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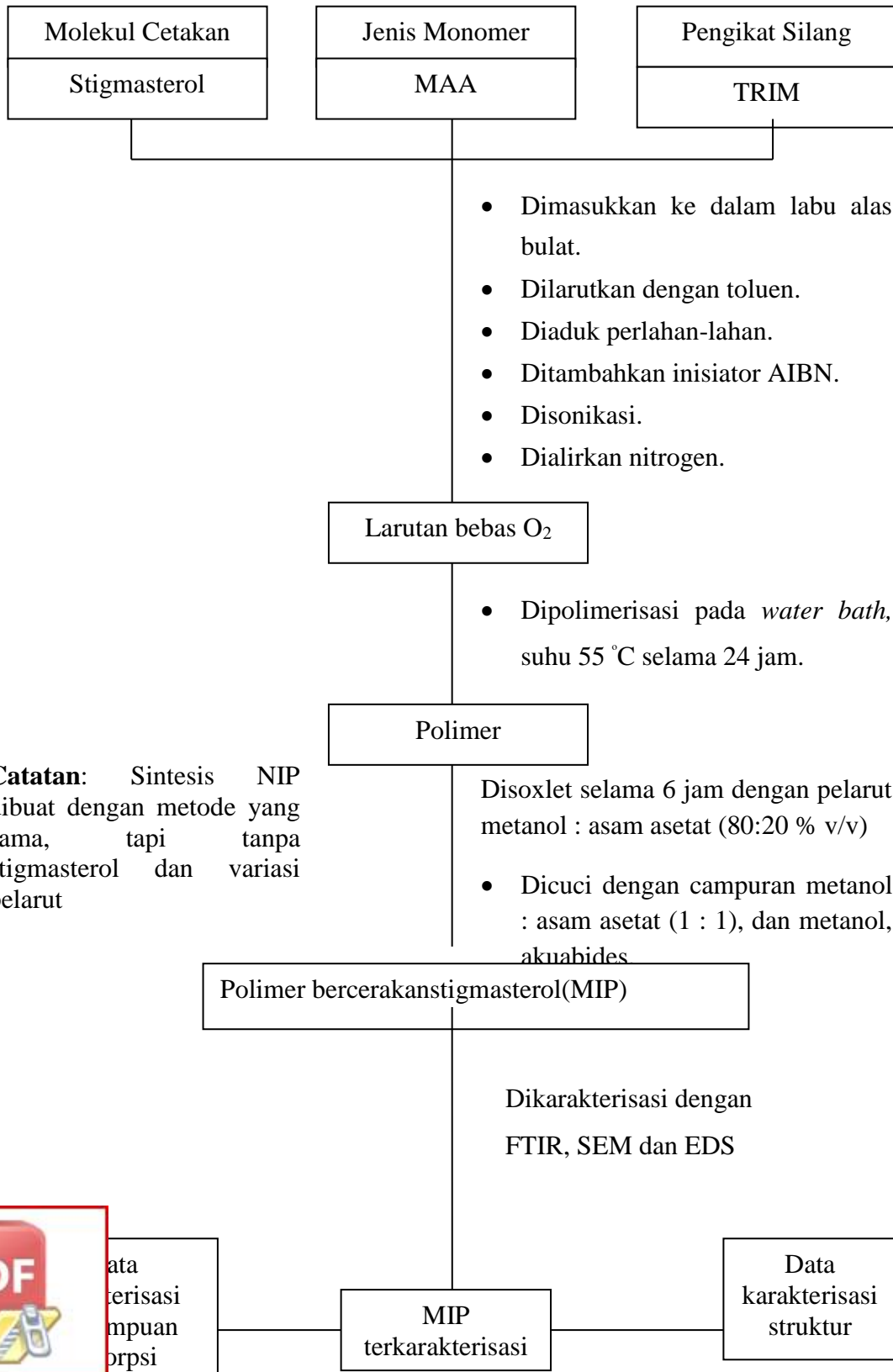
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Lampiran 1. Skema Sintesis MIP menggunakan Metode Polimerisasi Presipitasi

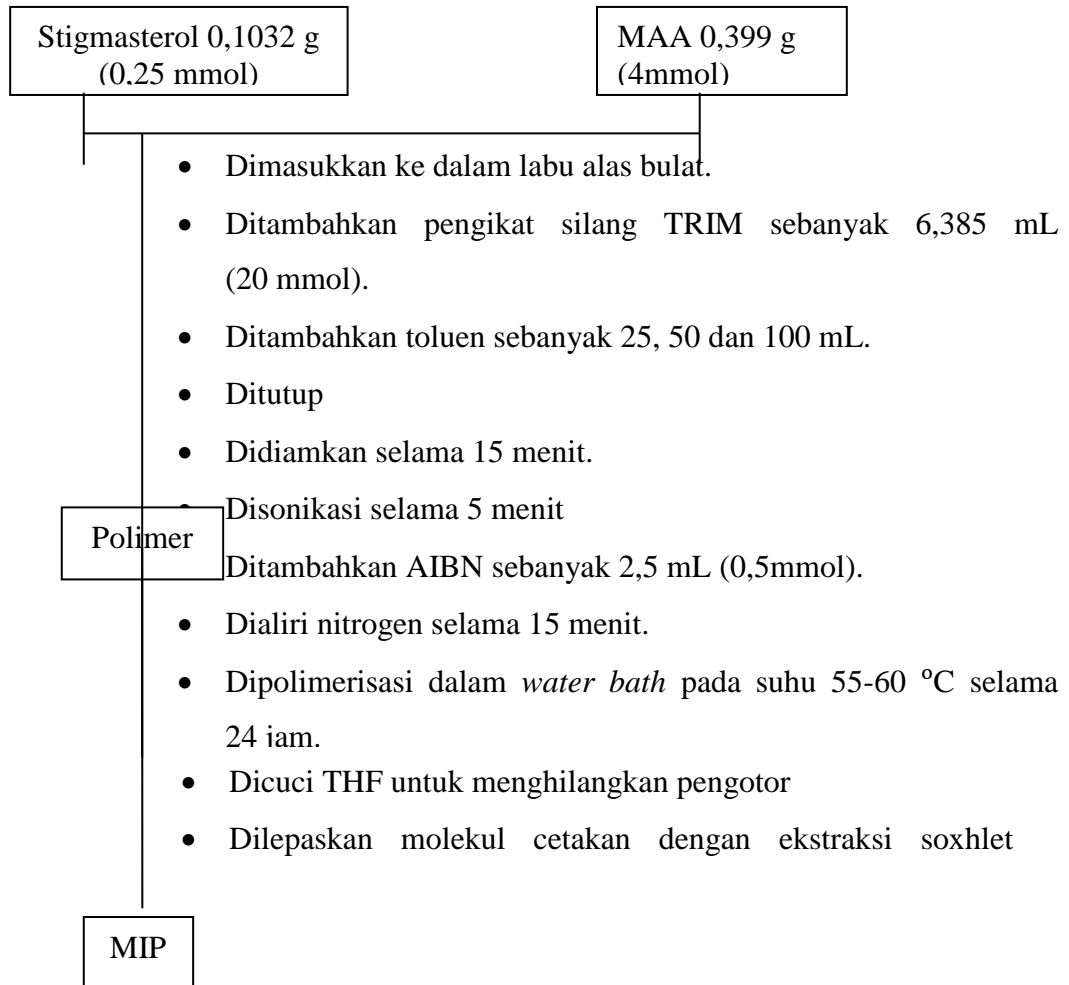


Catatan: Sintesis NIP dibuat dengan metode yang sama, tapi tanpa stigmasterol dan variasi pelarut



Lampiran 2. Bagan Kerja

1. Sintesis MIP dan NIP



Nb: Sintesis NIP dibuat dengan metode yang sama, tapi tanpa stigmasterol dan tanpa dilakukan ekstraksi

Penamaan hasil sintesis :

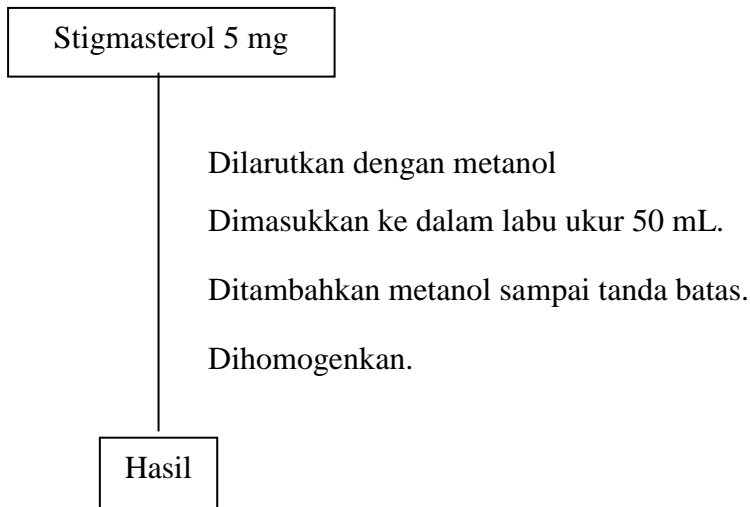
-NIP adalah NIP_MAA-co-TRIM

-Polimer belum diekstraksi MIP_MAA-co-TRIM_(BE)

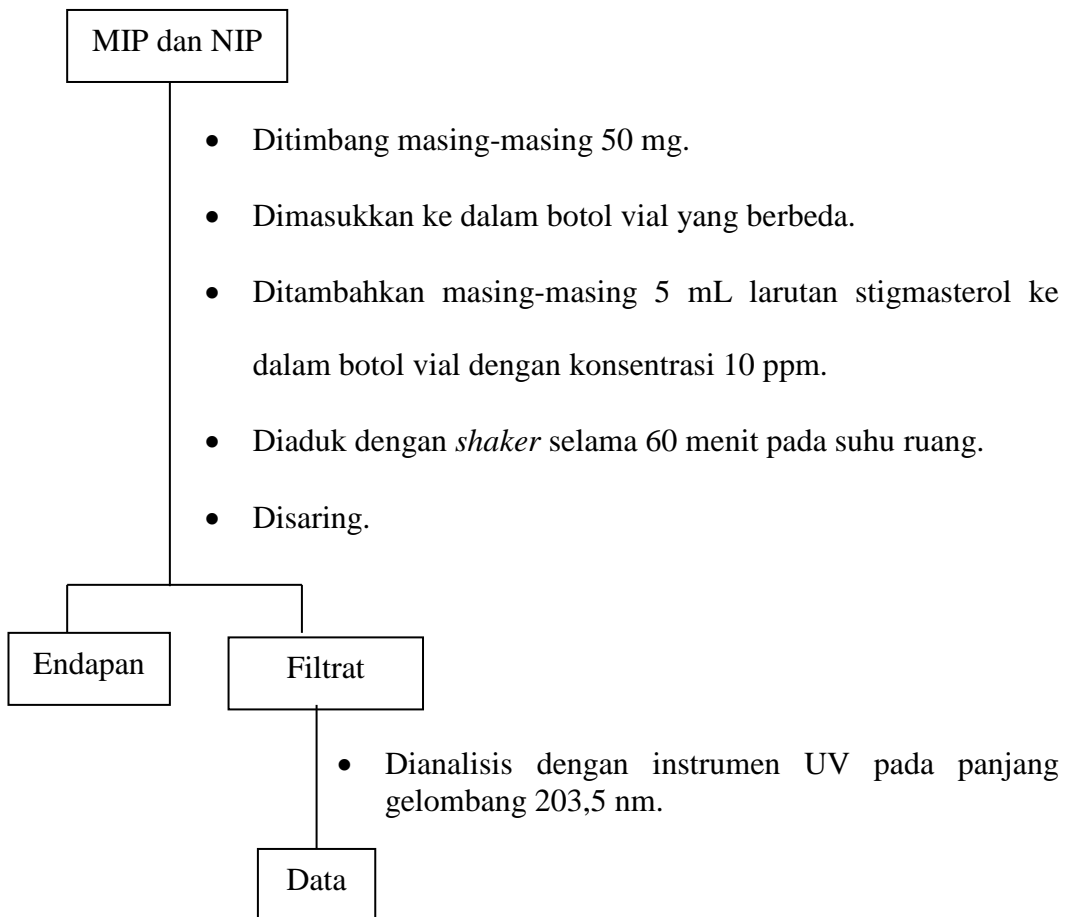
-Polimer telah diekstraksi MIP_MAA-co-TRIM_(TE)



2. Pembuatan Larutan Standar Stigmasterol 100 mgL⁻¹



3. Uji Kemampuan Adsorpsi MIP dan NIP

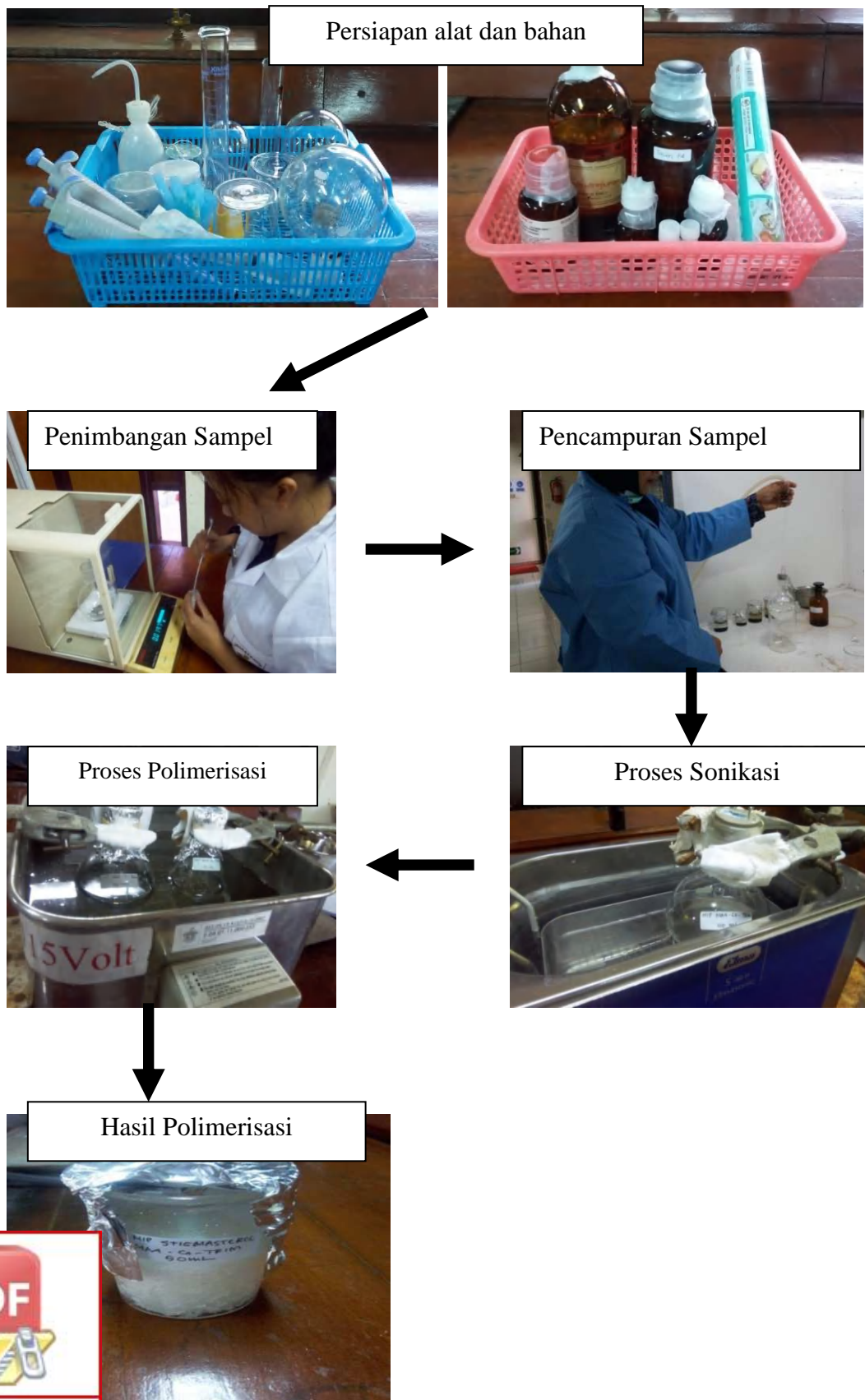


Karakterisasi kemampuan adsorpsi

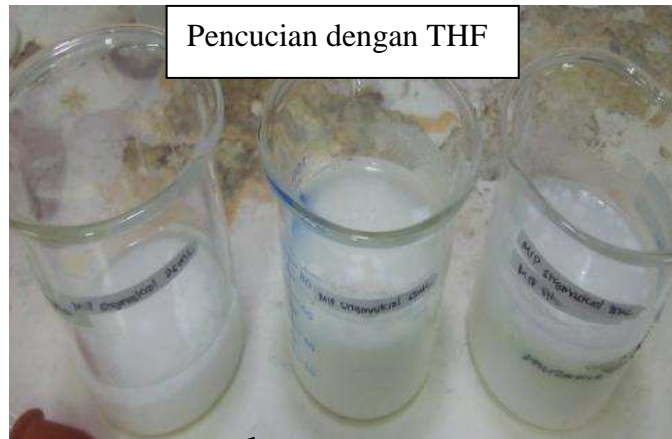
- Uji kemampuan adsorpsi terhadap pengaruh waktu, pengaruh pelarut porogen dan pengaruh konsentrasi.
- Dianalisis dengan instrumen UV.



Lampiran 3. Gambar Alur Penelitian



Optimization Software:
www.balesio.com



Karakterisasi hasil sintesis



PDF

Optimization Software:
www.balesio.com

UV-Vis

FTIR

SEM-EDS

Lampiran 4. Data Pengukuran dengan UV-Vis

Diperoleh data absorbansi standar stigmasterol sebagai berikut:

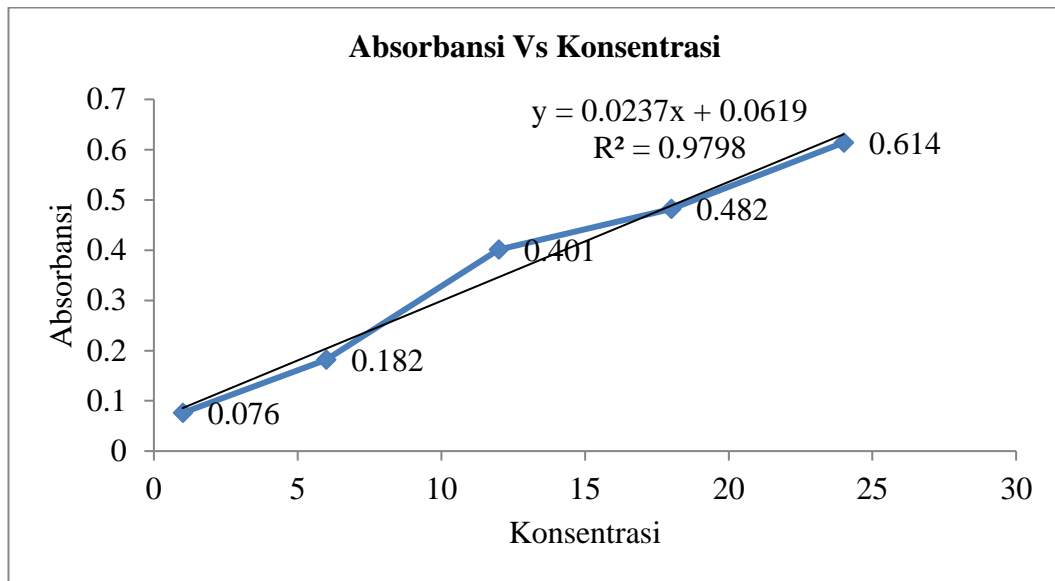
Larutan standar stigmasterol	Konsentrasi (mgL^{-1})	Absorbansi
1	1	0,076
2	6	0,182
3	12	0,401
4	18	0,482
5	24	0,614

Tabel data absorpsi sampel yang diukur pada panjang gelombang 203,5 nm

Nama Sampel	Absorbansi
NIP_MAA-Co-TRIM 25 mL	0,2657
NIP_MAA-Co-TRIM 50 mL	0,2892
NIP_MAA-Co-TRIM 100 mL	0,2652
MIP_stigmasterol_MAA-Co-TRIM 25 mL	0,2276
MIP_stigmasterol_MAA-Co-TRIM 50 mL	0,2503
MIP_stigmasterol_MAA-Co-TRIM 100 mL	0,2352



5. Kurva hubungan Absorbansi Vs Konsentrasi



n 6. Perhitungan

Jika y = absorbansi dan x = konsentrasi maka berdasarkan tabel diatas maka dapat diketahui:

a. Konsentrasi NIP_MAA-Co-TRIM 25 mL

$$y = 0,02368x + 0,06181$$

$$0,2657 = 0,02368x + 0,06181$$

$$0,02368x = 0,2657 - 0,06181$$

$$x = \frac{0,20389}{0,02368} = 8,61022 = 8,610 \text{mgL}^{-1}$$

b. Konsentrasi NIP_MAA-Co-TRIM 50 mL

$$y = 0,02368x + 0,06181$$

$$0,2892 = 0,02368x + 0,06181$$

$$0,02368x = 0,2892 - 0,06181$$

$$x = \frac{0,22739}{0,02368} = 9,602618 = 9,603 \text{mgL}^{-1}$$

c. Konsentrasi NIP_MAA-Co-TRIM 100 mL

$$y = 0,02368x + 0,06181$$

$$0,2652 = 0,02368x + 0,06181$$

$$0,02368x = 0,2652 - 0,06181$$

$$x = \frac{0,20339}{0,02368} = 8,589105 = 8,589 \text{mgL}^{-1}$$

d. Konsentrasi MIP_stigmasterol_MAA-Co-TRIM 25 mL

$$y = 0,02368x + 0,06181$$

$$0,2276 = 0,02368x + 0,06181$$

$$0,02368x = 0,2276 - 0,06181$$

$$x = \frac{0,16579}{0,02368} = 7,001267 = 7,001 \text{mgL}^{-1}$$



e. Konsentrasi MIP_stigmasterol_MAA-Co-TRIM 50 mL

$$y = 0,02368x + 0,06181$$

$$0,2503 = 0,02368x + 0,06181$$

$$0,02368x = 0,2503 - 0,06181$$

$$x = \frac{0,18849}{0,02368} = 7,959882 = 7,960 \text{ mgL}^{-1}$$

f. Konsentrasi MIP_stigmasterol_MAA-Co-TRIM 100 mL

$$y = 0,02368x + 0,06181$$

$$0,2352 = 0,02368x + 0,06181$$

$$0,02368x = 0,2352 - 0,06181$$

$$x = \frac{0,17339}{0,02368} = 7,322213 = 7,322 \text{ mgL}^{-1}$$

Jumlah Stigmasterol yang Teradsorpsi pada Setiap Gram Sampel

Jika diketahui $C_0 = 100 \text{ mgL}^{-1}$

$$m = 0,05 \text{ g}$$

$$V = 0,005 \text{ L}, \text{ maka}$$

a. NIP_MAA-Co-TRIM 25 mL

$$q_e = \frac{[(C_0 - C_e) V]}{m}$$
$$q_e = \frac{[(10 \text{ mg/L} - 8,61022 \text{ mg/L}) \times 0,005 \text{ L}]}{0,05 \text{ g}}$$
$$q_e = \frac{(1,38978 \text{ mg/L}) \times 0,005 \text{ L}}{0,05 \text{ g}}$$
$$q_e = \frac{0,006949 \text{ mg}}{0,05 \text{ g}} = 0,139 \text{ mg/g}$$

b. NIP_MAA-Co-TRIM 50 mL

$$q_e = \frac{[(C_0 - C_e) V]}{m}$$



$$q_e = \frac{[(10 \text{ mg/L} - 9,602618 \text{ mg/L})] \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{(0,397382 \text{ mg/L}) \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{0,001987, \text{ mg}}{0,05 \text{ g}} = 0,040 \text{ mg/g}$$

c. NIP_MAA-Co-TRIM 100 mL

$$q_e = \frac{[(C_o - C_e) V]}{m}$$

$$q_e = \frac{[(10 \text{ mg/L} - 8,589105 \text{ mg/L})] \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{(1,410895 \text{ mg/L}) \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{0,007054969 \text{ mg}}{0,05 \text{ g}} = 0,141 \text{ mg/g}$$

d. MIP_stigmasterol_MAA-Co-TRIM 25 mL

$$q_e = \frac{[(C_o - C_e) V]}{m}$$

$$q_e = \frac{[(10 \text{ mg/L} - 7,001267 \text{ mg/L})] \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{(2,998733 \text{ mg/L}) \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{0,014994 \text{ mg}}{0,05 \text{ g}} = 0,300 \text{ mg/g}$$

e. MIP_stigmasterol_MAA-Co-TRIM 50 mL

$$q_e = \frac{[(C_o - C_e) V]}{m}$$

$$q_e = \frac{[(10 \text{ mg/L} - 7,959882 \text{ mg/L})] \times 0,005\text{L}}{0,05 \text{ g}}$$

$$= \frac{(2,040118 \text{ mg/L}) \times 0,005\text{L}}{0,05 \text{ g}}$$

$$= \frac{0,010201 \text{ mg}}{0,05 \text{ g}} = 0,204 \text{ mg/g}$$

MIP_stigmasterol_MAA-Co-TRIM 100 mL



$$q_e = \frac{[(C_o - C_e) V]}{m}$$

$$q_e = \frac{[(10 \text{ mg/L} - 7,322213 \text{ mg/L}) \times 0,005\text{L}]}{0,05 \text{ g}}$$

$$q_e = \frac{(2,677787 \text{ mg/L}) \times 0,005\text{L}}{0,05 \text{ g}}$$

$$q_e = \frac{0,013389 \text{ mg}}{0,05 \text{ g}} = 0,268 \text{ mg/g}$$

sehingga Δq_e untuk setiap variasi volume pelarut

a. Volume 25 mL

$$\Delta q_e = Q_e(\text{MIP_MAA-Co-TRIM 25 mL}) - Q_e(\text{NIP_MAA-Co-TRIM 25 mL})$$

$$= 0,29987 \text{ mg/g} - 0,13898 \text{ mg/g}$$

$$= 0,161 \text{ mg/g}$$

b. Volume 50 mL

$$\Delta q_e = Q_e(\text{MIP_MAA-Co-TRIM 50 mL}) - Q_e(\text{NIP_MAA-Co-TRIM 50 mL})$$

$$= 0,20401 \text{ mg/g} - 0,03974 \text{ mg/g}$$

$$= 0,164 \text{ mg/g}$$

c. Volume 100 mL

$$\Delta q_e = Q_e(\text{MIP_MAA-Co-TRIM 100 mL}) - Q_e(\text{NIP_MAA-Co-TRIM 100 mL})$$

$$= 0,26778 \text{ mg/g} - 0,14109 \text{ mg/g}$$

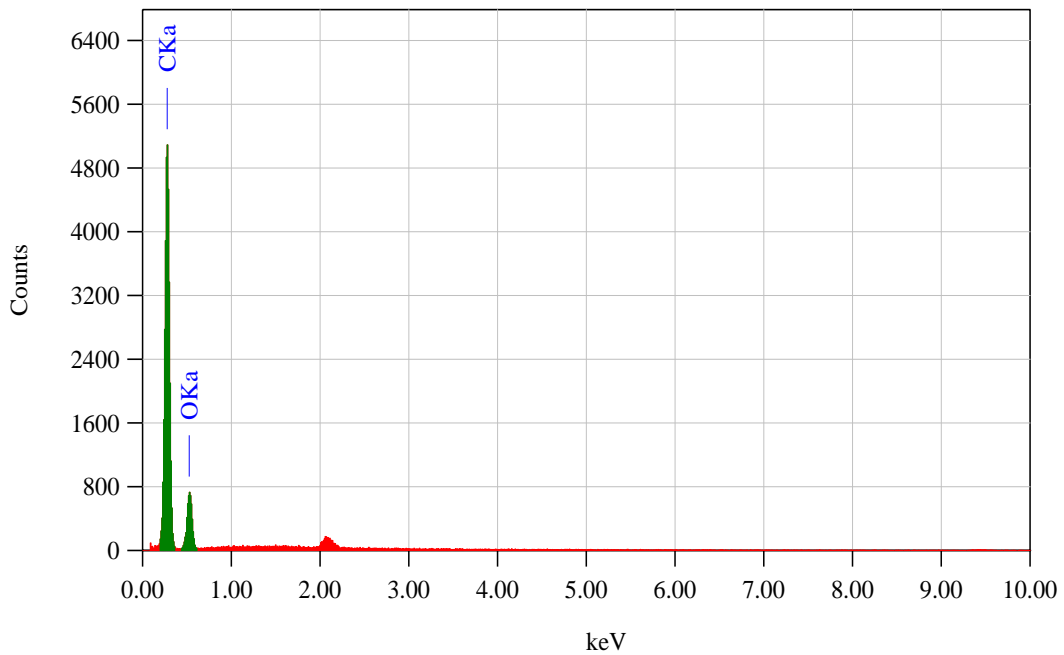
$$= 0,127 \text{ mg/g}$$



Lampiran 7. Data Hasil Karakterisasi Menggunakan EDS

1. EDS NIP_MAA-Co-TRIM 25 mL

Title	: IMG1	Acquisition Parameter
-----		Instrument : 6510(LA)
Instrument	: 6510(LA)	Acc. Voltage : 15.0 kV
Volt	: 15.00 kV	Probe Current: 1.00000 nA
Mag.	: x 3,000	PHA mode : T3
Date	: 2018/10/19	Real Time : 52.99 sec
Pixel	: 512 x 384	Live Time : 50.00 sec
		Dead Time : 5 %
		Counting Rate: 1133 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.7031

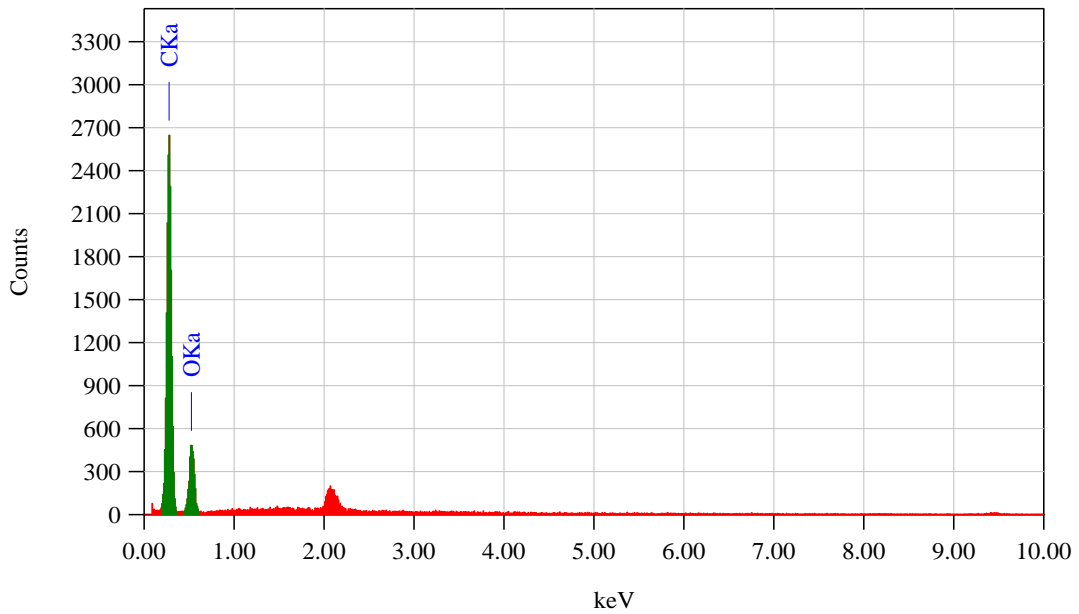
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
	0.277	82.59	0.23	86.33				95.3447
	0.525	17.41	1.09	13.67				4.6553
		100.00		100.00				

el NIP 1 25 mL



2. EDS NIP_MAA-Co-TRIM 50 mL

Title	: IMG1	Acquisition Parameter
-----		Instrument : 6510(LA)
Instrument	: 6510(LA)	Acc. Voltage : 15.0 kV
Volt	: 15.00 kV	Probe Current: 1.00000 nA
Mag.	: x 3,000	PHA mode : T3
Date	: 2018/10/19	Real Time : 51.93 sec
Pixel	: 512 x 384	Live Time : 50.00 sec
		Dead Time : 3 %
		Counting Rate: 754 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.7084

Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C	0.277	79.55	0.23	83.83				93.9970
O	0.525	20.45	0.98	16.17				6.0030
		100.00		100.00				

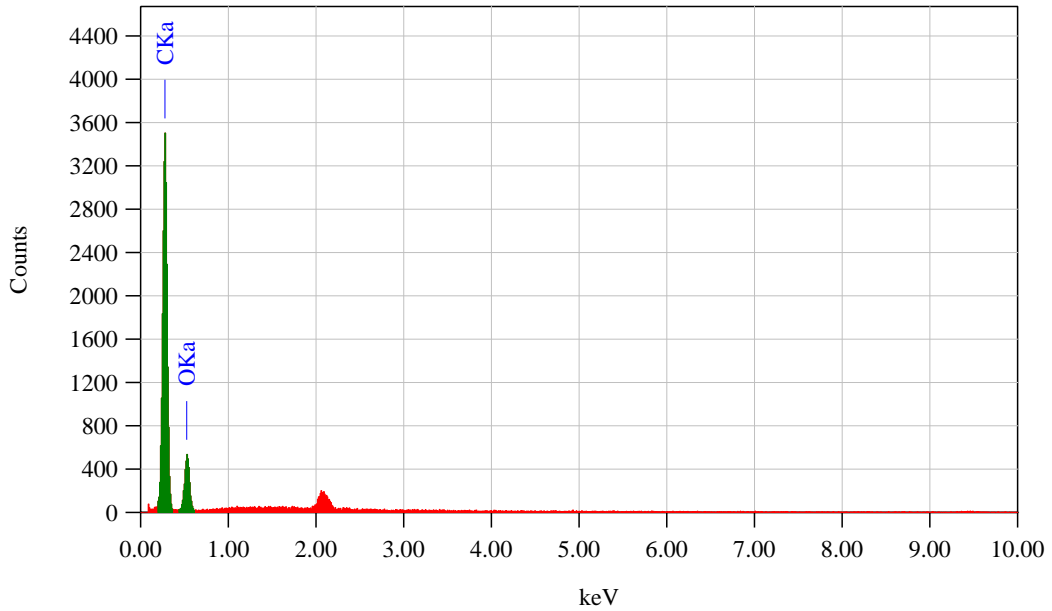


L NIP 2 50 mL

3. EDS NIP_MAA-Co-TRIM 100mL

Title	: IMG1	Acquisition Parameter

Instrument	: 6510(LA)	Instrument : 6510(LA)
Volt	: 15.00 kV	Acc. Voltage : 15.0 kV
Mag.	: x 3,000	Probe Current: 1.00000 nA
Date	: 2018/10/19	PHA mode : T3
Pixel	: 512 x 384	Real Time : 52.26 sec
		Live Time : 50.00 sec
		Dead Time : 4 %
		Counting Rate: 868 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.7100

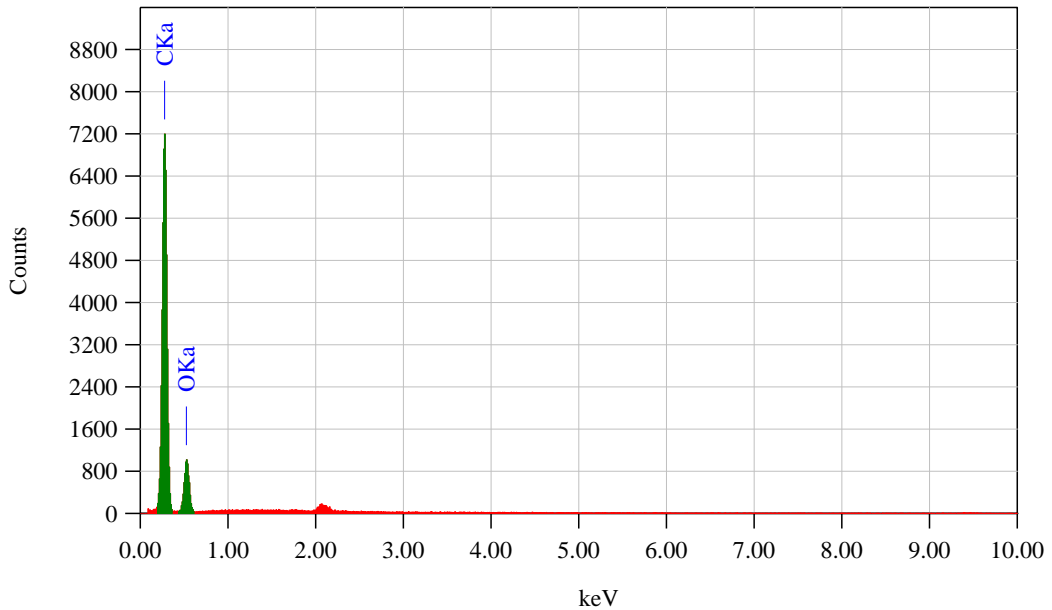
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	82.10	0.23	85.93				95.1408
O K	0.525	17.90	1.08	14.07				4.8592
		100.00		100.00				



L NIP 4 100 mL

4. EDS MIP_Stigmasterol_MAA-Co-TRIM_(BE) 25 mL

Title	: IMG1	Acquisition Parameter
-----		Instrument : 6510(LA)
Instrument	: 6510(LA)	Acc. Voltage : 15.0 kV
Volt	: 15.00 kV	Probe Current: 1.00000 nA
Mag.	: x 3,000	PHA mode : T3
Date	: 2018/10/16	Real Time : 54.05 sec
Pixel	: 512 x 384	Live Time : 50.00 sec
		Dead Time : 7 %
		Counting Rate: 1531 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.6833

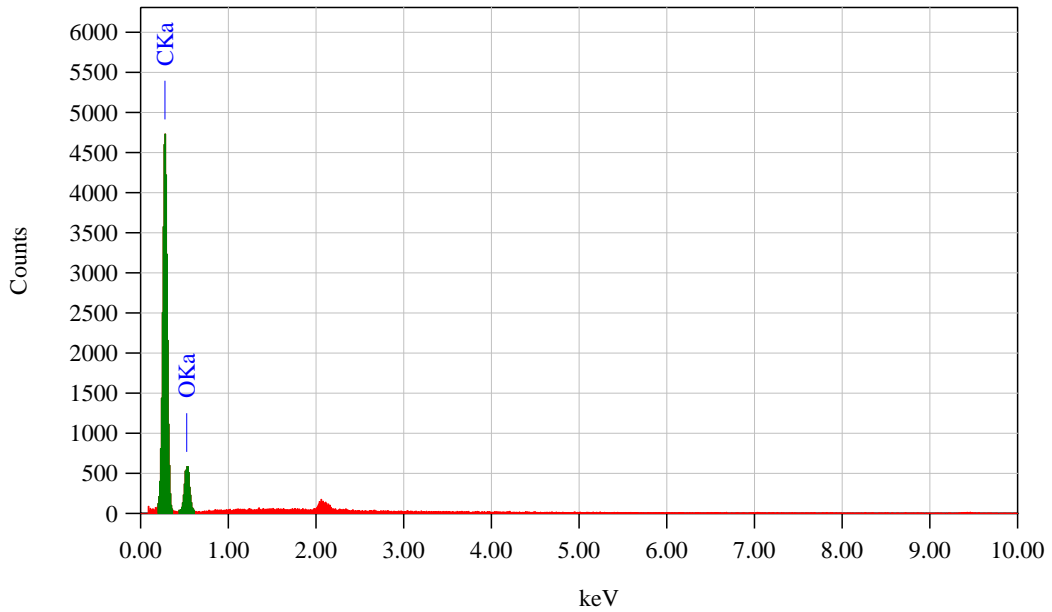
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	82.98	0.23	86.66				95.5065
O K	0.525	17.02	1.07	13.34				4.4935
Total		100.00		100.00				



L MSB1 25 mL

5. EDS MIP_Stigmasterol_MAA-Co-TRIM_(BE) 50 mL

Title : IMG1	Acquisition Parameter
-----	Instrument : 6510(LA)
Instrument : 6510(LA)	Acc. Voltage : 15.0 kV
Volt : 15.00 kV	Probe Current: 1.00000 nA
Mag. : x 3,000	PHA mode : T3
Date : 2018/10/16	Real Time : 52.91 sec
Pixel : 512 x 384	Live Time : 50.00 sec
	Dead Time : 5 %
	Counting Rate: 1118 cps
	Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.6972

Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	84.04	0.23	87.52				95.9197
O K	0.525	15.96	1.12	12.48				4.0803
		100.00		100.00				

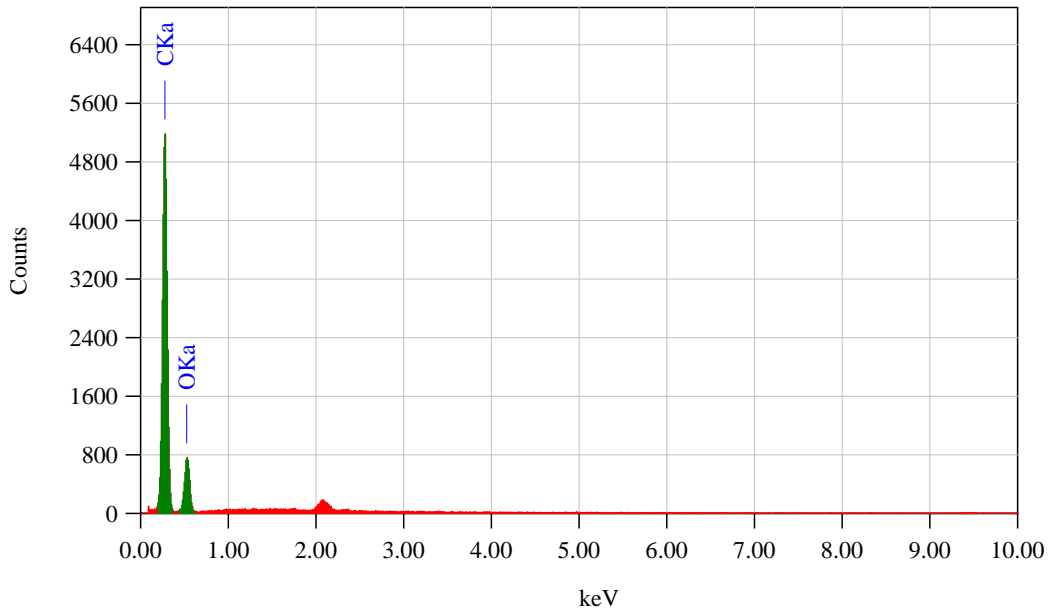


L MSB2 50 mL

6. EDS MIP_Stigmasterol_MAA-Co-TRIM_(BE) 100 mL

Title	: IMG1	Acquisition Parameter

Instrument	: 6510(LA)	Instrument : 6510(LA)
Volt	: 15.00 kV	Acc. Voltage : 15.0 kV
Mag.	: x 3,000	Probe Current: 1.00000 nA
Date	: 2018/10/15	PHA mode : T3
Pixel	: 512 x 384	Real Time : 51.92 sec
		Live Time : 48.67 sec
		Dead Time : 6 %
		Counting Rate: 1233 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.6956

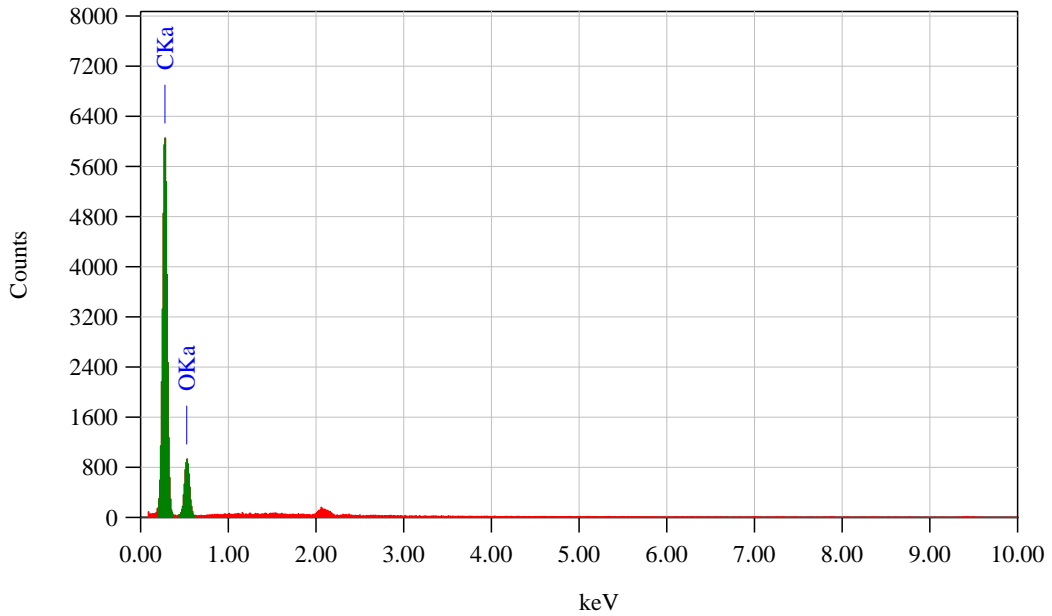
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	82.48	0.23	86.25				95.2997
O K	0.525	17.52	1.07	13.75				4.7003
Total		100.00		100.00				



L MSB4 100 mL

7. EDS MIP_Stigmasterol_MAA-Co-TRIM(TE) 25mL

Title	: IMG1	Acquisition Parameter
-----		Instrument : 6510 (LA)
Instrument	: 6510 (LA)	Acc. Voltage : 15.0 kV
Volt	: 15.00 kV	Probe Current: 1.00000 nA
Mag.	: x 3,000	PHA mode : T3
Date	: 2018/10/12	Real Time : 51.67 sec
Pixel	: 512 x 384	Live Time : 48.08 sec
		Dead Time : 6 %
		Counting Rate: 1358 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.6932

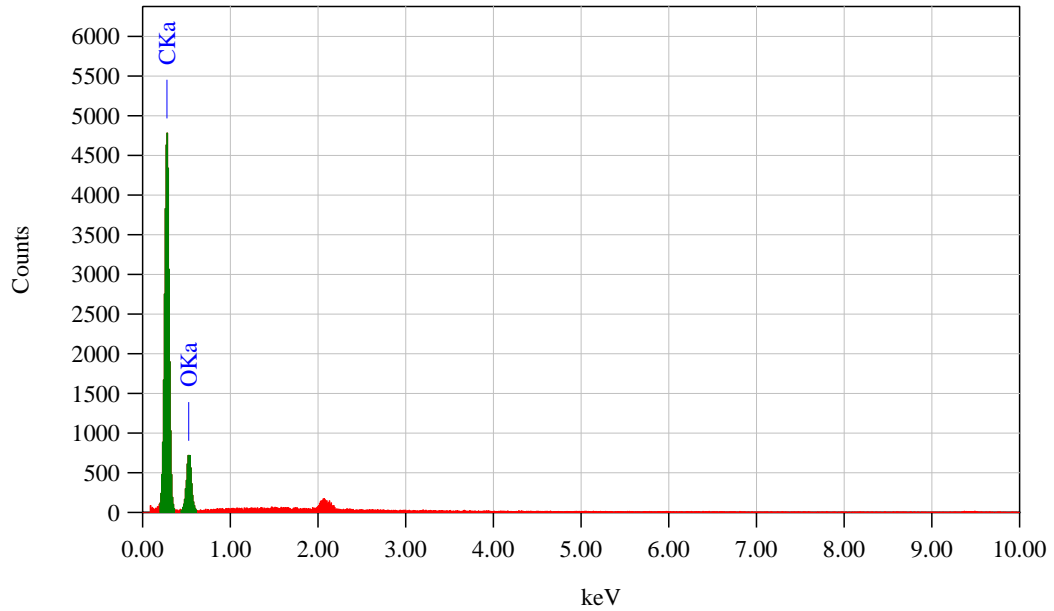
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	81.57	0.23	85.50				94.9144
O K	0.525	18.43	1.05	14.50				5.0856
Total		100.00		100.00				



el MST1 25 mL

8. EDS MIP_Stigmasterol_MAA-Co-TRIM(TE) 50 mL

Title	: IMG2	Acquisition Parameter
-----		Instrument : 6510(LA)
Instrument	:	Acc. Voltage : 15.0 kV
Volt	: 15.00 kV	Probe Current: 1.00000 nA
Mag.	: x 3,000	PHA mode : T3
Date	: 2018/10/12	Real Time : 51.68 sec
Pixel	: 1280 x 960	Live Time : 48.68 sec
		Dead Time : 5 %
		Counting Rate: 1154 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.6998

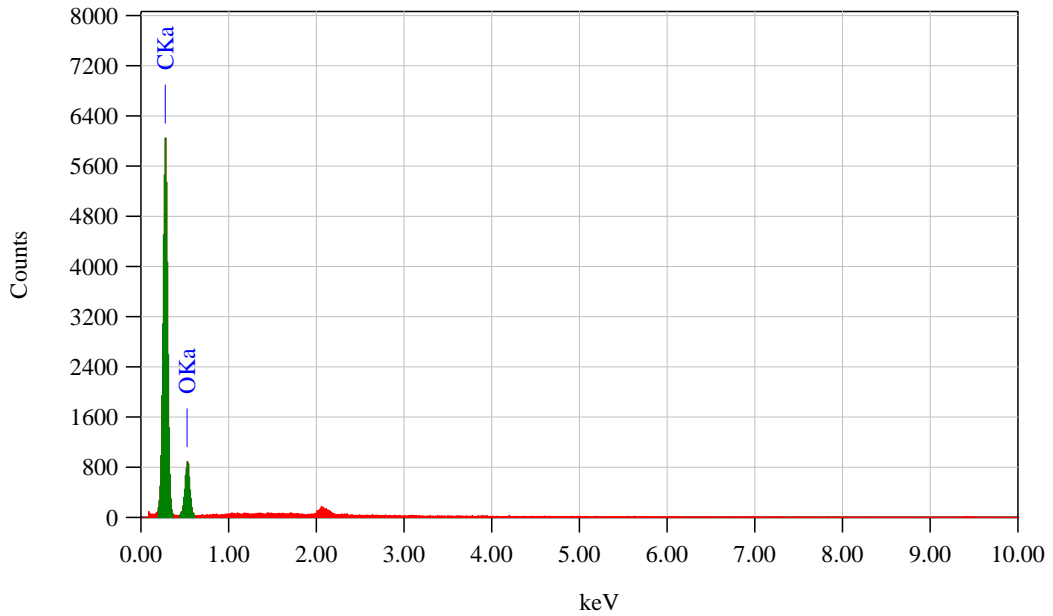
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	81.50	0.23	85.44				94.8856
O K	0.525	18.50	1.05	14.56				5.1144
Total		100.00		100.00				



el MST2 50 mL

9. EDS MIP_Stigmasterol_MAA-Co-TRIM(TE) 100mL

Title	: IMG1	Acquisition Parameter
-----		Instrument : 6510 (LA)
Instrument	: 6510 (LA)	Acc. Voltage : 15.0 kV
Volt	: 15.00 kV	Probe Current: 1.00000 nA
Mag.	: x 3,000	PHA mode : T3
Date	: 2018/10/16	Real Time : 53.53 sec
Pixel	: 512 x 384	Live Time : 50.00 sec
		Dead Time : 6 %
		Counting Rate: 1312 cps
		Energy Range : 0 - 20 keV



ZAF Method Standardless Quantitative Analysis

Fitting Coefficient : 0.6866

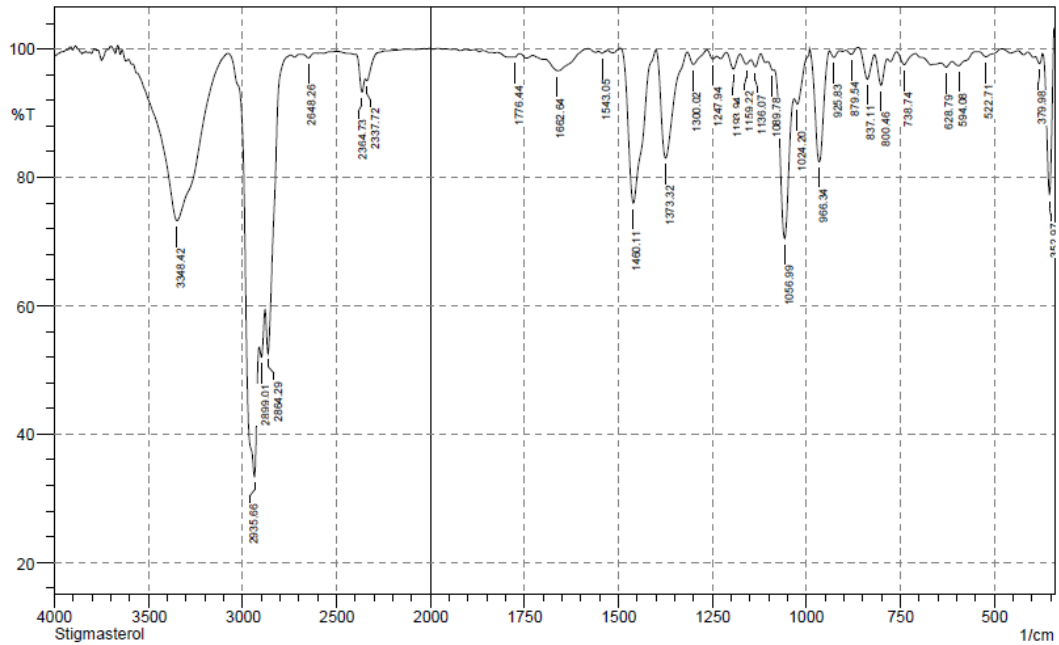
Element	(keV)	Mass%	Error%	Atom%	Compound	Mass%	Cation	K
C K	0.277	82.45	0.23	86.22				95.2864
O K	0.525	17.55	1.06	13.78				4.7136
Total		100.00		100.00				



L MST4 100 mL

Lampiran 8. Karakterisasi FTIR

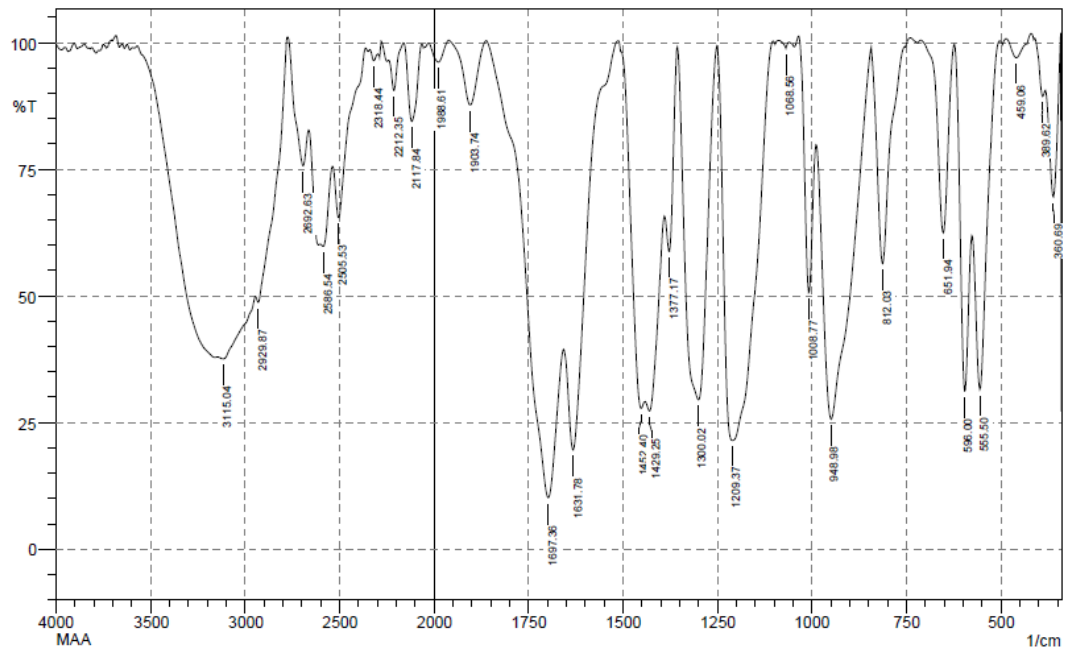
1. Spektrum stigmasterol



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	352.97	77.21	24.26	370.33	341.4	1.54	1.69
2	379.98	97.71	1.36	389.62	372.26	0.13	0.06
3	522.71	98.79	0.93	540.07	478.35	0.18	0.13
4	594.08	97.38	1.04	611.43	540.07	0.49	0.13
5	628.79	97.18	0.73	642.3	611.43	0.33	0.05
6	738.74	97.56	1.88	759.95	707.88	0.32	0.19
7	800.46	94.35	4.43	817.82	783.1	0.51	0.32
8	837.11	95.28	4.31	862.18	817.82	0.45	0.38
9	879.54	99.15	0.84	894.97	862.18	0.05	0.05
10	925.83	98.69	1.01	937.4	910.4	0.09	0.06
11	966.34	82.41	17.28	989.48	939.33	2.05	1.98
12	1024.2	91.4	1.92	1029.99	991.41	0.79	0.15
13	1056.99	70.47	23.92	1083.99	1031.92	4.21	2.9
14	1089.78	96.68	0.34	1103.28	1085.92	0.21	0.01
15	1136.07	97.23	1.47	1147.65	1120.64	0.23	0.08
16	1159.22	97.61	1.04	1176.58	1147.65	0.22	0.07
17	1193.94	96.87	2.45	1211.3	1176.58	0.29	0.19
18	1247.94	98.45	0.76	1265.3	1238.3	0.12	0.05
19	1300.02	97.59	2.03	1317.38	1265.3	0.3	0.23
20	1373.32	82.98	16.69	1398.39	1317.38	2.94	2.81
21	1460.11	75.99	24.04	1492.9	1400.32	4.73	4.73
22	1543.05	99.32	0.37	1552.7	1529.55	0.05	0.02
23	1662.64	96.61	2.25	1693.5	1581.63	0.94	0.57
24	1776.44	98.71	0.31	1789.94	1762.94	0.13	0.02
25	2337.72	95.06	0.39	2345.44	2131.34	0.91	0.02
26	2364.73	93.3	3.45	2393.66	2347.37	0.89	0.31
27	2648.26	98.6	0.69	2694.56	2613.55	0.35	0.09
28	2864.29	52.55	11.38	2879.72	2744.71	12.8	1.76
29	2899.01	51.97	3.87	2910.58	2881.65	7.67	0.51
30	2935.66	33.35	26.58	3076.46	2912.51	30.72	12.01
31	3348.42	73.25	25.16	3581.81	3078.39	30.35	26.98



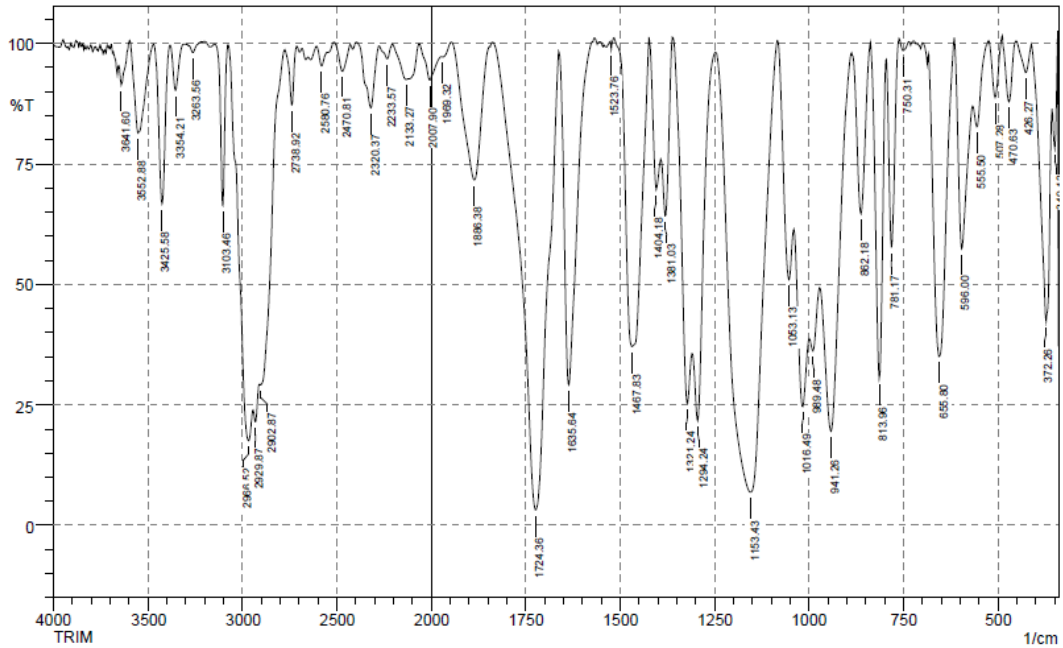
2. Spektrum asam Metakrilat (MAA)



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	360.69	69.496	25.353	381.91	343.33	3.73	2.795
2	389.62	89.374	3.443	408.91	383.83	0.728	0.186
3	459.06	96.983	4.181	486.06	418.55	0.275	0.644
4	555.5	31.543	40.568	574.79	503.42	15.667	8.587
5	596	31.244	46.386	623.01	576.72	12.284	7.254
6	651.94	62.458	37.29	709.8	624.94	5.629	5.599
7	812.03	56.414	42.657	842.89	756.1	8.679	8.33
8	948.98	25.698	59.071	987.55	844.82	42.234	34.789
9	1008.77	50.661	38.467	1033.85	989.48	6.874	4.723
10	1068.56	98.844	1.319	1087.85	1060.85	0.023	0.051
11	1209.37	21.49	77.649	1249.87	1103.28	50.45	50.129
12	1300.02	29.472	69.726	1355.96	1251.8	29.609	29.244
13	1377.17	58.769	19.19	1388.75	1357.89	4.619	1.869
14	1429.25	27.281	10.307	1440.83	1390.68	20.41	2.844
15	1452.4	27.819	12.418	1502.55	1442.75	18.189	2.296
16	1631.78	19.613	29.544	1654.92	1512.19	33.549	10.302
17	1697.36	10.178	41.362	1861.31	1656.85	72.162	32.98
18	1903.74	87.674	12.68	1959.68	1863.24	2.204	2.355
19	1988.61	96.153	4.1	2029.11	1961.61	0.543	0.6
20	2117.84	84.458	15.316	2160.27	2065.76	3.685	3.587
21	2212.35	90.535	7.157	2239.36	2162.2	1.554	0.955
22	2318.44	96.399	1.771	2339.65	2297.22	0.502	0.162
23	2505.53	65.445	14.291	2536.39	2362.8	15.108	4.264
24	2586.54	59.778	4.154	2601.97	2538.32	11.811	1.049
25	2692.63	75.684	11.854	2773.64	2663.69	8.298	3.935
26	2929.87	48.697	5.28	2943.37	2775.57	29.778	5.136
27	3115.04	37.579	2.105	3143.97	2945.3	74.759	3.078



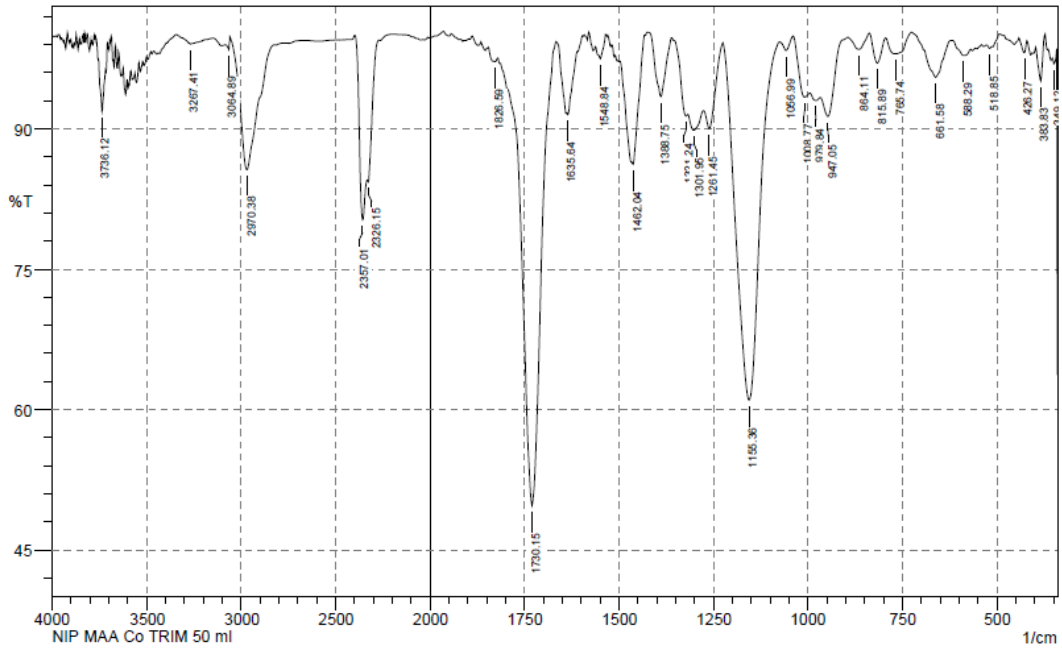
3. Spektrum trimetilpropan Trimetakrilat (TRIM)



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	349.12	78.25	11.765	354.9	343.33	0.915	0.424
2	372.26	42.302	47.931	410.84	356.83	9.209	7.412
3	426.27	93.975	6.098	451.34	410.84	0.535	0.563
4	470.63	87.894	13.164	487.99	451.34	0.932	1.09
5	507.28	88.769	12.145	524.64	489.92	0.822	0.962
6	555.5	82.712	7.518	565.14	526.57	1.594	0.532
7	596	57.395	38.126	615.29	567.07	6.347	4.948
8	655.8	35.051	63.651	682.8	617.22	14.453	14.145
9	750.31	98.511	2.217	761.88	734.88	0.065	0.144
10	781.17	57.651	40.785	794.67	761.88	3.557	3.403
11	813.96	30.404	67.624	837.11	796.6	9.015	8.694
12	862.18	64.663	34.152	887.26	839.03	4.309	4.059
13	941.26	19.542	47.021	970.19	889.18	28.05	15.505
14	989.48	36.185	6.33	999.13	972.12	10.5	0.899
15	1016.49	24.66	22.976	1039.63	1001.06	17.432	5.15
16	1053.13	50.986	21.37	1082.07	1041.56	7.244	2.773
17	1153.43	6.866	92.638	1246.02	1083.99	79.872	79.402
18	1294.24	21.738	27.942	1307.74	1247.94	16.011	4.586
19	1321.24	25.285	25.486	1359.82	1309.67	15.105	4.125
20	1381.03	64.255	19.911	1390.68	1361.74	3.269	1.716
21	3547.09	69.672	16.039	1421.54	1392.61	3.02	1.199
22	1467.83	37.081	64.152	1516.05	1423.47	17.778	18.27
23	1523.76	98.747	1.865	1525.69	1516.05	-0.009	0.025
24	1635.64	29.137	69.515	1660.71	1575.84	16.072	15.739
25	1724.36	3.209	95.807	1836.23	1662.64	65.294	64.745
26	1886.38	71.657	27.94	1946.18	1847.81	6.908	6.781
27	1969.32	97.186	0.45	1973.18	1946.18	0.194	0.043
28	2007.9	92.41	5.793	2061.9	1975.11	1.668	1.096
29	2133.27	92.525	7.35	2204.64	2063.83	2.888	2.811
30	2233.57	96.804	2.878	2276	2204.64	0.537	0.426
31	2320.37	86.639	13.088	2395.59	2277.93	3.353	3.269
32	2470.81	94.237	5.72	2513.25	2430.31	1.09	1.074
33	2580.76	95.341	3.487	2607.76	2549.89	0.72	0.407
34	2738.92	87.212	11.922	2775.57	2711.92	1.621	1.368
35	2902.87	29.141	3.231	2908.65	2777.5	30.718	1.666
36	2929.87	21.49	4.649	2943.37	2910.58	20.105	1.273
37	2966.52	17.574	18.495	3076.46	2945.3	48.544	9.628
38	3103.46	66.329	33.35	3147.83	3078.39	4.047	3.959
39	3263.56	98.113	1.685	3282.84	3217.27	0.202	0.19
40	3354.21	90.307	9.384	3381.21	3309.85	1.403	1.32
41	3425.58	66.713	33.018	3469.94	3383.14	6.209	6.107
42	3552.88	81.391	18.898	3595.31	3471.87	5.458	5.55
43	3641.6	91.339	5.339	3655.11	3597.24	1.183	0.703



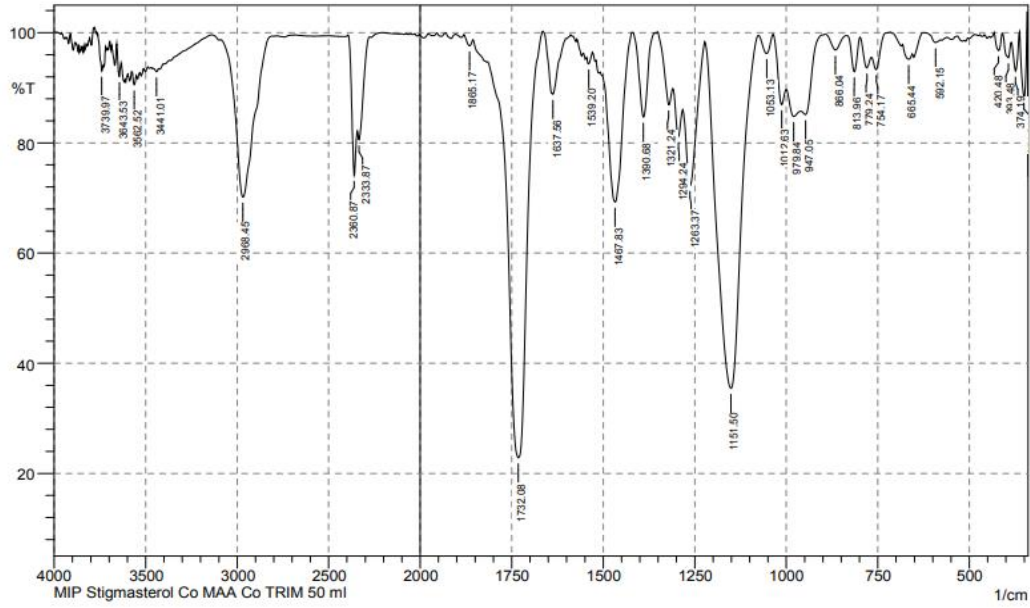
4. Spektrum NIP_MAA-co-TRIM_50



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	349.12	96.905	0.96	352.97	341.4	0.135	0.035
2	383.83	95.071	4.352	397.34	372.26	0.303	0.234
3	426.27	98.089	1.379	441.7	420.48	0.113	0.07
4	518.85	98.553	0.254	526.57	513.07	0.077	0.007
5	588.29	97.806	1.042	615.29	569	0.348	0.13
6	661.58	95.469	3.321	690.52	623.01	0.873	0.542
7	765.74	98.007	0.105	767.67	725.23	0.209	0.05
8	815.89	96.992	2.943	837.11	794.67	0.308	0.296
9	864.11	98.465	1.522	894.97	837.11	0.213	0.206
10	947.05	91.283	4.074	966.34	908.47	1.406	0.505
11	979.84	92.997	0.514	993.34	968.27	0.768	0.038
12	1008.77	93.368	2.354	1037.7	995.27	0.914	0.285
13	1056.99	98.339	1.222	1074.35	1039.63	0.159	0.092
14	1155.36	61.026	38.163	1224.8	1076.28	13.595	13.072
15	1261.45	89.989	3.902	1274.95	1226.73	1.393	0.438
16	1301.95	89.825	1.774	1315.45	1276.88	1.661	0.206
17	1321.24	91.338	0.919	1359.82	1317.38	0.862	0.086
18	1388.75	93.406	6.532	1423.47	1361.74	0.843	0.834
19	1462.04	86.184	12.51	1496.76	1433.11	2.381	1.991
20	1548.84	97.449	1.964	1562.34	1535.34	0.206	0.136
21	1635.64	91.502	0.525	1637.56	1593.2	0.679	0.016
22	1730.15	49.785	48.5	1813.09	1666.5	15.483	14.288
23	1826.59	97.134	0.667	1845.88	1820.8	0.275	0.068
24	2326.15	84.341	1.563	2331.94	2270.22	1.969	0.097
25	2367.01	80.25	9.868	2397.52	2333.87	3.691	1.346
26	2970.38	85.625	13.798	3057.17	2823.79	7.116	6.426
27	3064.89	98.448	1.161	3084.18	3059.1	0.125	0.058
28	3267.41	99.027	0.296	3342.64	3248.13	0.22	0.05
29	3736.12	91.841	5.519	3768.91	3718.76	1.048	0.565



5. Spektrum MIP_Stigmasterol_MAA-co-TRIM_50(BE)

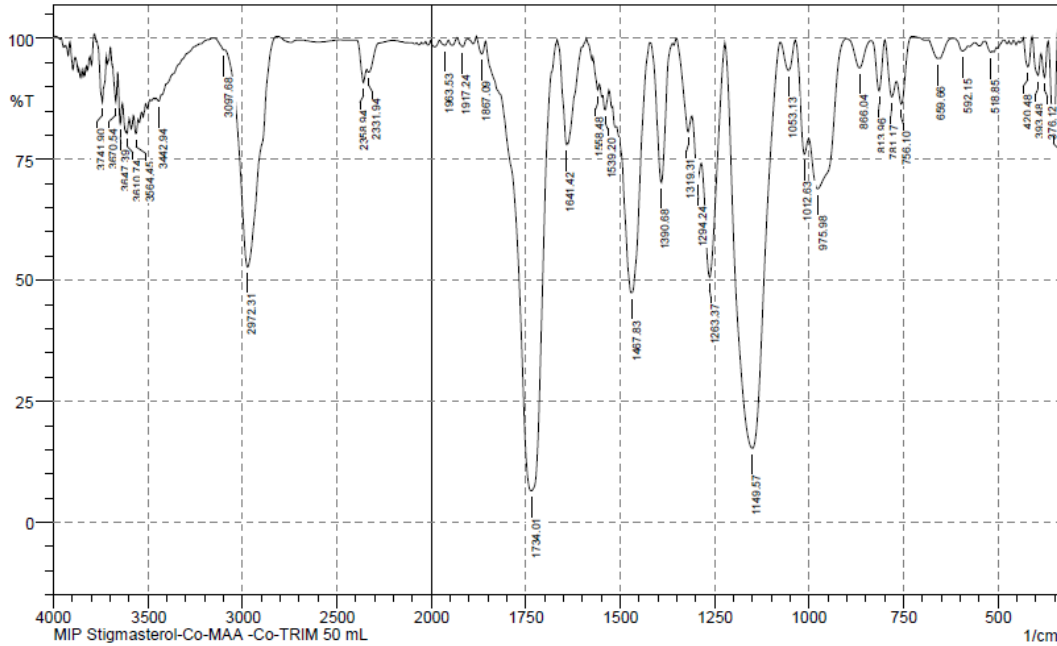


No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	351.04	88.335	10.615	362.62	343.33	0.69	0.61
2	374.19	93.035	6.156	385.76	362.62	0.419	0.337
3	393.48	95.476	3.305	408.91	385.76	0.309	0.213
4	420.48	96.767	3.168	432.05	408.91	0.196	0.189
5	592.15	98.218	0.83	626.87	578.64	0.18	0.041
6	665.44	95.193	1.584	682.8	655.8	0.489	0.133
7	754.17	93.315	3.458	767.67	717.52	0.647	0.241
8	779.24	93.638	3.279	798.53	767.67	0.602	0.242
9	813.96	92.907	6.413	835.18	798.53	0.576	0.471
10	866.04	96.871	2.741	893.04	835.18	0.419	0.319
11	947.05	85.145	3.477	960.55	894.97	2.116	0.311
12	979.84	84.793	2.793	999.13	962.48	2.404	0.29
13	1012.63	86.939	6.087	1035.77	1001.06	1.368	0.488
14	1053.13	96.229	3.397	1076.28	1035.77	0.39	0.322
15	1151.5	35.448	63.301	1220.94	1076.28	28.183	27.416
16	1263.37	72.275	17.7	1282.66	1222.87	4.858	2.736
17	1294.24	81.167	6.123	1309.67	1284.59	1.849	0.406
18	1321.24	86.916	5.297	1350.17	1311.59	1.359	0.397
19	1390.68	84.683	15.31	1419.61	1361.74	1.769	1.767
20	1467.83	69.246	26.957	1508.33	1421.54	6.903	5.543
21	1539.2	94.352	1.504	1544.98	1529.55	0.34	0.064
22	1637.56	88.811	10.872	1664.57	1602.85	1.527	1.413
23	1732.08	22.856	74.898	1815.02	1666.5	31.126	29.449
24	1865.17	97.622	1.487	1880.6	1855.52	0.181	0.096
25	2333.87	80.551	3.532	2341.58	2277.93	2.988	0.404
26	2360.87	74.144	14.263	2391.73	2343.51	3.627	1.46
27	2968.45	70.151	28.861	3088.03	2808.36	17.04	15.892
28	3441.01	92.94	0.544	3456.44	3431.36	0.769	0.036
29	3562.52	90.563	1.895	3576.02	3552.88	0.9	0.116
30	3643.53	92.066	3.788	3658.96	3633.89	0.673	0.24
31	3739.97	93.036	2.111	3763.12	3734.19	0.515	0.116



Optimization Software:
www.balesio.com

6. Spektrum MIP_Stigmasterol_MAA-co-TRIM_50(TE)



Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area	
1	352.97	80.937	17.758	366.48	343.33	1.242	1.114
2	376.12	91.941	6.148	385.76	366.48	0.417	0.255
3	393.48	92.318	5.664	408.91	385.76	0.515	0.368
4	420.48	94.133	6.091	432.05	408.91	0.35	0.372
5	518.85	97.1	0.691	532.35	514.99	0.162	0.037
6	592.15	97.365	1.673	613.36	578.64	0.254	0.135
7	659.66	95.798	0.668	682.8	655.8	0.316	0.054
8	756.1	86.4	7.354	767.67	727.16	1.285	0.575
9	781.17	87.904	6.606	798.53	769.6	1.118	0.471
10	813.96	89.152	10.329	835.18	800.46	0.84	0.762
11	866.04	93.841	5.763	893.04	837.11	0.783	0.685
12	975.98	68.897	15.19	999.13	902.69	9.694	4.92
13	1012.63	76.025	10.049	1035.77	1001.06	2.648	0.809
14	1053.13	93.347	5.952	1074.35	1037.7	0.679	0.566
15	1149.57	15.303	83.448	1220.94	1076.28	52.961	52.178
16	1263.37	50.644	32.109	1284.59	1222.87	10.107	6.106
17	1294.24	70.881	6.371	1309.67	1286.52	2.885	0.435
18	1319.31	80.671	6.327	1350.17	1311.59	2.089	0.536
19	1390.68	70.206	28.797	1419.61	1361.74	3.708	3.455
20	1467.83	47.441	42.352	1508.33	1421.54	14.637	10.727
21	1539.2	85.238	3.343	1544.98	1529.55	0.951	0.155
22	1558.48	89.302	2.444	1570.06	1554.63	0.622	0.109
23	1641.42	78.018	20.788	1664.57	1602.85	3.534	3.168
24	1734.01	6.536	93.044	1855.52	1666.5	61.334	60.955
25	1867.09	96.761	3.098	1880.6	1855.52	0.204	0.192
26	1917.24	98.263	1.782	1930.74	1903.74	0.111	0.116
27	1963.53	98.562	1.043	1978.97	1953.89	0.11	0.067
28	2331.94	92.996	1.401	2341.58	2277.93	1.219	0.217
29	2358.94	90.839	4.565	2393.66	2343.51	1.235	0.452
30	2972.31	52.737	46.049	3089.96	2816.07	29.792	28.577
31	3097.68	97.535	0.325	3145.9	3091.89	0.302	0.022
32	3442.94	87.037	1.001	3458.37	3431.36	1.573	0.076
33	3564.45	80.301	3.281	3576.02	3552.88	2.037	0.231
34	3610.74	80.38	0.635	3612.67	3599.17	1.169	0.021
35	3647.39	82.29	7.186	3658.96	3635.82	1.607	0.456
36	3670.54	86.829	7.525	3697.54	3660.89	1.448	0.69
37	3741.9	86.802	10.836	3770.84	3720.69	1.77	1.286

