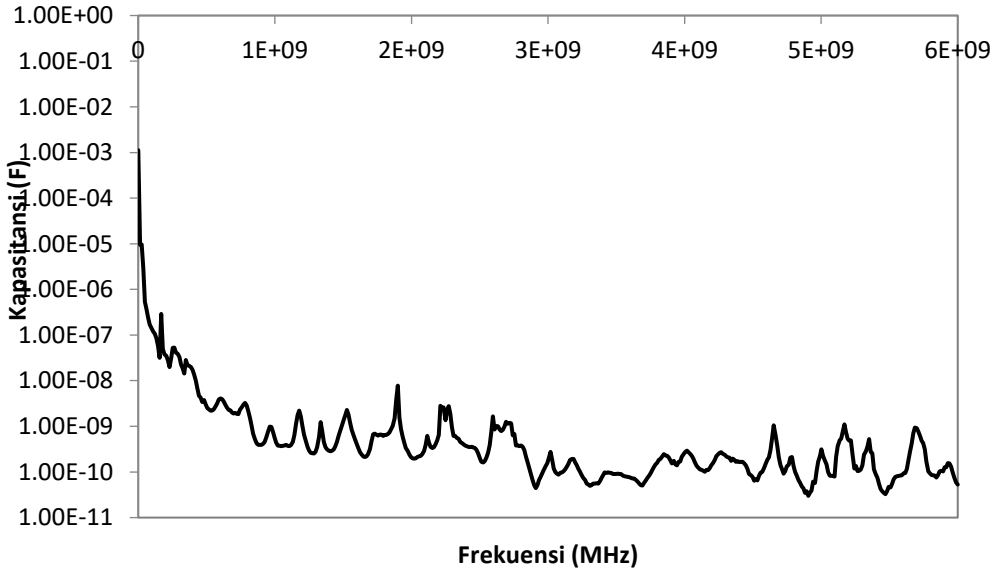
Gambar B.3. Nilai Impedansi Air



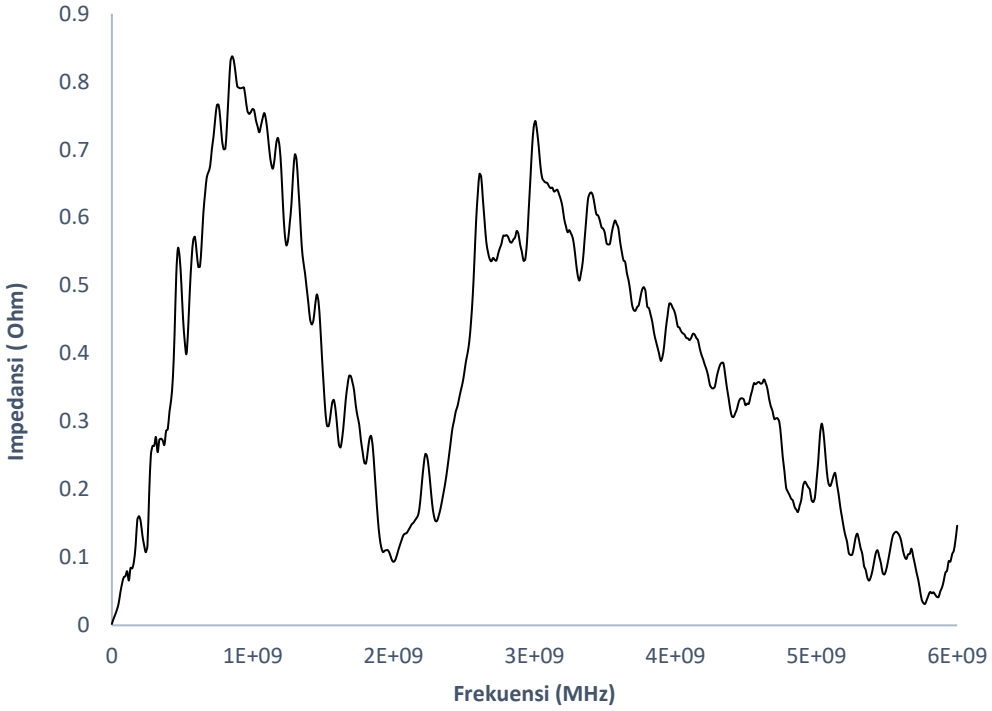
Gambar B.4. Nilai Kapasitansi Air



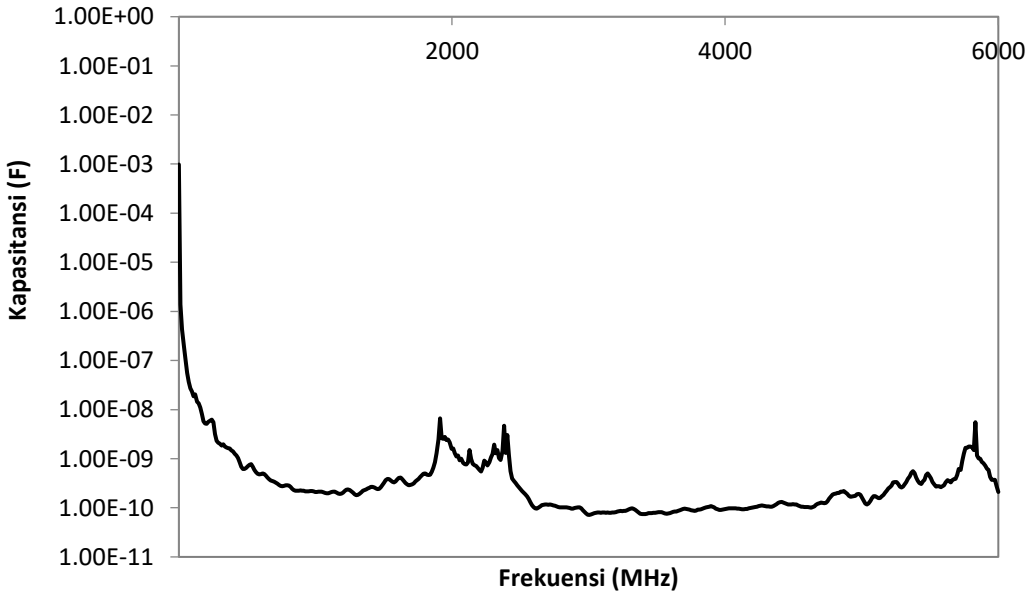
Gambar B.5. Nilai Impedansi Etanol



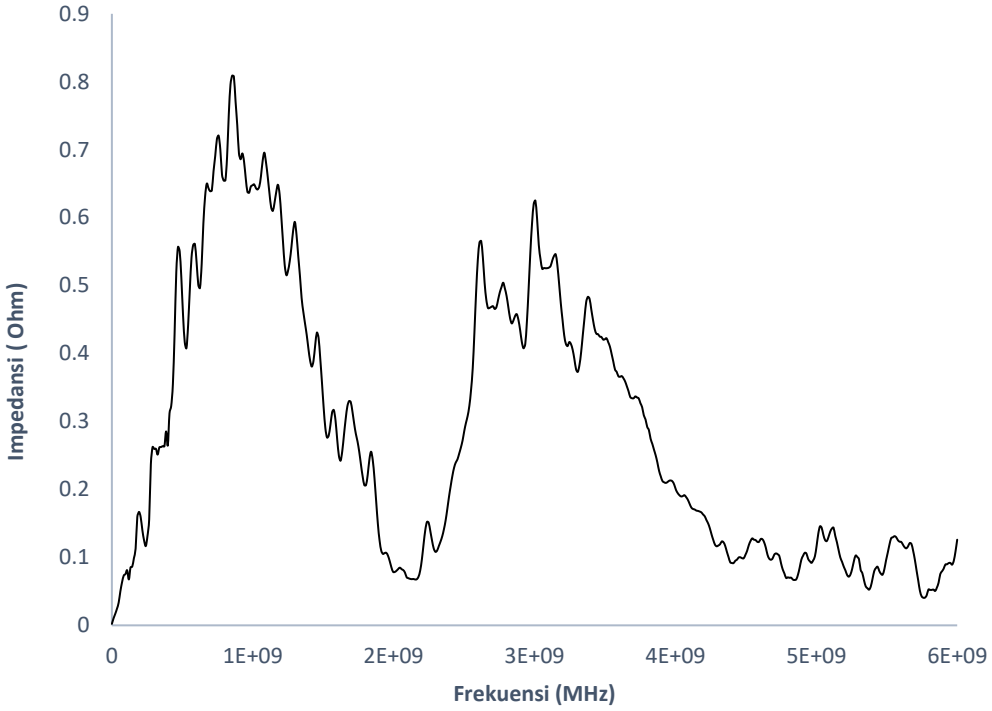
Gambar B.6. Nilai Kapasitansi Etanol



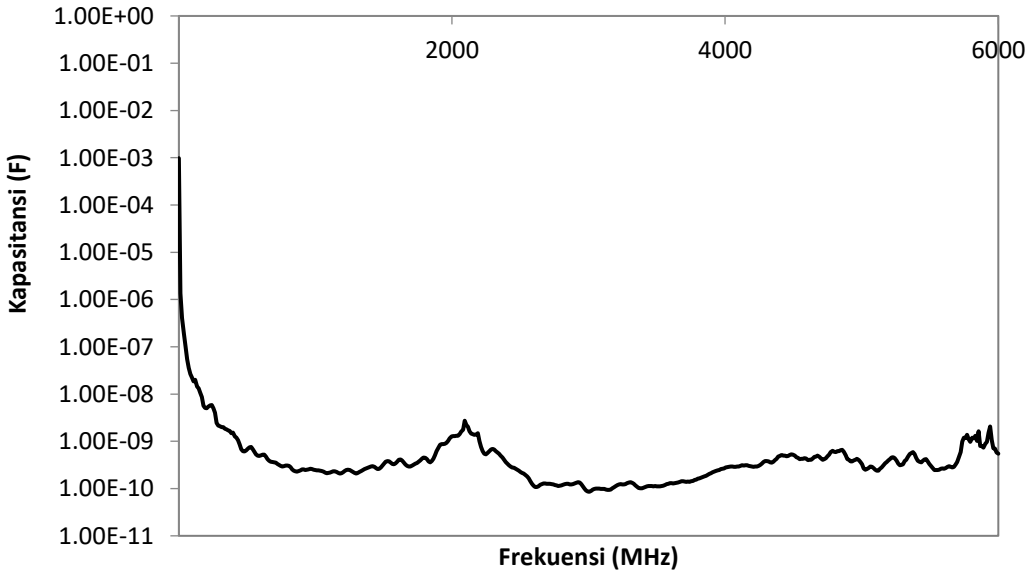
Gambar B.7. Nilai Impedansi *Rum*



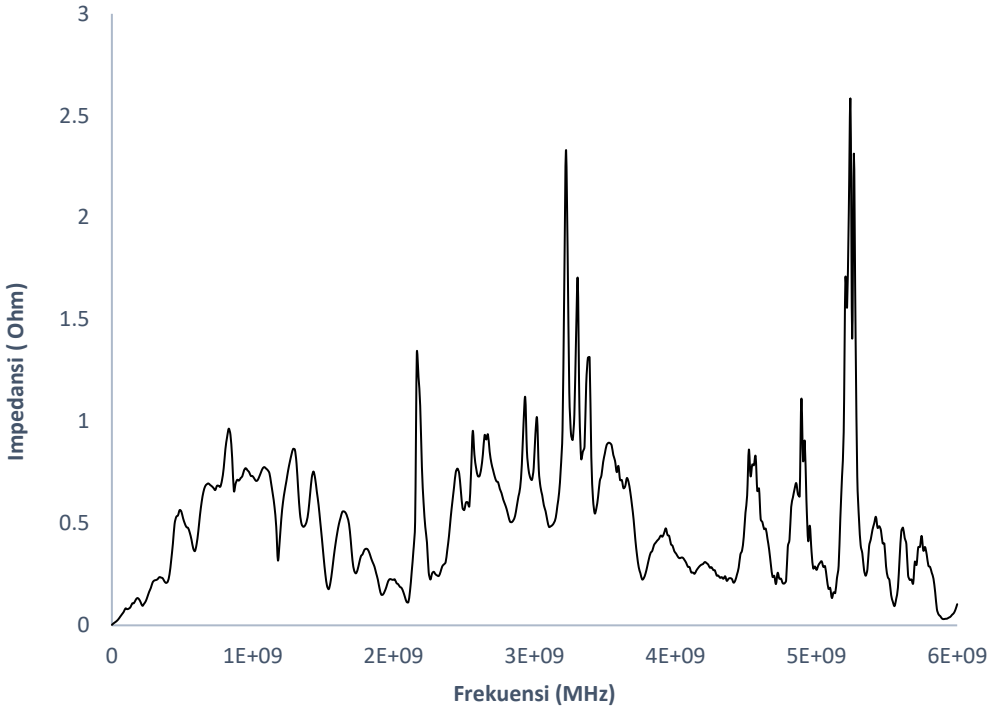
Gambar B.8. Nilai Kapasitansi *Rum*



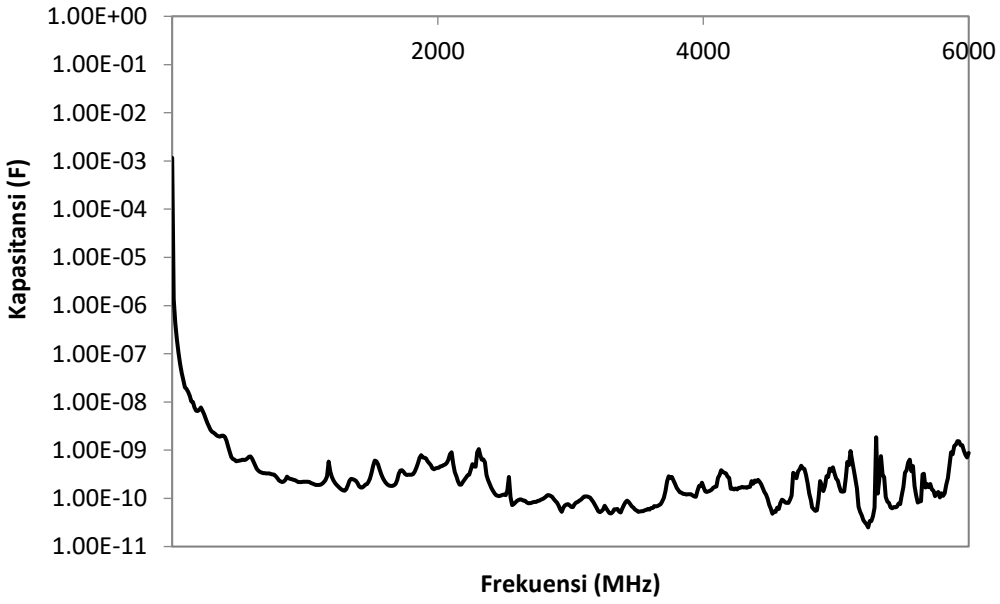
Gambar B.9. Nilai Impedansi *Beer*



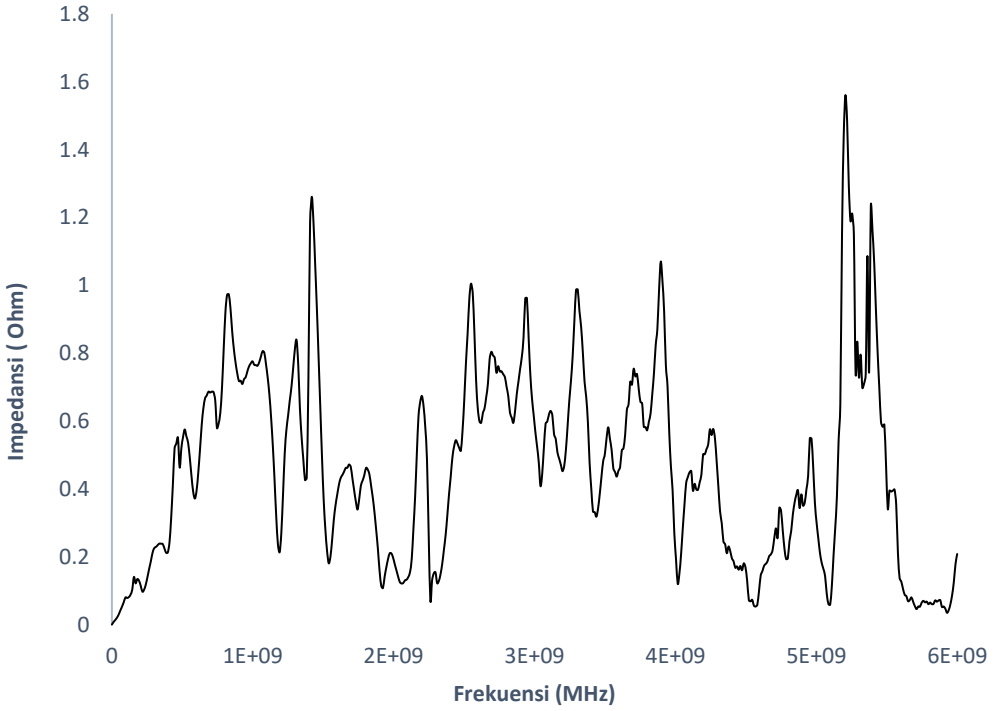
Gambar B.10. Nilai Kapasitansi *Beer*



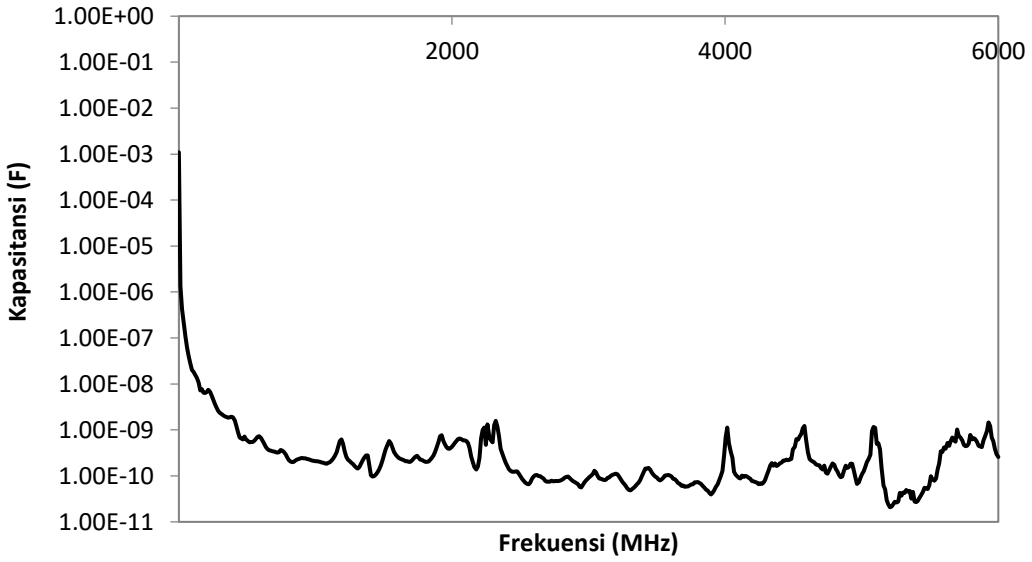
Gambar B.9. Nilai Impedansi *Angchu*



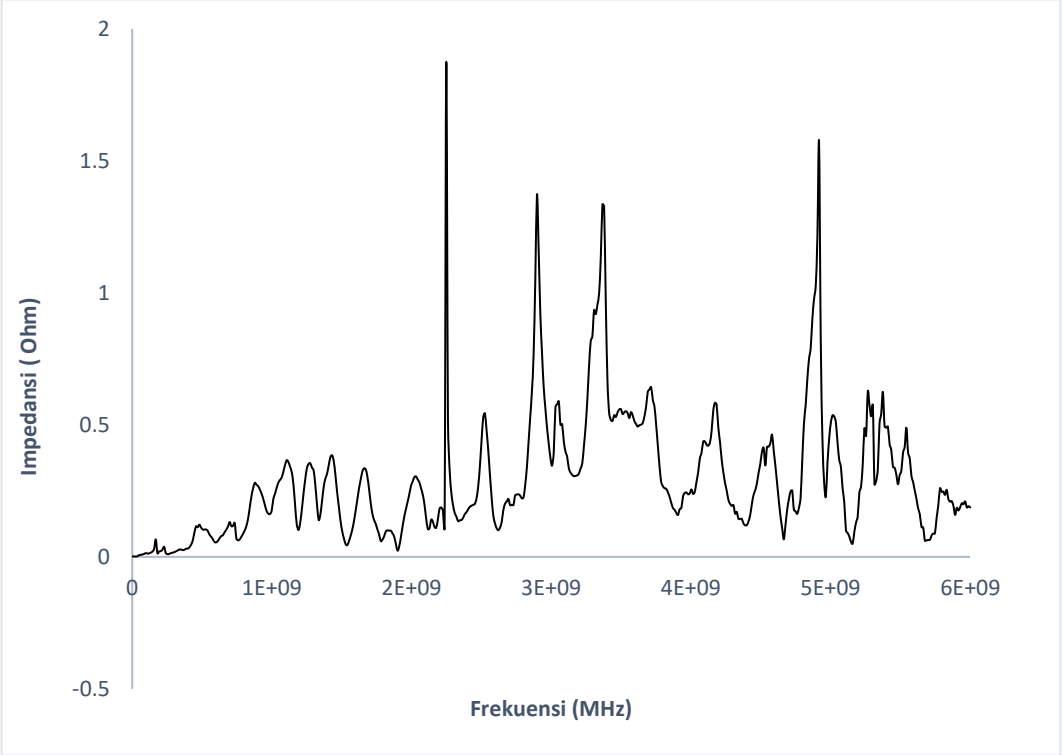
Gambar B.10. Nilai Kapasitansi *Angchu*



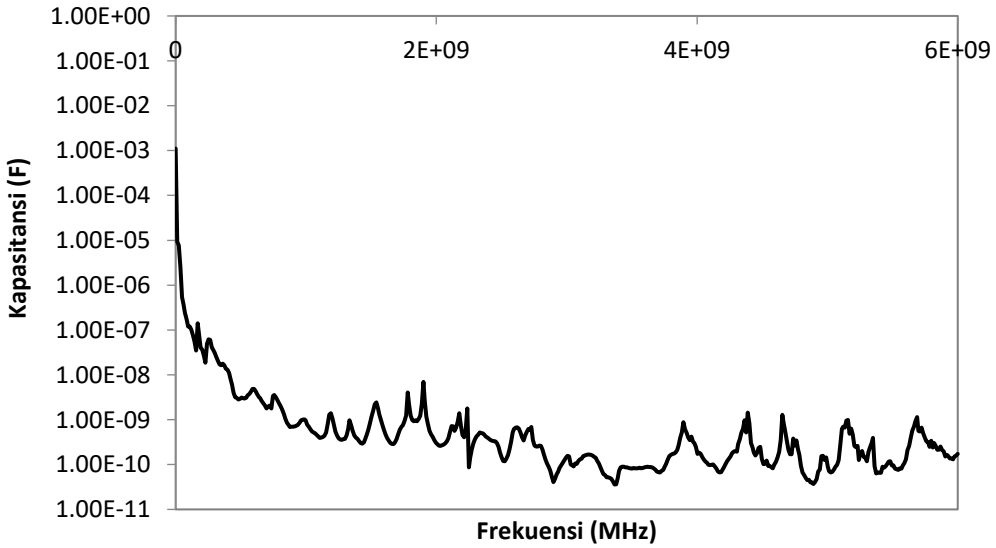
Gambar B.9. Nilai Impedansi *White Wine*



Gambar B.10. Nilai Kapasitansi *White Wine*



Gambar B.9. Nilai Impedansi *Red Wine*



Gambar B.10. Nilai Kapasitansi *Red Wine*

B.2. Data Pengukuran Udara Frekuensi 100 kHz – 6 GHz

Tabel B.1 Data Pengukuran Udara pada Frekuensi 100 kHz – 6 GHz

Frekuensi (Hz)	Rata-Rata Impedansi (Ω)	Rata-Rata Kapasitansi (F)
100000	0.002235	0.001027
12123800	0.010064	1.33E-06
24147700	0.018512	3.59E-07
36171500	0.026967	1.64E-07
48195400	0.038604	8.57E-08
60219200	0.054705	4.84E-08
72243100	0.069868	3.16E-08
84266900	0.080858	2.34E-08
96290800	0.082967	1.99E-08
1.08E+08	0.08949	1.64E-08
1.2E+08	0.074612	1.77E-08
1.32E+08	0.088405	1.36E-08
1.44E+08	0.091928	1.2E-08
1.56E+08	0.104172	9.78E-09
1.68E+08	0.141421	6.69E-09
1.8E+08	0.173322	5.09E-09
1.92E+08	0.17563	4.71E-09
2.05E+08	0.169012	4.61E-09
2.17E+08	0.147086	5E-09
2.29E+08	0.133619	5.21E-09

2.41E+08	0.128594	5.15E-09
2.53E+08	0.135623	4.65E-09
2.65E+08	0.198282	3.04E-09
2.77E+08	0.252697	2.28E-09
2.89E+08	0.272945	2.02E-09
3.01E+08	0.27261	1.94E-09
3.13E+08	0.286657	1.78E-09
3.25E+08	0.269326	1.82E-09
3.37E+08	0.283126	1.67E-09
3.49E+08	0.292229	1.56E-09
3.61E+08	0.293808	1.5E-09
3.73E+08	0.282787	1.51E-09
3.85E+08	0.319718	1.29E-09
3.97E+08	0.282273	1.42E-09
4.09E+08	0.329916	1.18E-09
4.21E+08	0.363739	1.04E-09
4.33E+08	0.405414	9.07E-10
4.45E+08	0.48048	7.45E-10
4.57E+08	0.556256	6.26E-10
4.69E+08	0.608374	5.58E-10
4.81E+08	0.593271	5.58E-10
4.93E+08	0.537858	6E-10
5.05E+08	0.49228	6.4E-10
5.17E+08	0.453529	6.79E-10

5.29E+08	0.442701	6.8E-10
5.41E+08	0.469728	6.26E-10
5.53E+08	0.521895	5.52E-10
5.65E+08	0.563853	5E-10
5.77E+08	0.586394	4.7E-10
5.89E+08	0.583059	4.63E-10
6.01E+08	0.579675	4.57E-10
6.13E+08	0.562075	4.62E-10
6.25E+08	0.548552	4.64E-10
6.37E+08	0.573931	4.35E-10
6.49E+08	0.627416	3.91E-10
6.61E+08	0.667412	3.61E-10
6.73E+08	0.676765	3.51E-10
6.85E+08	0.690491	3.37E-10
6.97E+08	0.695846	3.28E-10
7.1E+08	0.711152	3.16E-10
7.22E+08	0.736058	3E-10
7.34E+08	0.763162	2.85E-10
7.46E+08	0.785007	2.72E-10
7.58E+08	0.775209	2.71E-10
7.7E+08	0.75949	2.72E-10
7.82E+08	0.749766	2.72E-10
7.94E+08	0.753874	2.66E-10
8.06E+08	0.769978	2.57E-10

8.18E+08	0.815136	2.39E-10
8.3E+08	0.868858	2.21E-10
8.42E+08	0.913585	2.07E-10
8.54E+08	0.914274	2.04E-10
8.66E+08	0.891533	2.06E-10
8.78E+08	0.850651	2.13E-10
8.9E+08	0.816964	2.19E-10
9.02E+08	0.798293	2.21E-10
9.14E+08	0.797681	2.18E-10
9.26E+08	0.814494	2.11E-10
9.38E+08	0.813728	2.09E-10
9.5E+08	0.807834	2.07E-10
9.62E+08	0.804236	2.06E-10
9.74E+08	0.813164	2.01E-10
9.86E+08	0.83986	1.92E-10
9.98E+08	0.856305	1.86E-10
1.01E+09	0.842327	1.87E-10
1.02E+09	0.807313	1.93E-10
1.03E+09	0.770069	2E-10
1.05E+09	0.759147	2.01E-10
1.06E+09	0.76025	1.98E-10
1.07E+09	0.764479	1.95E-10
1.08E+09	0.77736	1.89E-10
1.09E+09	0.779326	1.87E-10

1.11E+09	0.758203	1.9E-10
1.12E+09	0.734945	1.94E-10
1.13E+09	0.716667	1.97E-10
1.14E+09	0.696606	2E-10
1.15E+09	0.710465	1.94E-10
1.17E+09	0.724559	1.88E-10
1.18E+09	0.740587	1.82E-10
1.19E+09	0.723363	1.85E-10
1.2E+09	0.687207	1.93E-10
1.21E+09	0.623433	2.1E-10
1.23E+09	0.567167	2.29E-10
1.24E+09	0.545938	2.36E-10
1.25E+09	0.534528	2.38E-10
1.26E+09	0.561138	2.25E-10
1.27E+09	0.607813	2.06E-10
1.29E+09	0.661073	1.87E-10
1.3E+09	0.713732	1.72E-10
1.31E+09	0.731964	1.66E-10
1.32E+09	0.711526	1.69E-10
1.33E+09	0.683009	1.75E-10
1.35E+09	0.63726	1.86E-10
1.36E+09	0.61231	1.91E-10
1.37E+09	0.597863	1.94E-10
1.38E+09	0.575555	2E-10

1.39E+09	0.561627	2.03E-10
1.41E+09	0.545114	2.08E-10
1.42E+09	0.535998	2.1E-10
1.43E+09	0.5518	2.02E-10
1.44E+09	0.578948	1.91E-10
1.45E+09	0.601141	1.82E-10
1.47E+09	0.589113	1.84E-10
1.48E+09	0.546953	1.97E-10
1.49E+09	0.484757	2.21E-10
1.5E+09	0.414738	2.56E-10
1.52E+09	0.351955	2.99E-10
1.53E+09	0.312514	3.34E-10
1.54E+09	0.3024	3.42E-10
1.55E+09	0.314255	3.27E-10
1.56E+09	0.335572	3.04E-10
1.58E+09	0.338091	2.99E-10
1.59E+09	0.325409	3.08E-10
1.6E+09	0.293513	3.39E-10
1.61E+09	0.263896	3.75E-10
1.62E+09	0.251949	3.9E-10
1.64E+09	0.262968	3.71E-10
1.65E+09	0.294144	3.31E-10
1.66E+09	0.330385	2.93E-10
1.67E+09	0.363427	2.65E-10

1.68E+09	0.393285	2.43E-10
1.7E+09	0.40665	2.32E-10
1.71E+09	0.413631	2.26E-10
1.72E+09	0.407601	2.27E-10
1.73E+09	0.399758	2.3E-10
1.74E+09	0.39791	2.3E-10
1.76E+09	0.390251	2.32E-10
1.77E+09	0.375291	2.4E-10
1.78E+09	0.36167	2.47E-10
1.79E+09	0.352177	2.53E-10
1.8E+09	0.361417	2.45E-10
1.82E+09	0.399702	2.21E-10
1.83E+09	0.447951	1.95E-10
1.84E+09	0.473736	1.83E-10
1.85E+09	0.456248	1.89E-10
1.86E+09	0.410163	2.09E-10
1.88E+09	0.3439	2.47E-10
1.89E+09	0.281165	3.01E-10
1.9E+09	0.233787	3.59E-10
1.91E+09	0.202345	4.12E-10
1.92E+09	0.191025	4.34E-10
1.94E+09	0.191488	4.3E-10
1.95E+09	0.193533	4.23E-10
1.96E+09	0.190534	4.27E-10

1.97E+09	0.179814	4.49E-10
1.98E+09	0.165991	4.84E-10
2E+09	0.155205	5.14E-10
2.01E+09	0.154958	5.12E-10
2.02E+09	0.160542	4.91E-10
2.03E+09	0.170565	4.6E-10
2.04E+09	0.178063	4.38E-10
2.06E+09	0.187403	4.15E-10
2.07E+09	0.189572	4.07E-10
2.08E+09	0.188661	4.07E-10
2.09E+09	0.187547	4.06E-10
2.1E+09	0.187931	4.03E-10
2.12E+09	0.188496	3.99E-10
2.13E+09	0.194248	3.85E-10
2.14E+09	0.198979	3.74E-10
2.15E+09	0.198058	3.74E-10
2.16E+09	0.198907	3.7E-10
2.18E+09	0.200928	3.64E-10
2.19E+09	0.215459	3.38E-10
2.2E+09	0.243348	2.97E-10
2.21E+09	0.279815	2.57E-10
2.22E+09	0.308004	2.33E-10
2.24E+09	0.313386	2.27E-10
2.25E+09	0.279503	2.54E-10

2.26E+09	0.232334	3.03E-10
2.27E+09	0.181582	3.86E-10
2.28E+09	0.14085	4.96E-10
2.3E+09	0.111468	6.23E-10
2.31E+09	0.094529	7.31E-10
2.32E+09	0.080964	8.49E-10
2.33E+09	0.072185	9.48E-10
2.34E+09	0.066206	1.03E-09
2.36E+09	0.05855	1.16E-09
2.37E+09	0.052419	1.29E-09
2.38E+09	0.049347	1.36E-09
2.39E+09	0.04392	1.53E-09
2.4E+09	0.040685	1.65E-09
2.42E+09	0.036259	1.87E-09
2.43E+09	0.026714	2.5E-09
2.44E+09	0.022973	2.9E-09
2.45E+09	0.019422	3.41E-09
2.46E+09	0.01538	4.29E-09
2.48E+09	0.013991	4.74E-09
2.49E+09	0.015955	4.19E-09
2.5E+09	0.020507	3.23E-09
2.51E+09	0.029176	2.25E-09
2.53E+09	0.035193	1.84E-09
2.54E+09	0.046578	1.38E-09

2.55E+09	0.061591	1.03E-09
2.56E+09	0.084672	7.42E-10
2.57E+09	0.116812	5.34E-10
2.59E+09	0.158646	3.91E-10
2.6E+09	0.204243	3.02E-10
2.61E+09	0.243501	2.52E-10
2.62E+09	0.265689	2.29E-10
2.63E+09	0.267787	2.26E-10
2.65E+09	0.261279	2.31E-10
2.66E+09	0.246582	2.44E-10
2.67E+09	0.239865	2.49E-10
2.68E+09	0.23639	2.52E-10
2.69E+09	0.235811	2.51E-10
2.71E+09	0.232721	2.54E-10
2.72E+09	0.227942	2.58E-10
2.73E+09	0.227372	2.57E-10
2.74E+09	0.23765	2.45E-10
2.75E+09	0.252121	2.3E-10
2.77E+09	0.261322	2.21E-10
2.78E+09	0.275419	2.09E-10
2.79E+09	0.285176	2.01E-10
2.8E+09	0.288658	1.98E-10
2.81E+09	0.290005	1.96E-10
2.83E+09	0.298363	1.9E-10

2.84E+09	0.313023	1.8E-10
2.85E+09	0.333973	1.68E-10
2.86E+09	0.363721	1.54E-10
2.87E+09	0.387385	1.43E-10
2.89E+09	0.41316	1.34E-10
2.9E+09	0.429346	1.28E-10
2.91E+09	0.457993	1.2E-10
2.92E+09	0.504616	1.08E-10
2.93E+09	0.568526	9.56E-11
2.95E+09	0.632356	8.56E-11
2.96E+09	0.702899	7.66E-11
2.97E+09	0.748862	7.16E-11
2.98E+09	0.760297	7.02E-11
2.99E+09	0.741505	7.17E-11
3.01E+09	0.72002	7.36E-11
3.02E+09	0.685157	7.7E-11
3.03E+09	0.652447	8.06E-11
3.04E+09	0.628768	8.33E-11
3.05E+09	0.614249	8.49E-11
3.07E+09	0.600727	8.65E-11
3.08E+09	0.590353	8.77E-11
3.09E+09	0.588719	8.76E-11
3.1E+09	0.586977	8.75E-11
3.11E+09	0.582007	8.79E-11

3.13E+09	0.58359	8.74E-11
3.14E+09	0.58583	8.67E-11
3.15E+09	0.595091	8.5E-11
3.16E+09	0.589972	8.54E-11
3.17E+09	0.599454	8.37E-11
3.19E+09	0.595499	8.39E-11
3.2E+09	0.595723	8.36E-11
3.21E+09	0.605474	8.19E-11
3.22E+09	0.623551	7.93E-11
3.23E+09	0.637199	7.73E-11
3.25E+09	0.639232	7.68E-11
3.26E+09	0.637871	7.66E-11
3.27E+09	0.634849	7.67E-11
3.28E+09	0.613888	7.9E-11
3.29E+09	0.591627	8.17E-11
3.31E+09	0.565079	8.52E-11
3.32E+09	0.540363	8.88E-11
3.33E+09	0.540628	8.85E-11
3.34E+09	0.555599	8.58E-11
3.35E+09	0.572858	8.29E-11
3.37E+09	0.603358	7.84E-11
3.38E+09	0.620933	7.59E-11
3.39E+09	0.638469	7.36E-11
3.4E+09	0.618816	7.56E-11

3.41E+09	0.599641	7.78E-11
3.43E+09	0.587294	7.91E-11
3.44E+09	0.576753	8.03E-11
3.45E+09	0.577046	8E-11
3.46E+09	0.568436	8.09E-11
3.47E+09	0.581613	7.88E-11
3.49E+09	0.569927	8.01E-11
3.5E+09	0.575577	7.91E-11
3.51E+09	0.573572	7.91E-11
3.52E+09	0.57344	7.88E-11
3.54E+09	0.586361	7.68E-11
3.55E+09	0.593309	7.57E-11
3.56E+09	0.612306	7.31E-11
3.57E+09	0.633904	7.03E-11
3.58E+09	0.650574	6.83E-11
3.6E+09	0.664205	6.67E-11
3.61E+09	0.666594	6.62E-11
3.62E+09	0.651259	6.76E-11
3.63E+09	0.634782	6.91E-11
3.64E+09	0.631188	6.92E-11
3.66E+09	0.620053	7.03E-11
3.67E+09	0.601991	7.21E-11
3.68E+09	0.586566	7.38E-11
3.69E+09	0.56226	7.67E-11

3.7E+09	0.551103	7.8E-11
3.72E+09	0.543675	7.88E-11
3.73E+09	0.552983	7.73E-11
3.74E+09	0.559134	7.62E-11
3.75E+09	0.571408	7.43E-11
3.76E+09	0.558922	7.57E-11
3.78E+09	0.548182	7.7E-11
3.79E+09	0.539497	7.79E-11
3.8E+09	0.516275	8.12E-11
3.81E+09	0.512887	8.15E-11
3.82E+09	0.49371	8.44E-11
3.84E+09	0.483088	8.6E-11
3.85E+09	0.482267	8.58E-11
3.86E+09	0.475403	8.68E-11
3.87E+09	0.463655	8.87E-11
3.88E+09	0.457838	8.96E-11
3.9E+09	0.460859	8.87E-11
3.91E+09	0.480642	8.48E-11
3.92E+09	0.496556	8.18E-11
3.93E+09	0.533615	7.59E-11
3.94E+09	0.571076	7.07E-11
3.96E+09	0.592206	6.8E-11
3.97E+09	0.605433	6.63E-11
3.98E+09	0.600782	6.66E-11

3.99E+09	0.573453	6.96E-11
4E+09	0.561643	7.08E-11
4.02E+09	0.54844	7.23E-11
4.03E+09	0.542935	7.28E-11
4.04E+09	0.531986	7.41E-11
4.05E+09	0.524345	7.5E-11
4.06E+09	0.509917	7.69E-11
4.08E+09	0.484809	8.07E-11
4.09E+09	0.460207	8.48E-11
4.1E+09	0.451792	8.61E-11
4.11E+09	0.439464	8.82E-11
4.12E+09	0.434843	8.89E-11
4.14E+09	0.41657	9.25E-11
4.15E+09	0.406915	9.44E-11
4.16E+09	0.407634	9.4E-11
4.17E+09	0.403	9.48E-11
4.18E+09	0.39606	9.61E-11
4.2E+09	0.391376	9.7E-11
4.21E+09	0.385875	9.81E-11
4.22E+09	0.381663	9.89E-11
4.23E+09	0.376271	1E-10
4.24E+09	0.373141	1.01E-10
4.26E+09	0.382372	9.79E-11
4.27E+09	0.387419	9.63E-11

4.28E+09	0.39768	9.36E-11
4.29E+09	0.413124	8.98E-11
4.3E+09	0.418778	8.84E-11
4.32E+09	0.426457	8.66E-11
4.33E+09	0.416709	8.84E-11
4.34E+09	0.394393	9.32E-11
4.35E+09	0.376207	9.74E-11
4.36E+09	0.358855	1.02E-10
4.38E+09	0.351395	1.04E-10
4.39E+09	0.340712	1.07E-10
4.4E+09	0.339733	1.07E-10
4.41E+09	0.332076	1.09E-10
4.42E+09	0.324489	1.11E-10
4.44E+09	0.308166	1.17E-10
4.45E+09	0.297873	1.2E-10
4.46E+09	0.291735	1.23E-10
4.47E+09	0.286905	1.24E-10
4.49E+09	0.284959	1.25E-10
4.5E+09	0.297195	1.19E-10
4.51E+09	0.29498	1.2E-10
4.52E+09	0.302025	1.17E-10
4.53E+09	0.311056	1.13E-10
4.55E+09	0.331552	1.06E-10
4.56E+09	0.346741	1.01E-10

4.57E+09	0.362893	9.61E-11
4.58E+09	0.370934	9.38E-11
4.59E+09	0.370268	9.37E-11
4.61E+09	0.379065	9.13E-11
4.62E+09	0.385013	8.97E-11
4.63E+09	0.402087	8.56E-11
4.64E+09	0.41841	8.21E-11
4.65E+09	0.424472	8.07E-11
4.67E+09	0.404482	8.46E-11
4.68E+09	0.369622	9.24E-11
4.69E+09	0.330685	1.03E-10
4.7E+09	0.297183	1.15E-10
4.71E+09	0.272099	1.25E-10
4.73E+09	0.255325	1.33E-10
4.74E+09	0.250341	1.35E-10
4.75E+09	0.242242	1.39E-10
4.76E+09	0.224996	1.49E-10
4.77E+09	0.210112	1.6E-10
4.79E+09	0.188937	1.78E-10
4.8E+09	0.177052	1.89E-10
4.81E+09	0.169354	1.97E-10
4.82E+09	0.162495	2.05E-10
4.83E+09	0.156589	2.12E-10
4.85E+09	0.153529	2.15E-10

4.86E+09	0.148463	2.22E-10
4.87E+09	0.146499	2.25E-10
4.88E+09	0.143793	2.28E-10
4.89E+09	0.151754	2.15E-10
4.91E+09	0.170724	1.91E-10
4.92E+09	0.183347	1.77E-10
4.93E+09	0.187815	1.73E-10
4.94E+09	0.192939	1.68E-10
4.95E+09	0.194269	1.66E-10
4.97E+09	0.188775	1.71E-10
4.98E+09	0.184972	1.73E-10
4.99E+09	0.192281	1.66E-10
5E+09	0.22022	1.45E-10
5.01E+09	0.252659	1.26E-10
5.03E+09	0.304645	1.04E-10
5.04E+09	0.32567	9.72E-11
5.05E+09	0.316403	9.99E-11
5.06E+09	0.281406	1.12E-10
5.07E+09	0.242844	1.3E-10
5.09E+09	0.20831	1.51E-10
5.1E+09	0.200078	1.57E-10
5.11E+09	0.192295	1.63E-10
5.12E+09	0.206269	1.51E-10
5.13E+09	0.204345	1.53E-10

5.15E+09	0.197223	1.58E-10
5.16E+09	0.175468	1.77E-10
5.17E+09	0.156685	1.97E-10
5.18E+09	0.139562	2.22E-10
5.19E+09	0.121722	2.54E-10
5.21E+09	0.115144	2.69E-10
5.22E+09	0.102682	2.99E-10
5.23E+09	0.092043	3.35E-10
5.24E+09	0.083353	3.69E-10
5.25E+09	0.085498	3.58E-10
5.27E+09	0.095241	3.2E-10
5.28E+09	0.100236	3.03E-10
5.29E+09	0.113521	2.68E-10
5.3E+09	0.111262	2.72E-10
5.31E+09	0.107703	2.85E-10
5.33E+09	0.093658	3.3E-10
5.34E+09	0.081952	3.68E-10
5.35E+09	0.073638	4.09E-10
5.36E+09	0.068367	4.39E-10
5.37E+09	0.064905	4.61E-10
5.39E+09	0.068043	4.5E-10
5.4E+09	0.085702	3.49E-10
5.41E+09	0.100263	2.96E-10
5.42E+09	0.105304	2.83E-10

5.43E+09	0.123056	2.4E-10
5.45E+09	0.11869	2.49E-10
5.46E+09	0.105488	2.8E-10
5.47E+09	0.096757	3.03E-10
5.48E+09	0.092593	3.16E-10
5.5E+09	0.103531	2.82E-10
5.51E+09	0.117916	2.47E-10
5.52E+09	0.134503	2.16E-10
5.53E+09	0.152589	1.91E-10
5.54E+09	0.163524	1.77E-10
5.56E+09	0.166933	1.73E-10
5.57E+09	0.162331	1.78E-10
5.58E+09	0.159777	1.8E-10
5.59E+09	0.148213	1.96E-10
5.6E+09	0.140315	2.06E-10
5.62E+09	0.130783	2.19E-10
5.63E+09	0.12052	2.38E-10
5.64E+09	0.122846	2.33E-10
5.65E+09	0.125527	2.28E-10
5.66E+09	0.128819	2.21E-10
5.68E+09	0.138359	2.05E-10
5.69E+09	0.130073	2.17E-10
5.7E+09	0.122049	2.32E-10
5.71E+09	0.092949	3.05E-10

5.72E+09	0.094403	2.97E-10
5.74E+09	0.076575	3.7E-10
5.75E+09	0.066015	4.31E-10
5.76E+09	0.057896	4.91E-10
5.77E+09	0.060615	4.69E-10
5.78E+09	0.066721	4.18E-10
5.8E+09	0.076077	3.63E-10
5.81E+09	0.076472	3.61E-10
5.82E+09	0.092413	3E-10
5.83E+09	0.089774	3.05E-10
5.84E+09	0.081793	3.34E-10
5.86E+09	0.080422	3.39E-10
5.87E+09	0.086786	3.16E-10
5.88E+09	0.092493	2.97E-10
5.89E+09	0.092945	2.94E-10
5.9E+09	0.116293	2.35E-10
5.92E+09	0.139051	1.95E-10
5.93E+09	0.172107	1.6E-10
5.94E+09	0.187853	1.45E-10
5.95E+09	0.203334	1.32E-10
5.96E+09	0.204667	1.31E-10
5.98E+09	0.235555	1.14E-10
5.99E+09	0.247596	1.08E-10
6E+09	0.263503	1.01E-10

LAMPIRAN C

GAMBAR ALAT DAN BAHAN

Lampiran C. Gambar Alat dan Bahan

Gambar C.1 Air Brush

Gambar C.2 Aluminium Foil

Gambar C.3 Angciu

Gambar C.4 Aquabides

Gambar C.5 Batang Pengaduk

Gambar C.6 *Beer*

Gambar C.7 *Chamber*

Gambar C.8 Gelas Piala

Gambar C.9 *Hair Dryer*

Gambar C.10 Heksametilentetramin

Gambar C.11 *Hot Plate*

Gambar C.12 *Ice Bath*

Gambar C.13 Kabel Koaksial

Gambar C.14 Kaca Arloji

Gambar C.15 Kertas Saring

Gambar C.16 Klip

Gambar C.17 Kompresor

Gambar C.18 LibreVNA

Gambar C.19 Loyang

Gambar C.20 Mesin Uji SEM

Gambar C.21 Mesin Uji XRD

Gambar C.22 Oven

Gambar C.23 Perak Nitrat

Gambar C.24 Pinset

Gambar C.25 Pipet Tetes

Gambar C.26 Pita Perekat

Gambar C.27 *Red Wine*

Gambar C.28 Rum

Gambar C.29 Seng Oksida

Gambar C.30 Spatula

Gambar C.31 Termometer

Gambar C.32 Timbangan

Gambar C.33 *White Wine*