

Lampiran 1

HASIL PERHITUNGAN DAN GRAFIK

1.1. Penentuan Kurva Kalibrasi Metilen Biru

Tabel 4. Absorbansi Larutan Standart untuk Kalibrasi (25 – 125 ppm)

Konsentrasi (ppm)	Absorbansi
25	0,388
50	0,398
75	0,420
100	0,440
125	0,470

Tabel 5. Data Regresi untuk Kalibrasi (25 –125 ppm)

C	A	$(C_i - \bar{C})$	$(A_i - \bar{A})$	$(C_i - \bar{C})(A_i - \bar{A})$	$(C_i - \bar{C})^2$
0	0	-75	-0,425	31,725	5625
25	0,388	-50	-0,035	1,75	2500
50	0,398	-25	-0,025	0,625	625
75	0,420	0	-0,003	0	0
100	0,440	25	0,017	0,425	625
125	0,470	50	0,047	2,35	2500
$\bar{C}=75$	$\bar{A}=0,423$			$\Sigma=36,875$	$\Sigma=11875$

$$m = \frac{(C_i - \bar{C})(A_i - \bar{A})}{(C_i - \bar{C})^2}$$

$$= \frac{36,875}{11875}$$

$$= 0,0031$$

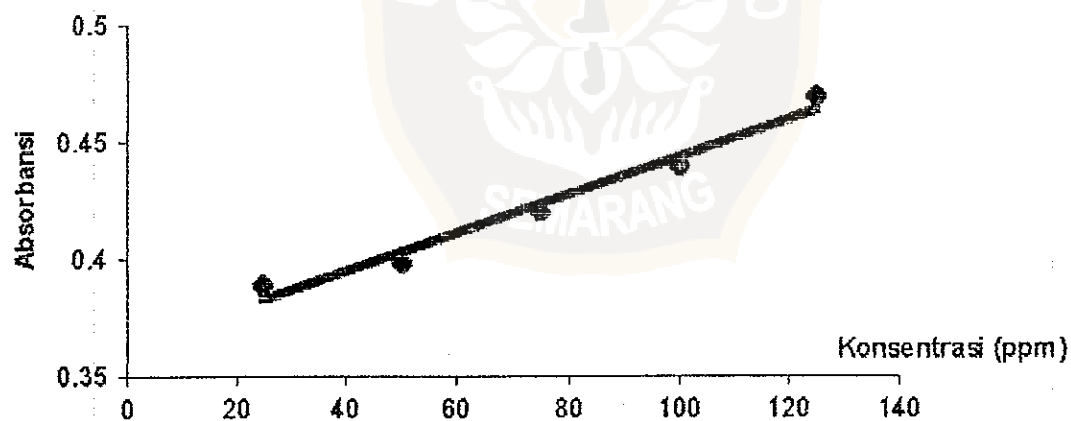
$$A = mC + n$$

$$n = A - mC$$

$$= 0,440 - 0,0031 \cdot 100$$

$$= 0,13$$

$$A = 0,0031 C + 0,13$$



Grafik 1. Kurva Kalibrasi Metilen Biru (25 - 125 ppm)

Tabel 6. Adsorbansi Larutan Standart untuk Kalibrasi (100 – 900 ppm)

Konsentrasi (ppm)	Absorbansi
100	0,422
300	0,584
500	0,724
700	0,856
900	0,966

Tabel 7. Data Regresi untuk Kalibrasi (100 – 900 ppm)

C	A	$(C_i - \bar{C})$	$(A_i - \bar{A})$	$(C_i - \bar{C})(A_i - \bar{A})$	$(C_i - \bar{C})^2$
0	0	-500	-0,7144	357,2	250000
100	0,442	-400	-0,2724	108,96	160000
300	0,584	-200	-0,1304	26,08	40000
500	0,724	0	0,0096	0	0
700	0,856	200	0,1416	28,32	40000
900	0,966	400	0,2516	100,64	160000
$\Sigma C = 400$	$\bar{A} = 0,6515$			$\Sigma = 621,2$	$\Sigma = 650000$

$$m = \frac{(C_i - \bar{C})(A_i - \bar{A})}{(C_i - \bar{C})^2}$$

$$= \frac{621,2}{650000}$$

$$= 0,00095$$

$$A = mC + n$$

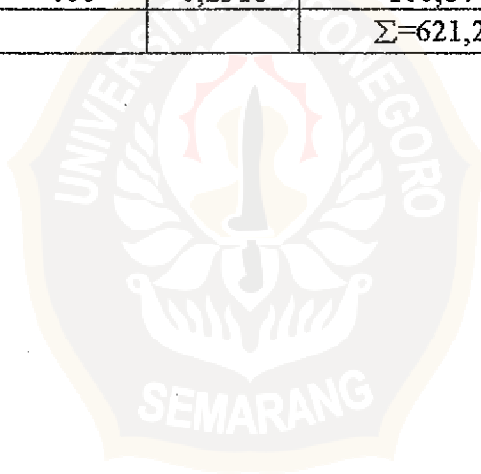
$$n = A - mC$$

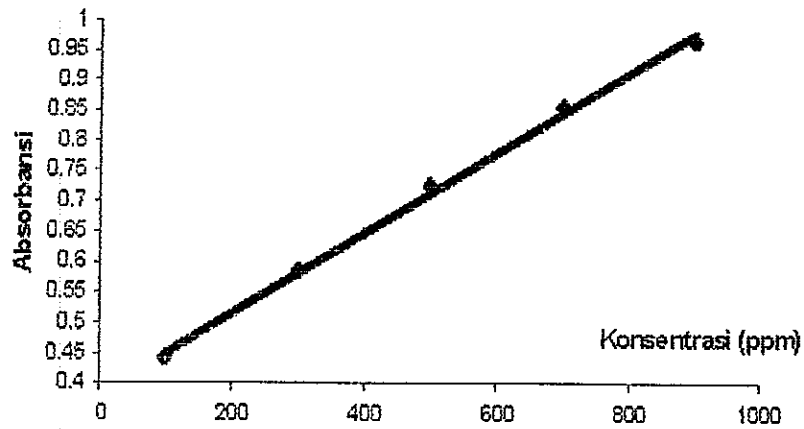
$$= 0,724 - 0,00095 \cdot 500$$

$$= 0,724 - 0,475$$

$$= 0,249$$

$$A = 0,00095 C + 0,249$$

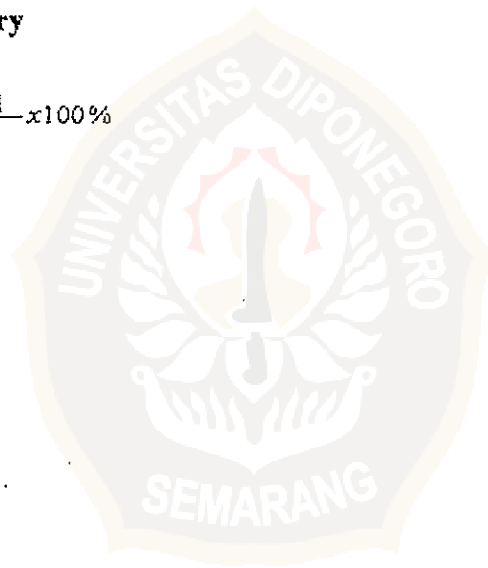




Grafik 2. Kurva Kalibrasi Metilen Biru (100 - 900 ppm)

1.2. Perhitungan Recovery

$$\text{Recovery} = \frac{m_{\text{terambil}}}{m_{\text{awal}}} \times 100\%$$



Lampiran 2

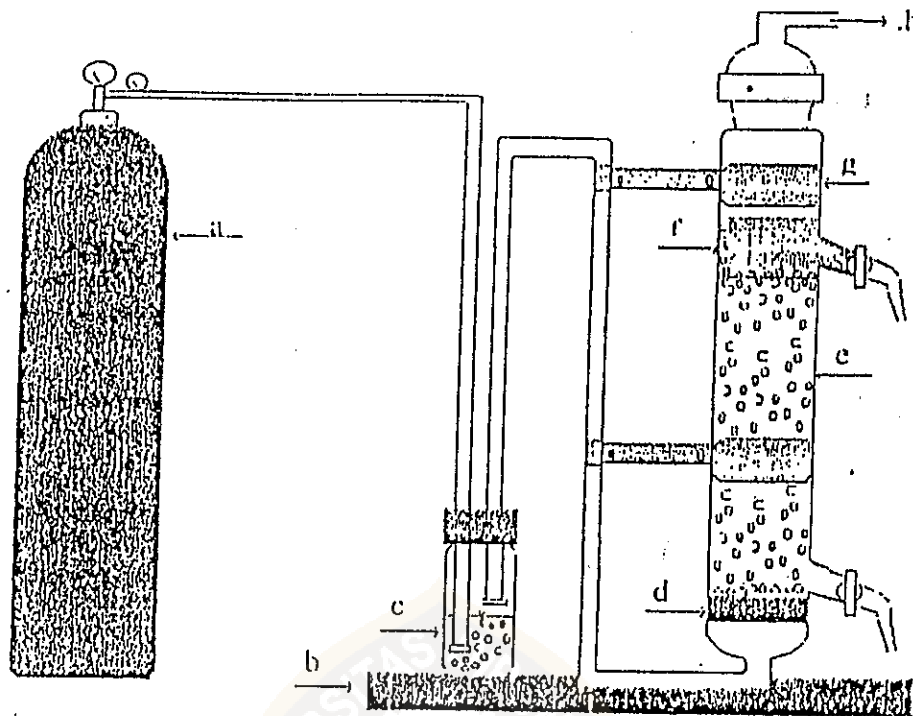
DATA ABSORBANSI

Tabel. 8. Absorbansi MBAS Pada Proses Sublasi

Tekanan gas N ₂ (Newton/cm ²)	Absorbansi			\bar{A}
0,125	0,472	0,464	0,468	0,468
0,25	0,464	0,464	0,464	0,464
0,5	0,412	0,416	0,414	0,414
0,125	0,712	0,710	0,708	0,710 ^{*)}

Ket : *) Proses Sublasi Tiga Kali





Gambar .1 Peralatan Sublimasi

Keterangan :

- a. Tabung Gas Nitrogen
- b. Landasan Statip
- c. Botol pengkabut berisi cairan Etil Asetat
- d. Penyaring karet busa (spon)
- e. Laretn sampel
- f. Cairan Etil Asetat
- g. Klem
- h. Gas keluar