**Lampiran 8.** Perhitungan Persamaan Regresi

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Konsentrasi (Y) | Absorbansi (X) | XY | Y2 | X2 |
| 1 | 0,5 | 0,420 | 0,21 | 0,25 | 0,1764 |
| 2 | 1,0 | 0,815 | 0,815 | 1,0 | 0,6642 |
| 3 | 1,5 | 0,932 | 1,398 | 2,25 | 0,8686 |
| 4 | 2,0 | 1,046 | 2,092 | 4,0 | 1,0941 |
| 5 | 2,5 | 1,201 | 3,0025 | 6,25 | 1,4424 |
|  | ∑ = 7,5Y= 1,5 | ∑ = 4,414X = 0,8828 | ∑ = 7,5175 | ∑ = 13,75 | ∑ = 4,2457 |

Y= ax + b

$$a= \frac{n (∑xy) – (∑x) (∑y)}{n\left(∑X^{2}\right)-(∑X)^{2}}$$

$$=\frac{5 \left(7,5175\right)- (4,414)(7,5) }{5 \left(4,2457\right)- (4,414)^{2}}$$

$$=\frac{37,5875-33,105}{21,2285-19,4834}$$

$$= \frac{4,4825}{1,7451}$$

= 2,5686

b = y – ax

= 1,5 – (2,5686)(0,8828)

= 1,5 – 2,2675

= - 0,7675

Maka persamaan regresi yang didapat

Y = 2,5686 x - 0,7675

**Lampiran 9**. Perhitungan konsentrasi sampel

1. Pelarut Metanol

|  |  |  |
| --- | --- | --- |
|  | Konsentrasi (Y) | Absorbansi (X) |
| 1 |  0,3  | 0,420 |
| 2 | 0,4 | 0,453 |
| 3 | 0,6 | 0,535 |
| 4 | 0,1 | 0,339 |
| 5 | 0,0 | 0,301 |

Persamaanregresi:

Y = 2,5686 x – 0,7675

1. Y = 2,5686 (0,420) – 0,7675

= 0,3ppm

1. Y = 2,5686 (0,453) – 0,7675

= 0,4 ppm

1. Y = 2,5686 (0,535) – 0,7675

= 0,6 ppm

1. Y = 2,5686 (0,339) – 0,7675

 = 0,1 ppm

1. Y = 2,5686 (0,301) – 0,7675

= 0,0 ppm

1. PelarutKloroform

|  |  |  |
| --- | --- | --- |
| No | Konsentrasi (ppm) | Absorbansi |
| 1 | 1,9 | 1,036 |
| 2 | 1,9 | 1,036 |
| 3 | 1,9 | 1,036 |
| 4 | 2,0 | 1,076 |
| 5 | 2,0 | 1,076 |
| 6 | 1,6 | 0,910 |
| 7 | 1,6 | 0,914 |
| 8 | 0,9 | 0,635 |
| 9 | 0,9  | 0,638 |
| 10 | 0,9 | 0,633 |
| 11 | 2,0 | 1,071 |
| 12 | 2,0 | 1,071 |
| 13 | 1,9 | 1,036 |
| 14 | 1,9 | 1,056 |
| 15 | 0,9 | 0,636 |
| 16 | 2,5 | 1,260 |
| 17 | 2,5 | 1,260 |
| 18 | 1,9 | 1,036 |
| 19 | 1,9 | 1,046 |
| 20 | 0,9 | 0,631 |
| 21 | 2,0 | 1,071 |
| 22 | 1,9 | 1,051 |
| 23 | 1,9 | 1,051 |
| 24 | 1,2 | 0,762 |
| 25 | 1,2 | 0,762 |
| 26 | 2,6 | 1,301 |
| 27 | 2,5 | 1,260 |
| 28 | 2,3 | 1,201 |
| 29 | 2,0 | 1,076 |
| 30 | 1,6 | 0,910 |

Persamaan regresi:

Y = 2,5686x – 0,7675

1. Y = 2,5686 (1,036) – 0,7675

= 1,9ppm

1. Y = 2,5686 (1,036) – 0,7675

= 1,9 ppm

1. Y = 2,5686 (01,036) – 0,7675

= 1,9 ppm

1. Y = 2,5686 (1,076) – 0,7675

 = 2,0ppm

1. Y = 2,5686 (1,076) – 0,7675

= 2,0 ppm

1. Y = 2,5686 (0,910) – 0,7675

= 1,6 ppm

1. Y = 2,5686 (0,914) – 0,7675

= 1,6 ppm

1. Y = 2,5686 ( 0,635) – 0,7675

= 0,9 ppm

1. Y = 2,5686 ( 0,638) – 0,7675

= 0,9 ppm

1. Y = 2,5686 (0,633) – 0,7675

= 0,9 ppm

1. Y = 2,5686 (1,071) – 0,7675

= 2,0 ppm

1. Y = 2,5686 (1,071) – 0,7675

= 2,0 ppm

1. Y = 2,5686 (1,036) – 0,7675

= 1,9 ppm

1. Y = 2,5686 (1,056) – 0,7675

= 1,9 ppm

1. Y = 2,5686 ( 0,636) – 0,7675

= 0,9 ppm

1. Y = 2,5686 (1,260) – 0,7675

= 2,5 ppm

1. Y = 2,5686 (1,260) – 0,7675

= 2,5 ppm

1. Y = 2,5686 (1,036) – 0,7675

= 1,9 ppm

1. Y = 2,5686 (1,046) – 0,7675

=1,9 ppm

1. Y = 2,5686 (0,631) – 0,7675

= 0,9 ppm

1. Y = 2,5686 (1,071) – 0,7675

= 2,0 pp

1. Y = 2,5686 (1,051) – 0,7675

= 1,9 ppm

1. Y = 2,5686 (1,051) – 0,7675

= 1,9 ppm

1. Y = 2,5686 (0,762) – 0,7675

= 1,2 ppm

1. Y = 2,5686 (0,762) – 0,7675

= 1,2 ppm

1. Y = 2,5686 (1,301) – 0,7675

= 2,6 ppm

1. Y = 2,5686 (1,260) – 0,7675

=2,5 ppm

1. Y = 2,5686 (1,201) – 0,7675

=2,3 ppm

1. Y = 2,5686 (1,076) – 0,7675

=2,0 ppm

1. Y = 2,5686 (0,910) – 0,7675

=1,6 ppm