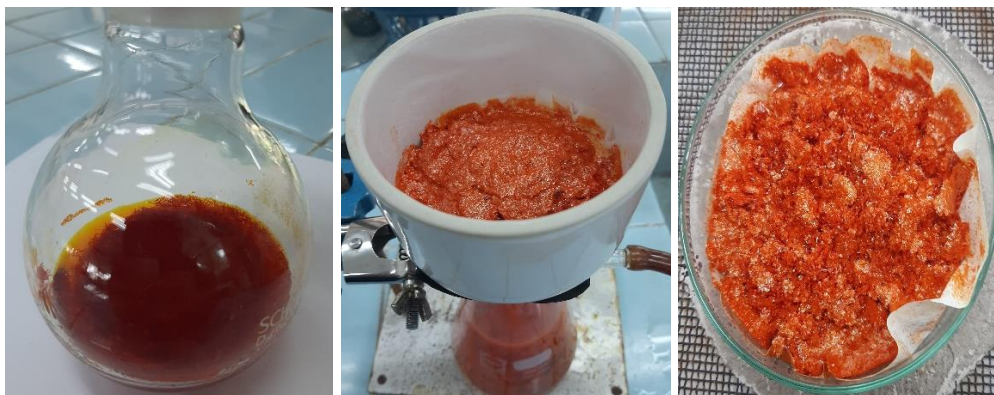




## Lampiran 1. Dokumentasi Penelitian

### A. Sintesis Basa Schiff



### B. Sintesis Kompleks [Cu(II)-SalOAP]



### C. Sintesis Komposit [Cu(II)-SalOAP]/PANI



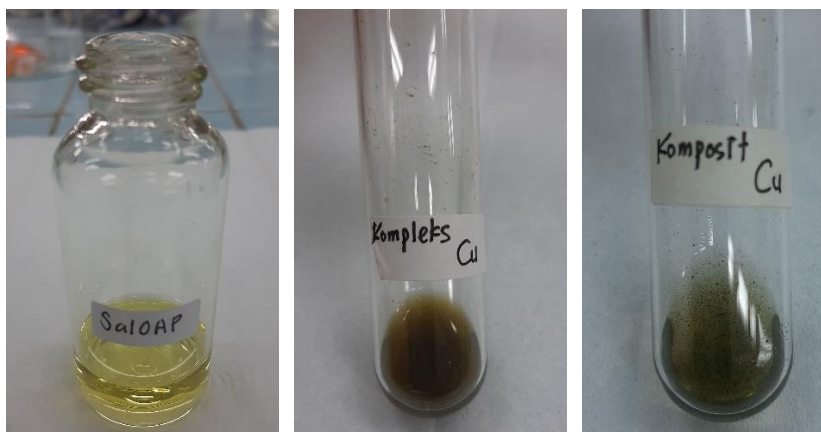
#### D. Sintesis Polimer Anilin (PANI)



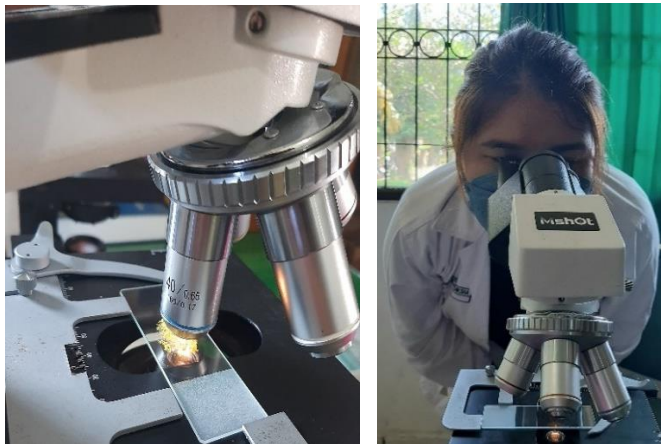
#### E. Uji pH



#### F. Hasil Uji Kelarutan SalOAP, Kompleks dan Komposit



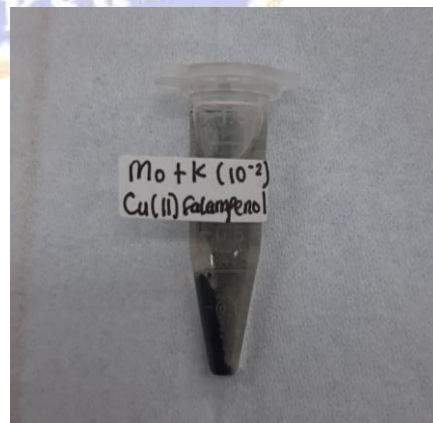
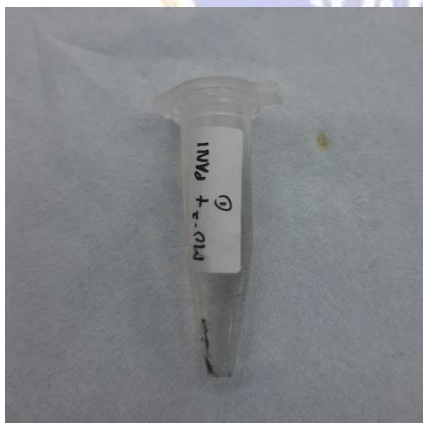
### G. Pengamatan dengan Mikroskop



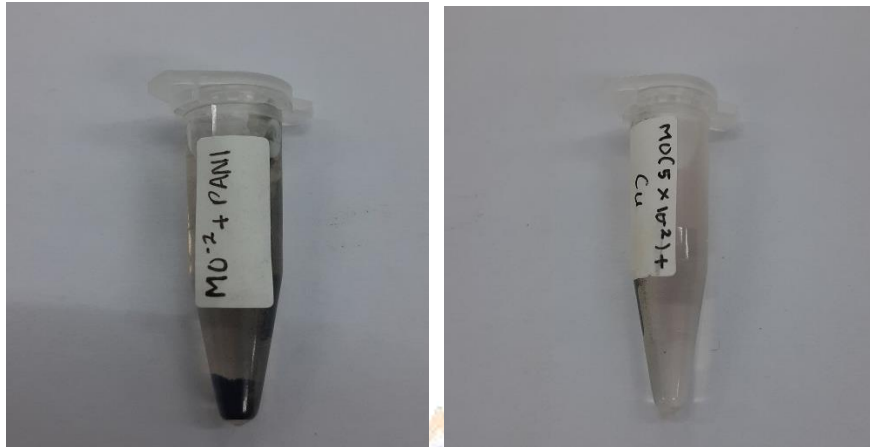
### H. Hasil Uji Dekolorisasi Konsentrasi $10^{-3}$



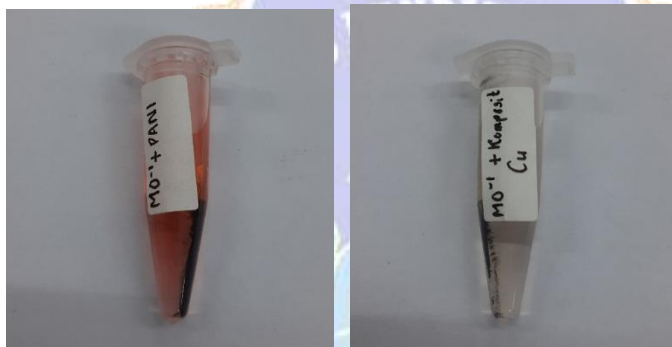
### I. Hasil Uji Dekolorisasi Konsentrasi $10^{-2}$



J. Hasil Uji Dekolorisasi Konsentrasi  $5 \times 10^{-2}$

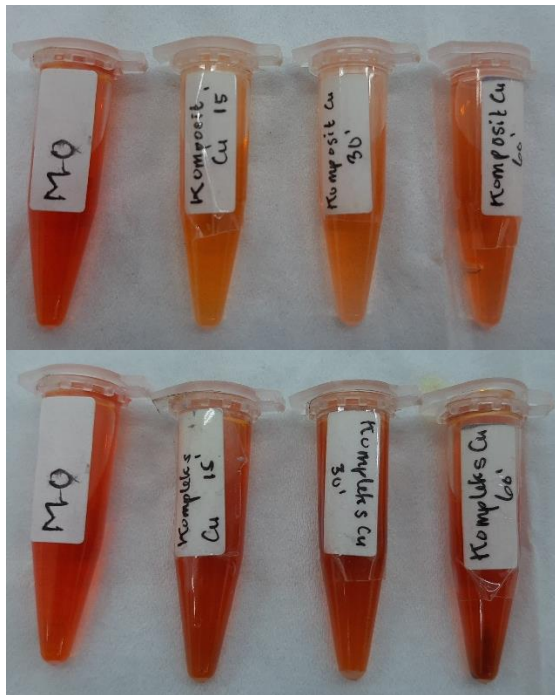


K. Hasil Uji Dekolorisasi Konsentrasi  $10^{-1}$



L. Hasil Uji Dekolorisasi Konsentrasi  $5 \times 10^{-1}$

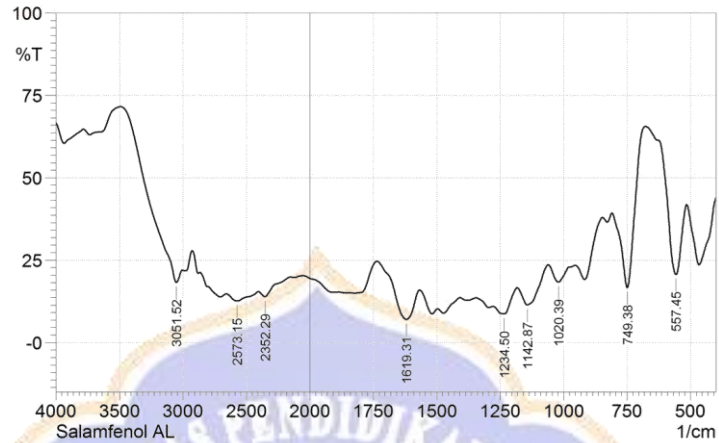




## Lampiran 2. Hasil Karakterisasi FTIR

### A. Pola Serapan Ligan SalOAP

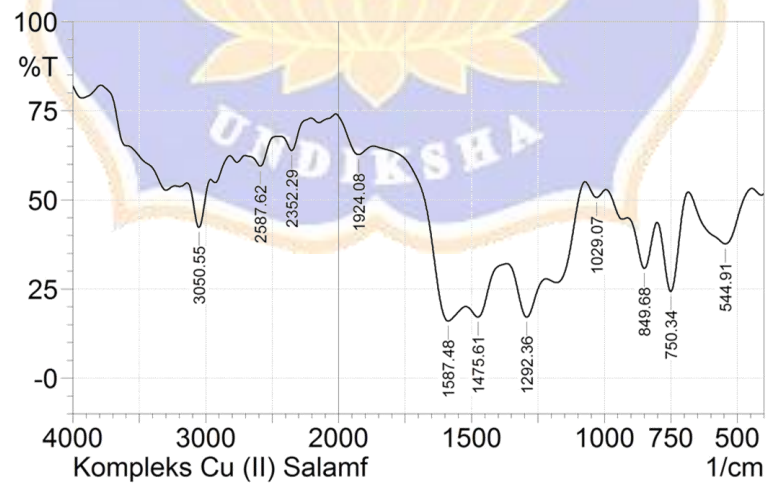
LABORATORIUM BERSAMA FMIPA  
UNIV. UDAYANA



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	557.45	20.61	27.41	678.01	515.02	60.53	14.76
2	749.38	16.64	34.64	809.17	678.01	60.03	21.42
3	1020.39	18.3	4.98	1060.89	976.99	57.55	4.41
4	1142.87	11.41	7.5	1182.41	1060.89	98.87	13.45
5	1234.5	8.67	4.85	1277.9	1182.41	91.48	8.39
6	1619.31	6.98	11.63	1735.04	1567.23	145.38	27.33
7	2352.29	13.93	2.46	2404.37	2152.65	194.85	4.53
8	2573.15	12.57	2.45	2657.06	2404.37	217.66	10.43
9	3051.52	18.24	8.55	3488.41	3004.26	196.76	2.15

### B. Pola Serapan Kompleks [Cu(II)-SalOAP]

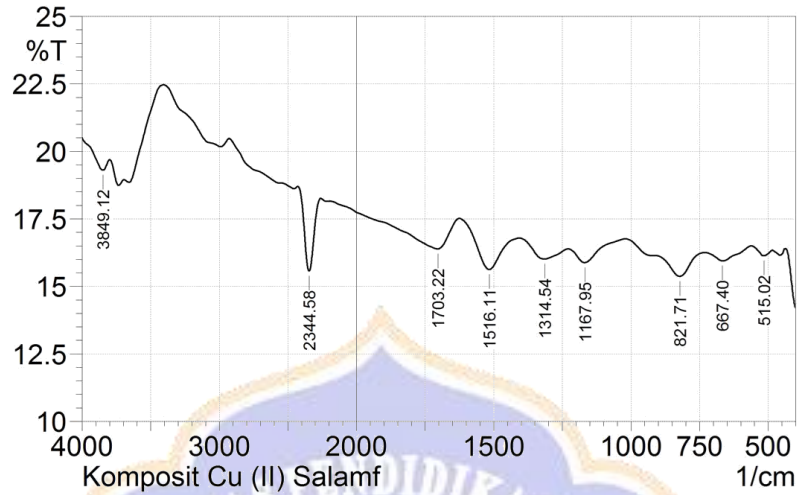
LABORATORIUM BERSAMA FMIPA  
UNIV. UDAYANA



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	544.91	37.66	15.14	684.76	445.58	85.66	19.14
2	750.34	24.31	23.1	801.46	684.76	52.18	14.71
3	849.68	30.73	13.51	912.37	801.46	47.04	7.85
4	1029.07	50.66	3.23	1072.47	993.38	22.26	1.09
5	1292.36	17.06	12.9	1366.62	1219.06	92.26	14.88
6	1475.61	17.07	6.54	1520.94	1366.62	96.77	4.91
7	1587.48	16	12.7	1868.14	1520.94	139.81	12.35
8	1924.08	62.68	5.75	2018.59	1868.14	26.34	2.51
9	2352.29	63.84	5.76	2431.38	2205.7	37.19	2.68
10	2587.62	59.45	5.66	2703.35	2474.78	46.26	3.53
11	3050.55	42.26	13	3138.32	2962.79	54.56	9.36

C. Pola Serapan Komposit [Cu(II)-SalOAP]

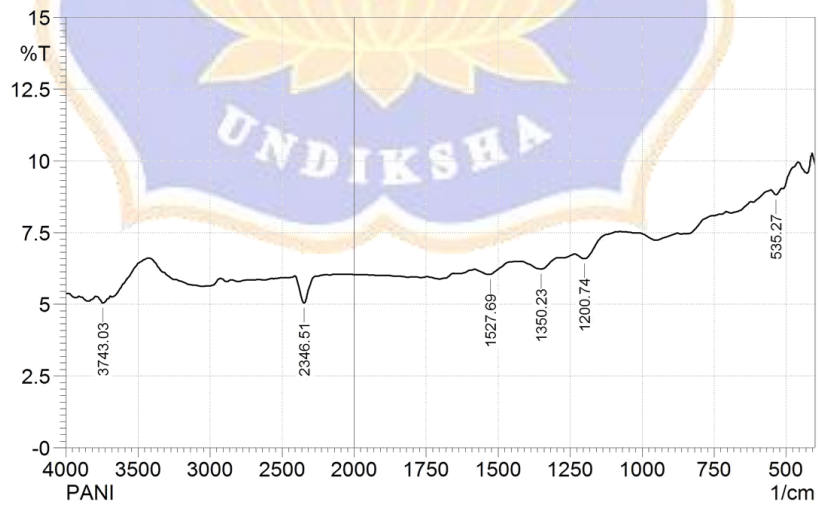
LABORATORIUM BERSAMA FMIPA  
UNIV. UDAYANA



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	515.02	16.13	0.27	560.35	484.15	60.05	0.27
2	667.4	15.94	0.4	729.12	560.35	133.55	0.91
3	821.71	15.37	0.83	913.33	729.12	147.35	1.71
4	1167.95	15.88	0.61	1228.71	1019.42	164.64	1.25
5	1314.54	16.01	0.57	1408.1	1228.71	141.33	1.36
6	1516.11	15.63	1.53	1624.13	1408.1	169.17	3.73
7	1703.22	16.39	1.22	2192.19	1624.13	431.86	6.5
8	2344.58	15.56	2.93	2427.52	2258.74	129.17	5.42
9	3849.12	19.31	0.61	4030.43	3798	162.87	1.33
10	4074.8	20.58	0.08	4104.7	4030.43	50.93	0.06
11	4149.06	20.56	0.19	4264.8	4105.66	108.65	0.26
12	4451.9	21.1	0.26	4503.98	4409.46	63.62	0.26
13	4590.78	21.43	0.06	4645.75	4579.21	44.37	0.03

D. Pola Serapan Polimer Anilin (PANI)

LABORATORIUM BERSAMA FMIPA  
UNIV. UDAYANA

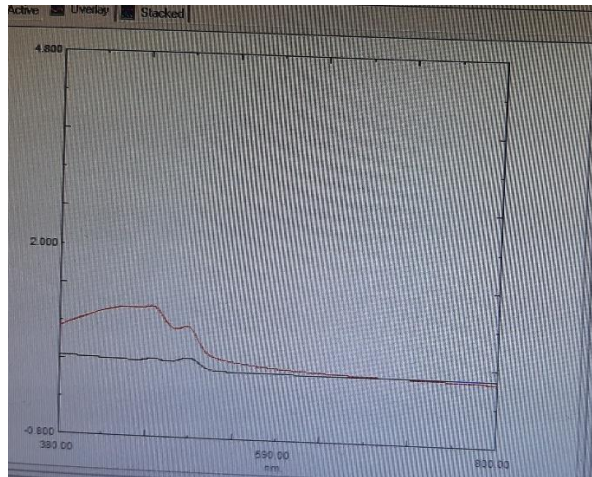


No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	535.27	8.818	0.191	552.63	515.98	38.49	0.184
2	1200.74	6.586	0.339	1233.53	1089.83	165.587	0.725
3	1350.23	6.226	0.334	1418.71	1293.33	149.815	1.432
4	1527.69	6.038	0.289	1580.73	1456.32	150.205	1.202
5	2346.51	5.039	0.948	2408.23	2264.53	180.484	4.781
6	3743.03	5.04	0.187	3780.64	3709.27	92.054	0.587

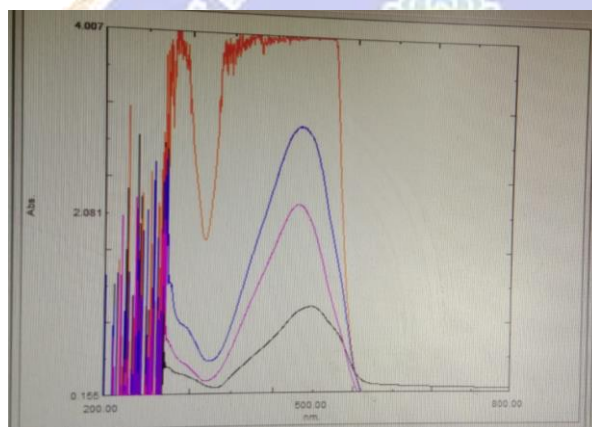


### Lampiran 3. Hasil Karakterisasi Menggunakan UV Vis

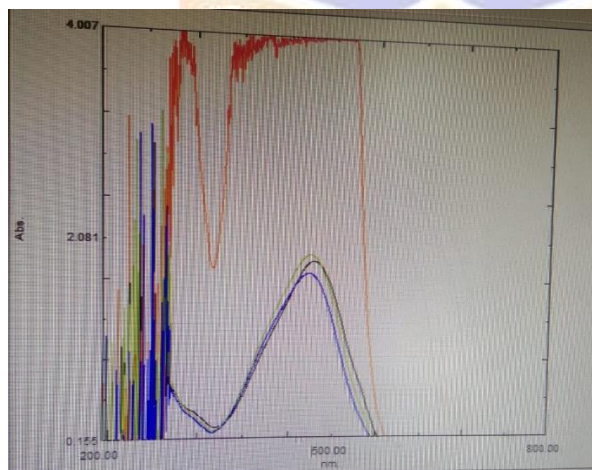
#### A. Hasil Karakterisasi Kompleks [Cu(II)-SalOAP] dan Komposit [Cu(II)-SalOAP]/PANI



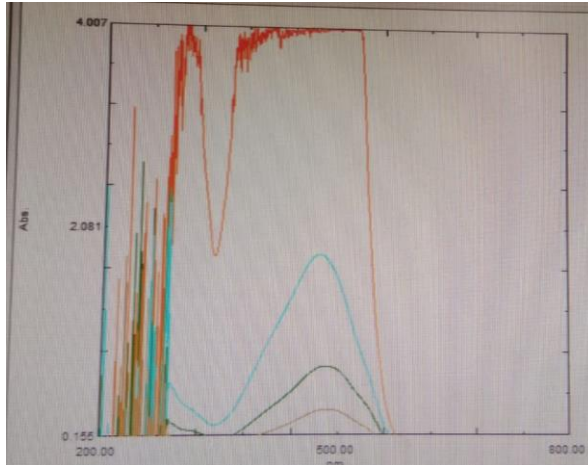
#### B. Hasil Uji Dekolorisasi Waktu Kontak 15 menit



#### C. Hasil Uji Dekolorisasi Waktu Kontak 30 menit



D. Hasil Uji Dekolorisasi Waktu Kontak 60 menit



#### Lampiran 4. Perhitungan

##### A. Perhitungan pembuatan APS

Pembuatan 10 mL APS 0,5 M

$$M_r = 228,20 \text{ g/mol}$$

$$M = \frac{\text{gram}}{M_r} \times \frac{1000}{v}$$

$$0,5 = \frac{\text{gram}}{228,20} \times \frac{1000}{10}$$

$$\text{gram} = \frac{1.141}{1000}$$

$$\text{gram} = 1,141$$

##### B. Perhitungan %D Komposit [Cu(II)-SalOAP]/PANI waktu kontak 60 menit

- Data Absorbansi Sampel

Sampel	Waktu kontak (menit)	Absorbansi (triplo)			
		Ke-1	Ke-2	Ke-3	Rata-rata
Metil oranye (0,5 M)	-	4,00	4,00	4,00	4,00
PANI	15	1,628	1,329	0,956	1,478
	30	0,733	1,064	1,260	1,064
	60	0,859	0,823	0,744	0,841
Kompleks [Cu(II)-SalOAP]	15	4,00	4,00	4,00	4,00
	30	4,00	4,00	4,00	4,00
	60	4,00	4,00	4,00	4,00
Komposit [Cu(II)-SalOAP/PANI]	15	3,064	2,005	1,470	2,005
	30	1,229	1,199	1,171	1,214
	60	0,851	0,918	0,925	0,8845

- Perhitungan %D Komposit [Cu(II)-SalOAP]/PANI waktu kontak 60 menit

$$\%D = \frac{A_{M_0 0} - A_{M_0 T}}{A_{M_0 0}} \times 100$$

$$\%D = \frac{4,00 - 0,8845}{4,00} \times 100 = 77,88$$

C. Perhitungan ukuran kristal

Posisi puncak	FWHM	Ukuran kristal D (nm)	Ukuran rata-rata (nm)
16.50298	0.2788	28.79265186	22.02916
23.64666	0.94071	8.628044882	
26.61029	0.35761	22.82768806	
27.12021	0.29324	27.86826545	

