

Lampiran 1. Tabel data hasil pengujian asam lemak di Universitas Airlangga

Tabel Profil Asam Lemak

No	Nama Komponen (metil ester)	kode GC-MS 9-60			kode GC-MS 9-61			kode GC-MS 9-59		
		Waktu Tambat	% Area	Quality*	Waktu Tambat	% Area	Quality	Waktu Tambat	% Area	Quality*
1	Myristic acid	5.075	26.778%	98%	-	-	-	5.059	0.365%	98%
2	palmitic acid	8.291	26.024%	99%	8.275	12.052%	98%	8.292	17.208%	99%
3	8,11-octadecadienoic acid	11.825	12.523%	99%	-	-	-	-	-	-
	linoleic acid	-	-	-	11.931	53.313%	99%	11.939	46.660%	99%
4	Oleic acid	11.996	30.163%	99%	12.061	26.153%	99%	12.069	26.928%	99%
	9,12,15-octadecatrienoic acid	-	-	-	-	-	-	12.312	0.330%	97%
5	stearic acid	12.540	3.890%	99%	12.556	6.119%	99%	12.564	6.663%	99%
6	11-eicosenoic acid	16.983	0.298%	99%	16.983	0.297%	99%	16.983	0.403%	99%
7	arachidic acid	17.852	0.167%	99%	17.860	0.454%	99%	17.860	0.647%	99%
	Docosanoic acid	-	-	-	23.019	1.212%	99%	23.019	0.563%	99%
8	lignoceric acid	25.602	0.156%	99%	25.602	0.400%	99%	25.602	0.234%	99%

\*ket. Qualify = Kesesuaian spektrum MS dengan pustaka Alat

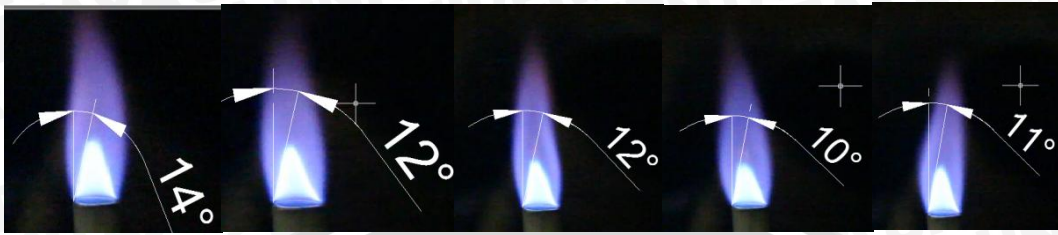
Surabaya, 15 September 2014  
 Analis ULPPFUA

**Mega Ferdina Warsito, S.Farm., Apt.**

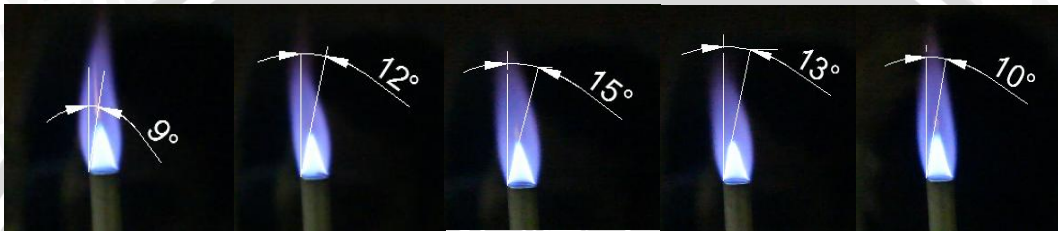


Lampiran 2. Visualisasi Api

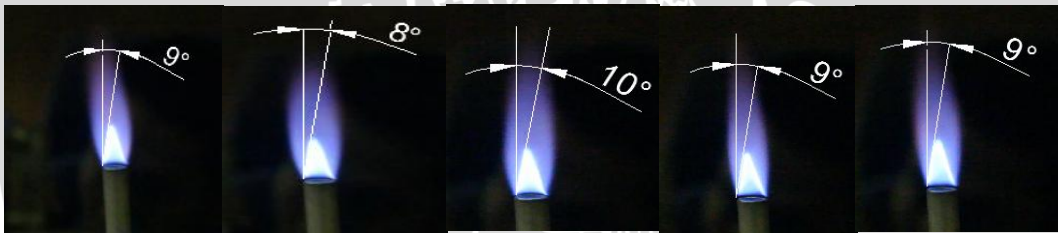
Tanpa magnet *Equivalence Ratio* 1,658



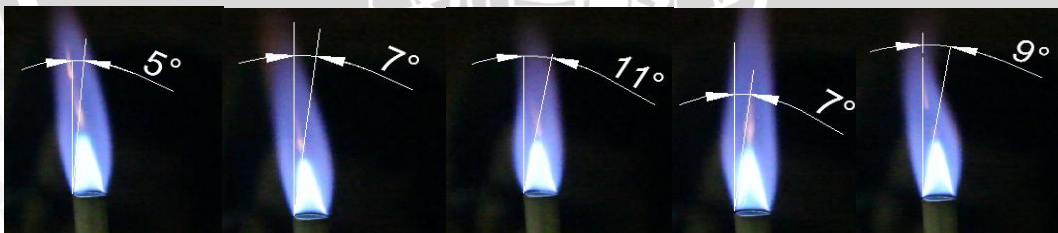
Tanpa magnet *Equivalence Ratio* 1,336



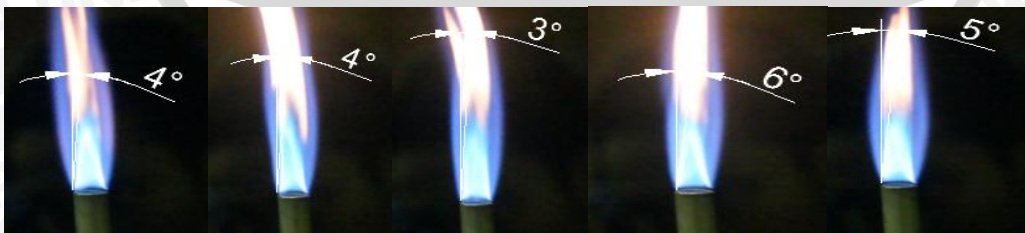
Tanpa magnet *Equivalence Ratio* 1,119



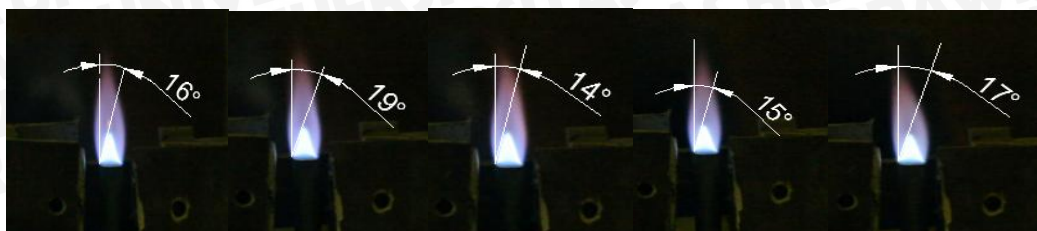
Tanpa magnet *Equivalence Ratio* 0,949



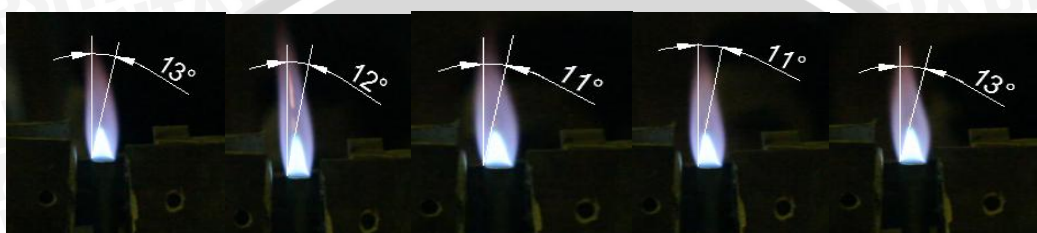
Tanpa Magnet *Equivalence Ratio* 0,829



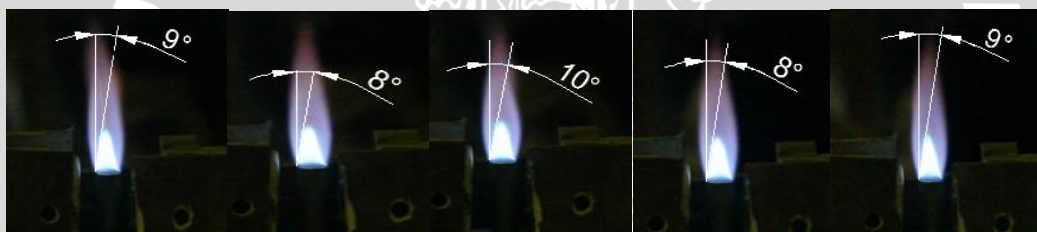
Titik 1 Equivalence Ratio 1,658



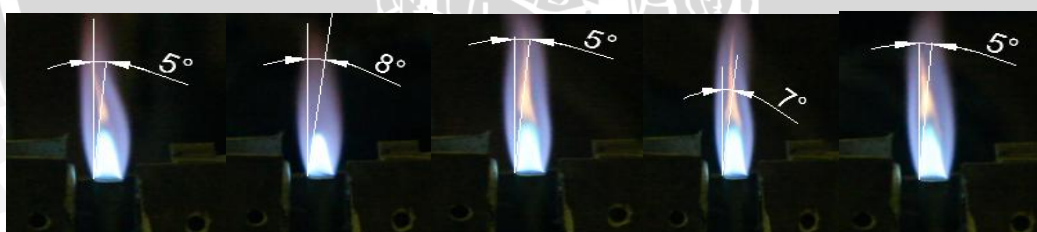
Titik 1 Equivalence Ratio 1,336



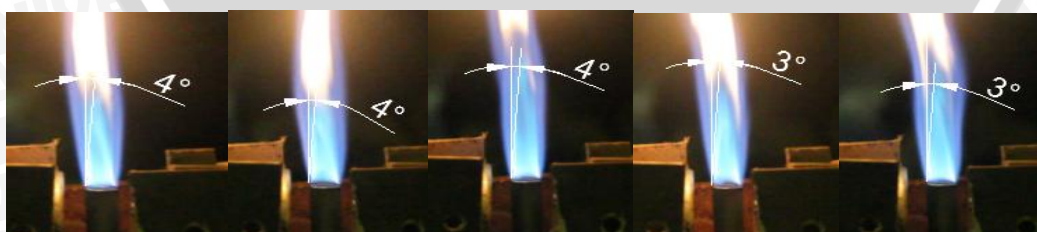
Titik 1 Equivalence Ratio 1,119



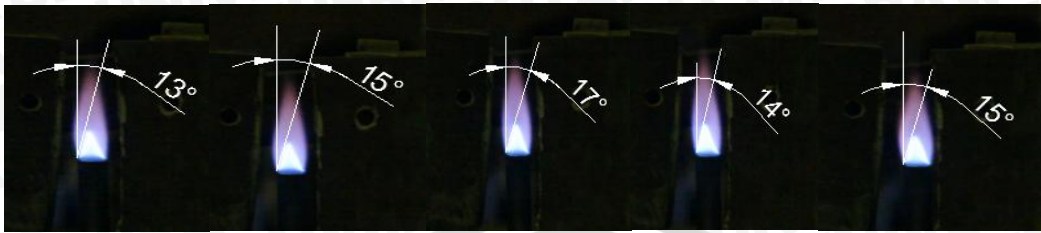
Titik 1 Equivalence Ratio 0,949



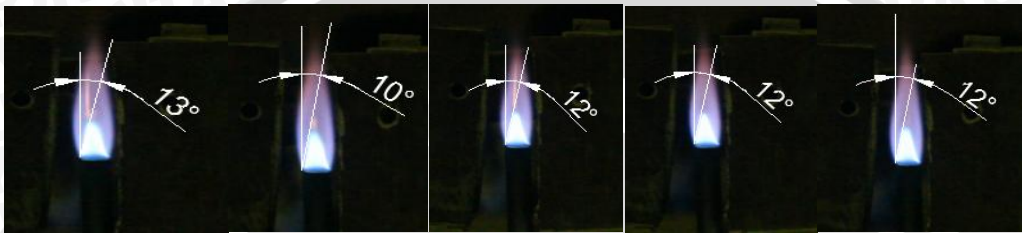
Titik 1 Equivalence Ratio 0,829



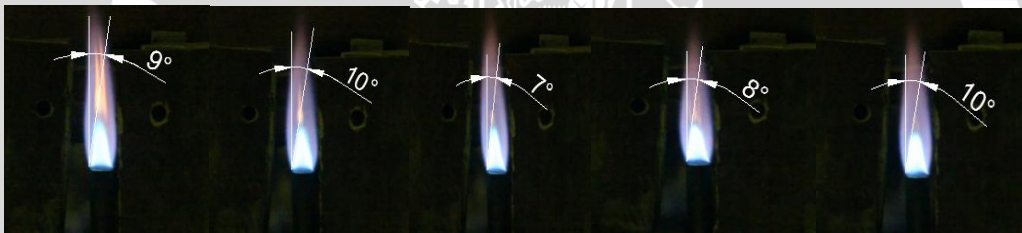
Titik 2 Equivalence Ratio 1,658



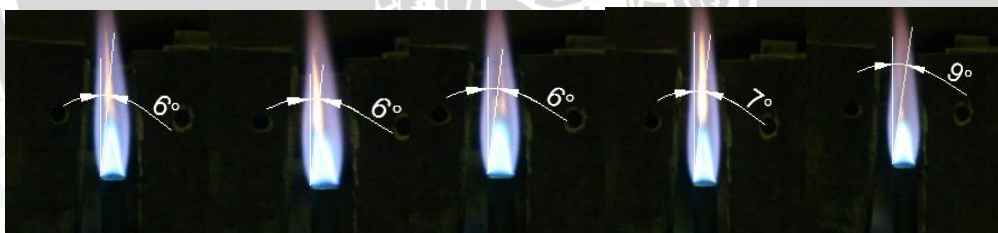
Titik 2 Equivalence Ratio 1,336



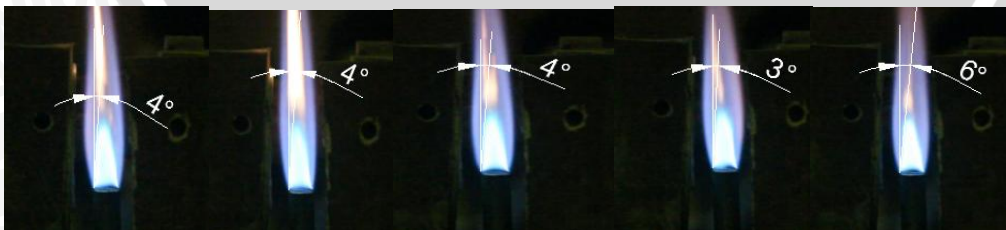
Titik 2 Equivalence Ratio 1,119



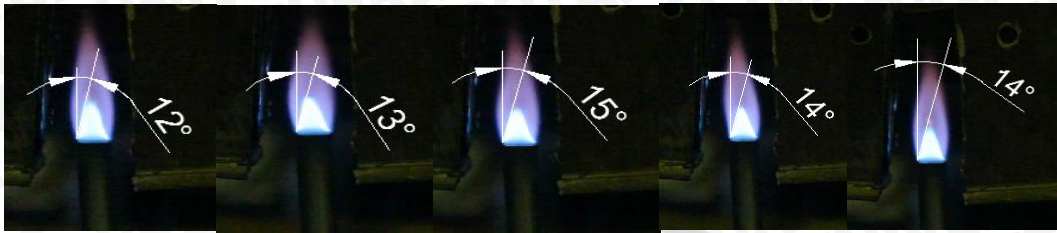
Titik 2 Equivalence Ratio 0,949



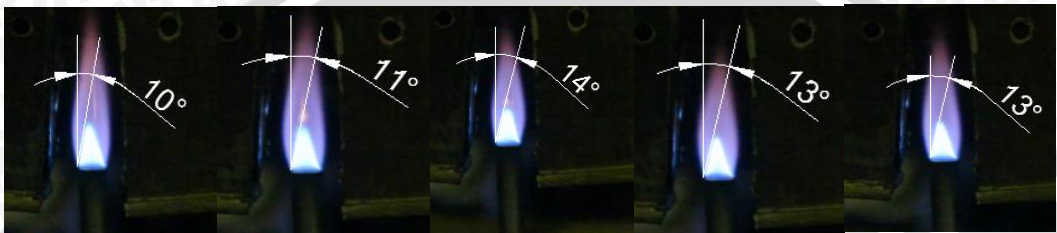
Titik 2 Equivalence Ratio 0,829



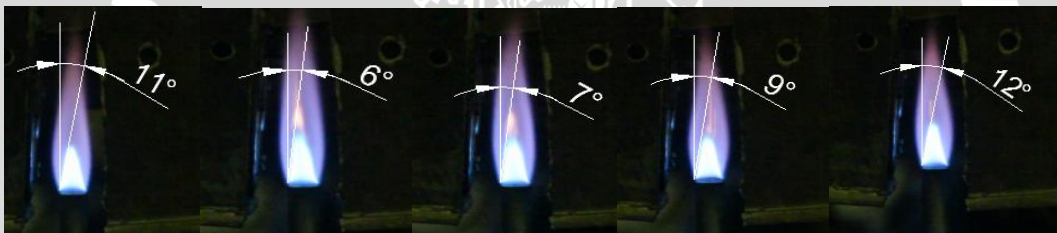
Titik 3 Equivalence Ratio 1,658



Titik 3 Equivalence Ratio 1,336



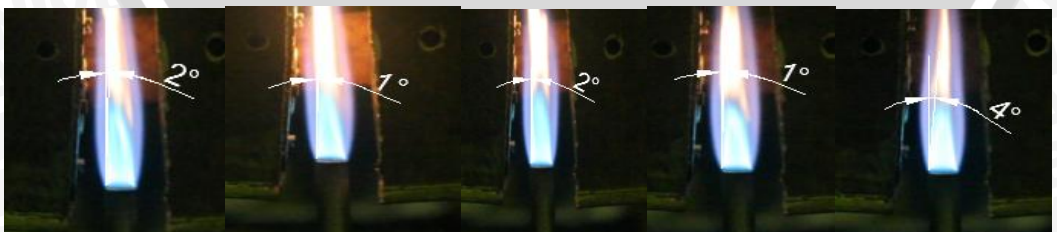
Titik 3 Equivalence Ratio 1,119



Titik 3 Equivalence Ratio 0,949



Titik 3 Equivalence Ratio 0,829



Lampiran 3. Tabel Data Hasil Perhitungan

No	Jarak Magnet (cm)	Letak Titik	Kuat Medan magnet (mT)	Debit Udara (l/min)	AFR Stoikiometri	AFR Aktual	Equivalence Ratio ( $\phi$ )	Sudut Api ( $\theta$ )	Sin $\theta$	Vu (cm/detik)	SL (cm/detik)
1				2	13.1	7.9	1.65822785	14	0.241	45.432236	10.95
2								0.208	9.45		
3								0.208	9.45		
4								0.174	7.91		
5								0.191	8.68		
6				2.5	13.1	9.8	1.33673469	9	0.156	56.081863	8.75
7								0.208	11.67		
8								0.259	14.53		
9								0.225	12.62		
10								0.174	9.76		
11				3	13.1	11.7	1.11965812	9	0.156	66.731490	10.41
12								0.139	9.28		
13								0.174	11.61		
14								0.156	10.41		
15								0.156	10.41		
16				3.5	13.1	13.8	0.94927536	5	0.087	77.381118	6.73
17								0.122	9.44		
18								0.191	14.78		
19								0.122	9.44		
20								0.156	12.07		
21				4	13.1	15.8	0.82911392	4	0.069	88.030745	6.07
22								0.069	6.07		
23								0.052	4.58		
24								0.104	9.16		
25								0.087	7.66		

No	Jarak Magnet (cm)	Letak Titik	Kuat Medan magnet (mT)	Debit Udara (l/min)	AFR Stoikiometri	AFR Aktual	Equivalence Ratio ( $\phi$ )	Sudut Api ( $\theta$ )	Sin $\theta$	Vu (cm/detik)	SL (cm/detik)
1	2	1	30.1	2	13.1	7.9	1.65822785	16	0.276	45.432236	12.54
2								0.325	14.77		
3								0.241	10.95		
4								0.259	11.77		
5								0.292	13.27		
6				2.5	13.1	9.8	1.33673469	13	0.225	56.081863	12.62
7								0.208	11.67		
8								0.191	10.71		
9								0.191	10.71		
10								0.225	12.62		
11				3	13.1	11.7	1.11965812	9	0.156	66.731490	10.41
12								0.139	9.28		
13								0.174	11.61		
14								0.139	9.28		
15								0.156	10.41		
16				3.5	13.1	13.8	0.94927536	5	0.087	77.381118	6.73
17								0.139	10.76		
18								0.087	6.73		
19								0.122	9.44		
20								0.087	6.73		
21				4	13.1	15.8	0.82911392	4	0.069	88.030745	6.07
22								0.069	6.07		
23								0.069	6.07		
24								0.052	4.58		
25								0.052	4.58		

No	Jarak Magnet (cm)	Letak Titik	Kuat Medan magnet (mT)	Debit Udara (l/min)	AFR Stoikiometri	AFR Aktual	Equivalence Ratio ( $\phi$ )	Sudut Api ( $\theta$ )	Sin $\theta$	Vu (cm/detik)	SL (cm/detik)
1	2	2	10.4	2	13.1	7.9	1.65822785	13	0.225	45.432236	10.22
2								15	0.259		11.77
3								17	0.292		13.27
4								14	0.241		10.95
5								15	0.259		11.77
6				2.5	13.1	9.8	1.33673469	13	0.225	56.081863	12.62
7								10	0.174		9.76
8								12	0.208		11.67
9								12	0.208		11.67
10								12	0.208		11.67
11				3	13.1	11.7	1.11965812	9	0.156	66.731490	10.41
12								10	0.174		11.61
13								7	0.122		8.14
14								8	0.139		9.28
15								10	0.174		11.61
16				3.5	13.1	13.8	0.94927536	6	0.104	77.381118	8.05
17								6	0.104		8.05
18								6	0.104		8.05
19								7	0.122		9.44
20								9	0.156		12.07
21				4	13.1	15.8	0.82911392	4	0.069	88.030745	6.07
22								4	0.069		6.07
23								4	0.069		6.07
24								3	0.052		4.58
25								6	0.104		9.16

No	Jarak Magnet (cm)	Letak Titik	Kuat Medan magnet (mT)	Debit Udara (l/min)	AFR Stoikiometri	AFR Aktual	Equivalence Ratio ( $\phi$ )	Sudut Api ( $\theta$ )	Sin $\theta$	Vu (cm/detik)	SL (cm/detik)
1	2	3	29.8	2	13.1	7.9	1.65822785	12	0.208	45.432236	9.45
2								13	0.225		10.22
3								15	0.259		11.77
4								14	0.241		10.95
5								14	0.241		10.95
6				2.5	13.1	9.8	1.33673469	10	0.174	56.081863	9.76
7								11	0.191		10.71
8								14	0.241		13.52
9								13	0.225		12.62
10								13	0.225		12.62
11				3	13.1	11.7	1.11965812	11	0.191	66.731490	12.75
12								6	0.104		6.94
13								7	0.122		8.14
14								9	0.156		10.41
15								12	0.208		13.88
16				3.5	13.1	13.8	0.94927536	2	0.035	77.381118	2.71
17								3	0.052		4.02
18								2	0.035		2.71
19								2	0.035		2.71
20								2	0.035		2.71
21				4	13.1	15.8	0.82911392	2	0.035	88.030745	3.08
22								1	0.017		1.50
23								2	0.035		3.08
24								1	0.017		1.50
25								4	0.069		6.07