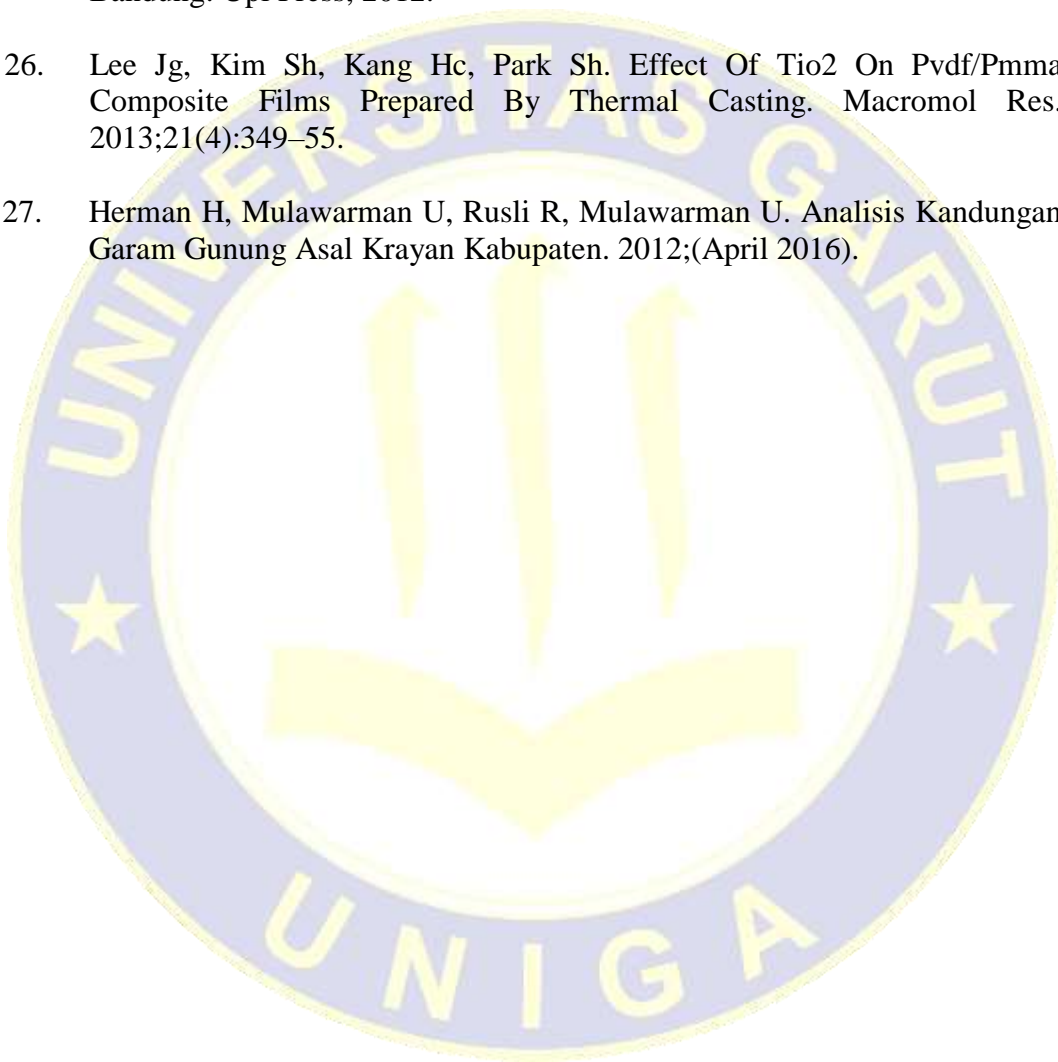


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L AMPIRAN 1
PERHITUNGAN BAHAN

1. Co-PVDF 24 %

$$\frac{24}{100} \times 10 \text{ mL} = 2,4 \text{ gram}$$

2. rGO 0,05%

$$\frac{0,05}{100} \times 10 \text{ mL} = 0,005 \text{ gram}$$

3. rGO 0,1%

$$\frac{0,1}{100} \times 10 \text{ mL} = 0,01 \text{ gram}$$

4. rGO 0,5%

$$\frac{0,5}{100} \times 10 \text{ mL} = 0,05 \text{ gram}$$

5. TiO₂ 0,05%

$$\frac{0,05}{100} \times 10 \text{ mL} = 0,005 \text{ gram}$$

6. TiO₂ 0,1%

$$\frac{0,1}{100} \times 10 \text{ mL} = 0,01 \text{ gram}$$

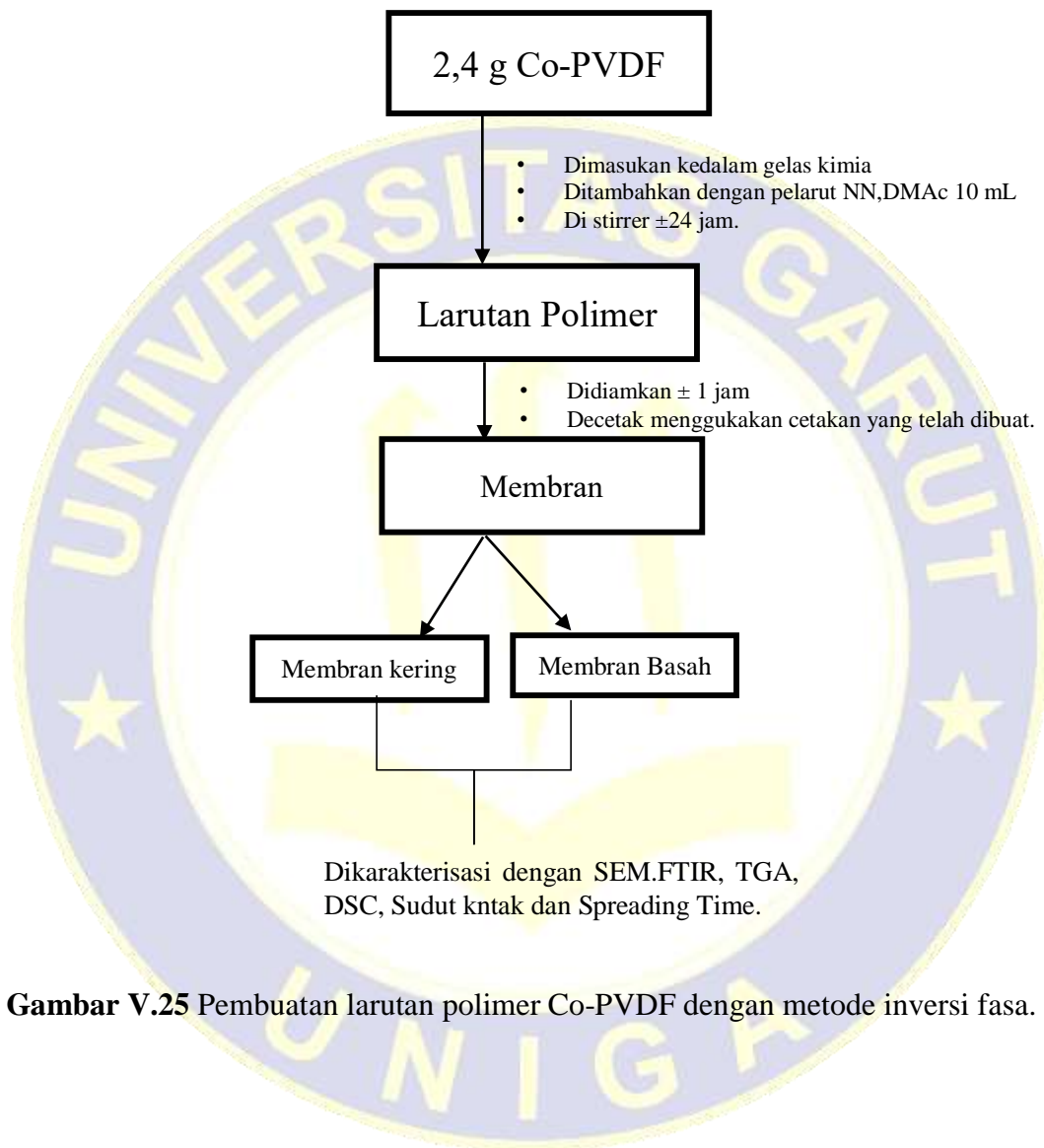
7. TiO₂ 0,2%

$$\frac{0,2}{100} \times 10 \text{ mL} = 0,02 \text{ gram}$$

LAMPIRAN 2

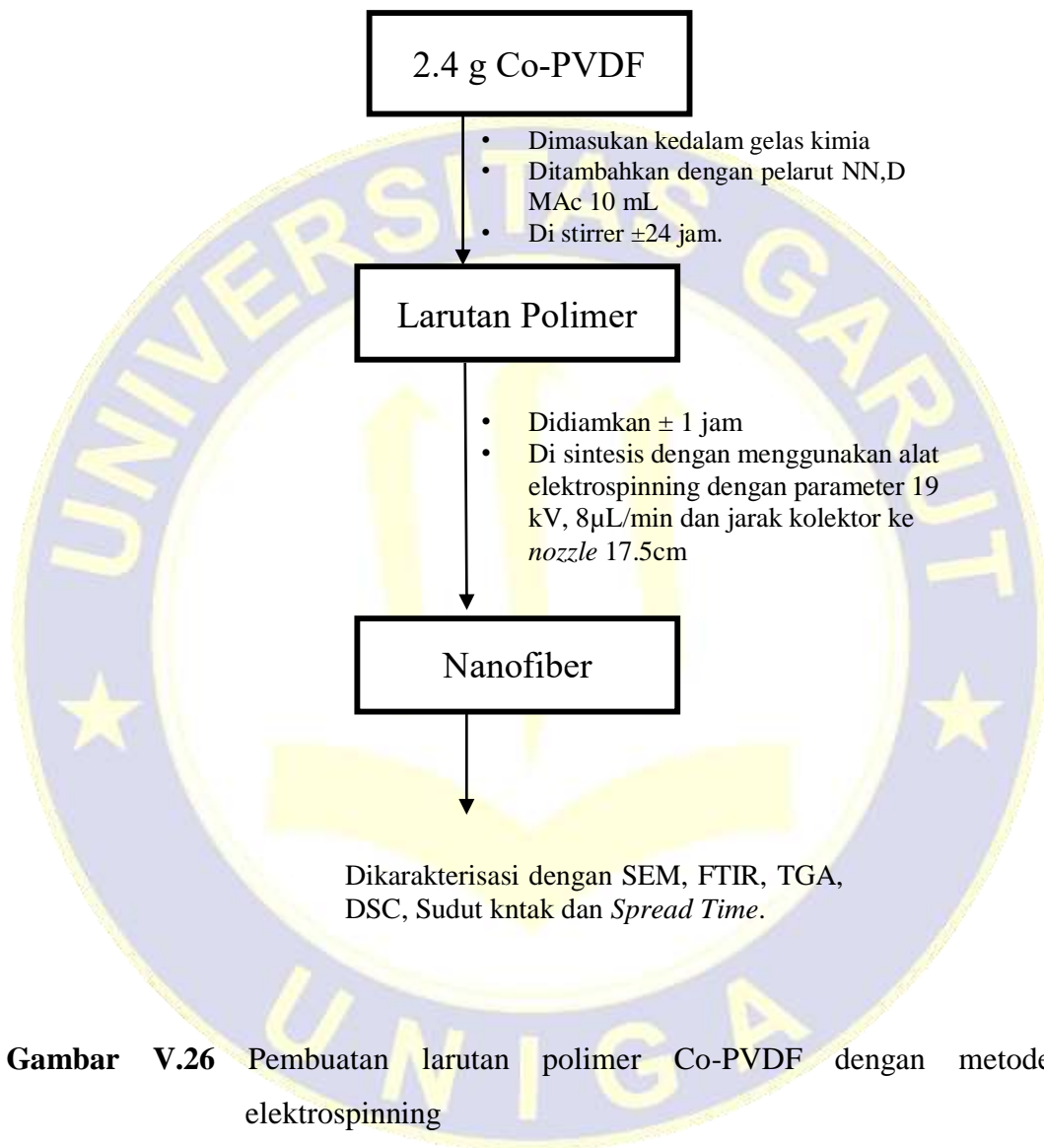
PEMBUATAN LARUTAN POLIMER Co-PVDF DENGAN METODE

INVERSI FASA



Gambar V.25 Pembuatan larutan polimer Co-PVDF dengan metode inversi fasa.

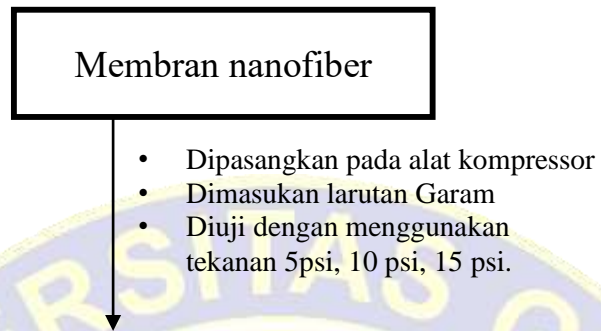
LAMPIRAN 3

PEMBUATAN LARUTAN POLIMER CO-PVDF DENGAN
ELEKTROSPINNING

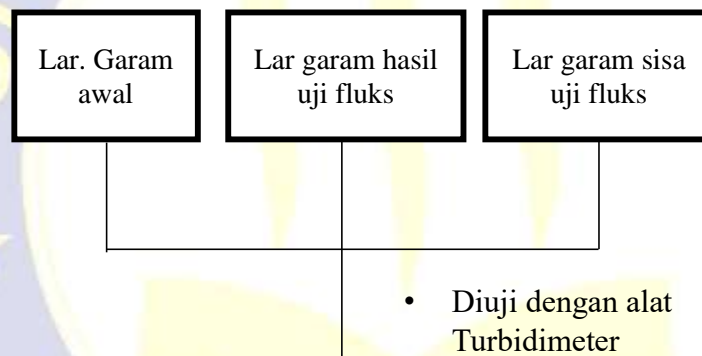
Gambar V.26 Pembuatan larutan polimer Co-PVDF dengan metode electrospinning

LAMPIRAN 4

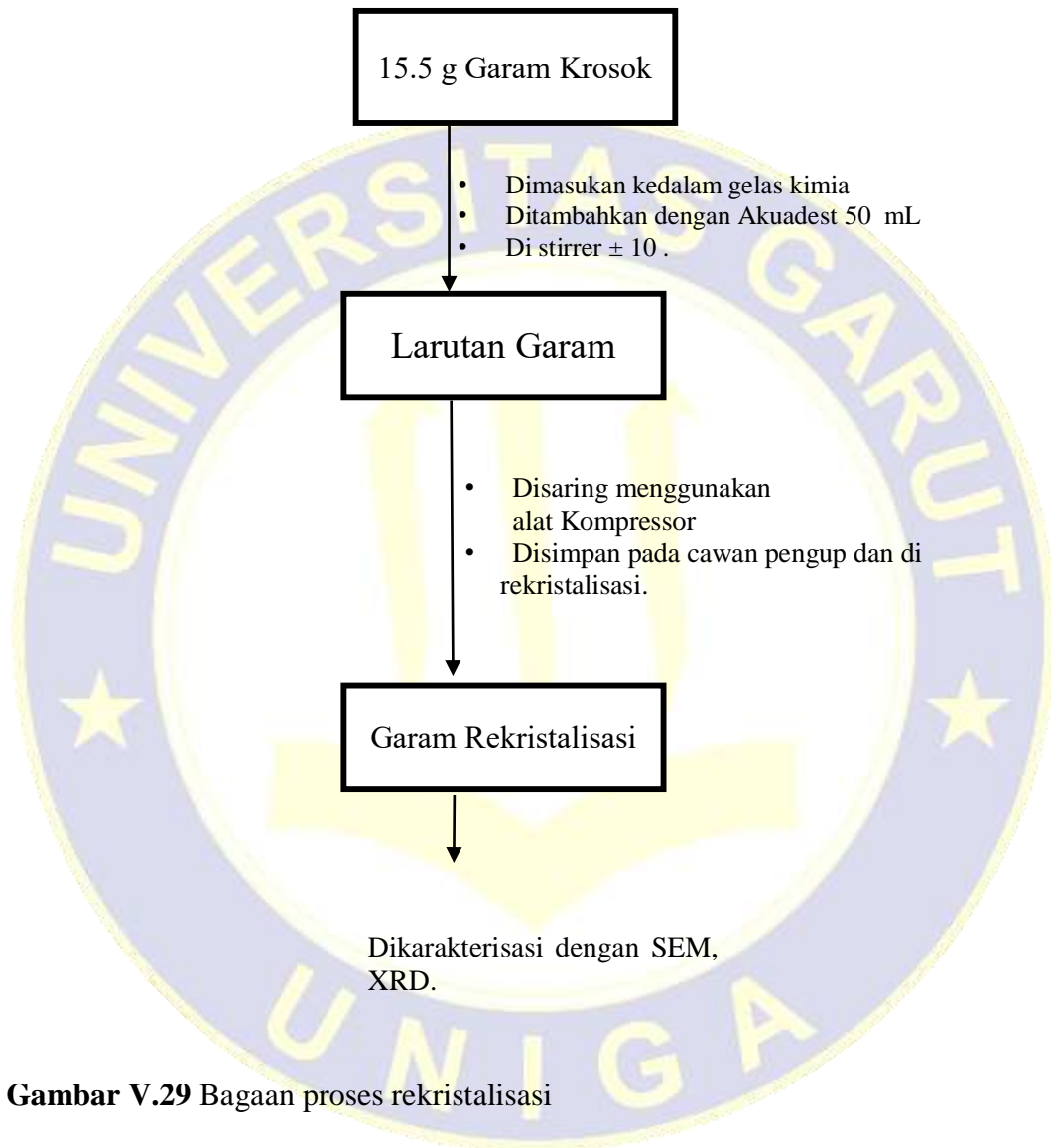
UJI FLUKS DAN TURBIDITY



Gambar V.27 Bagan Uji Fluks

Gambar V.28 Bagaan uji *turdibity*

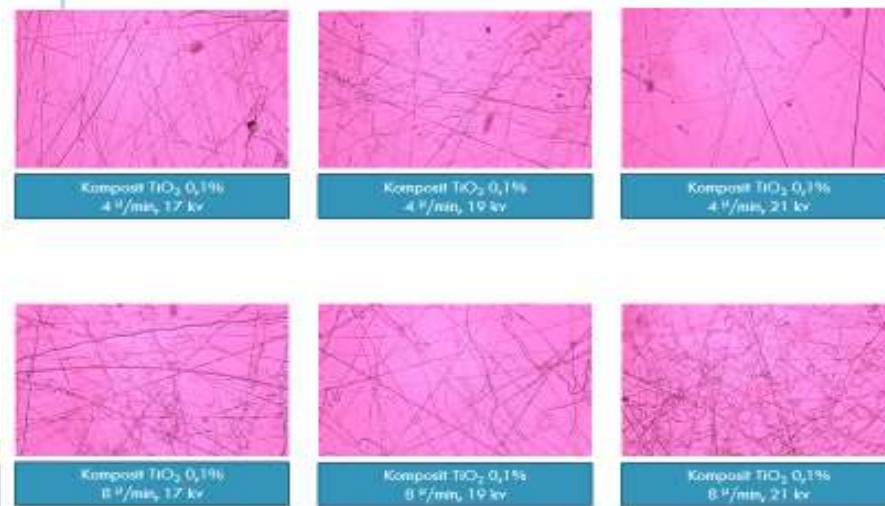
LAMPIRAN 5
PROSES REKRISTALISASI



Gambar V.29 Bagaan proses rekrystalisasi

LAMPIRAN 6

OPTIMASI DENGAN MIKROSKOP *FLUORESCENCE*

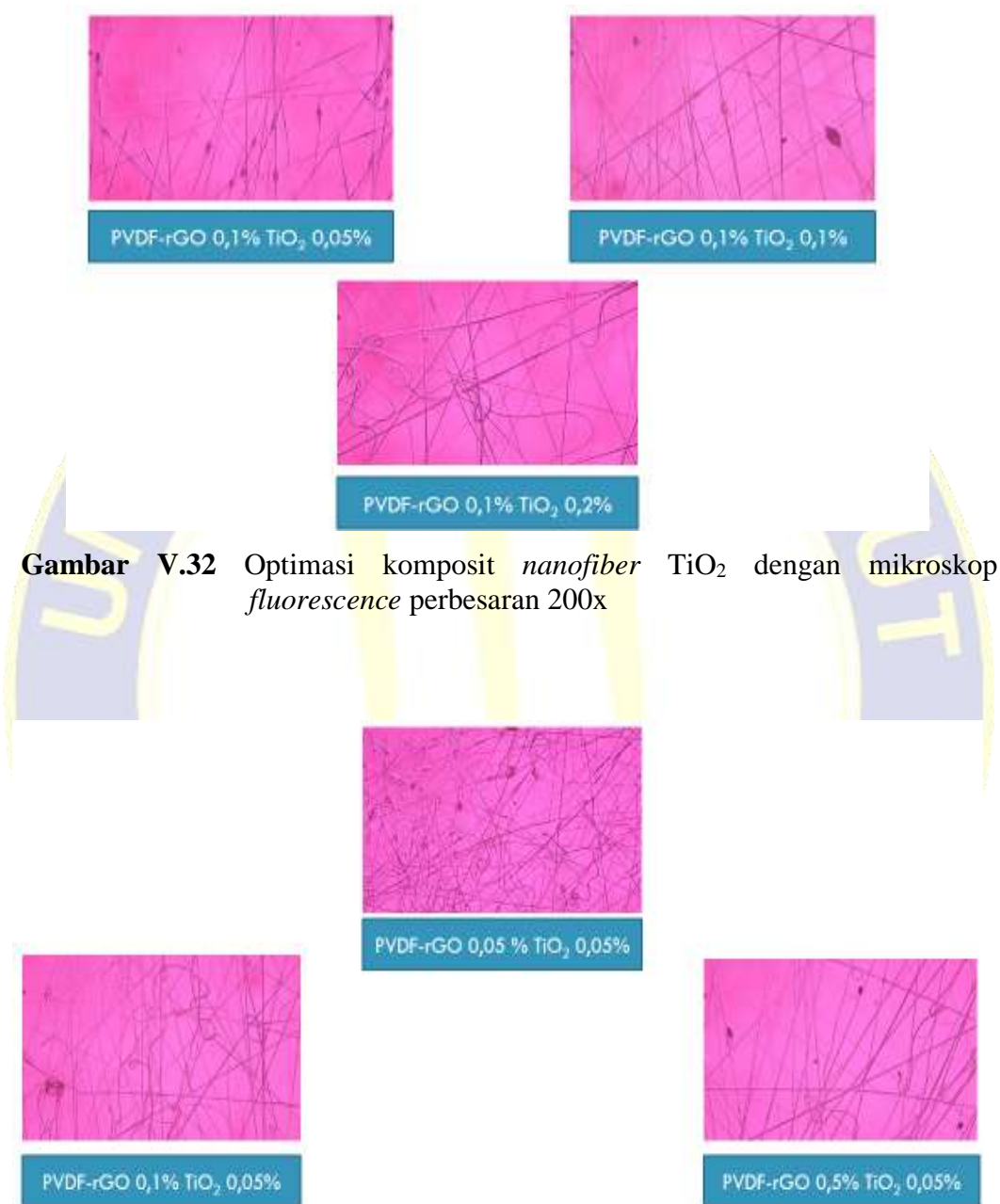


Gambar V.30 Optimasi voltase *nanofiber* dengan mikroskop *fluorescence* perbesaran 200x



Gambar V.31 Optimasi laju alir *nanofiber* dengan mikroskop *fluorescence* perbesaran 200x.

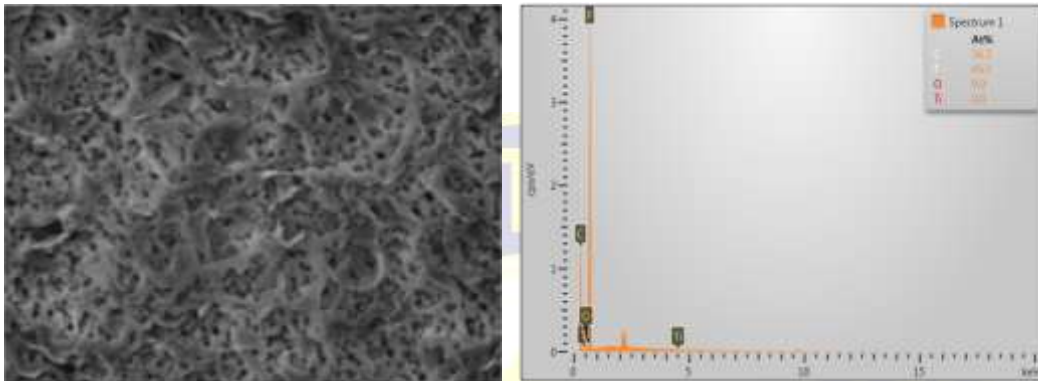
LAMPIRAN 6 (LANJUTAN)



Gambar V.32 Optimasi komposit *nanofiber* TiO₂ dengan mikroskop *fluorescence* perbesaran 200x

Gambar V.33 Optimasi komposit *nanofiber* rGO dengan mikroskop *fluorescence* perbesaran 200x.

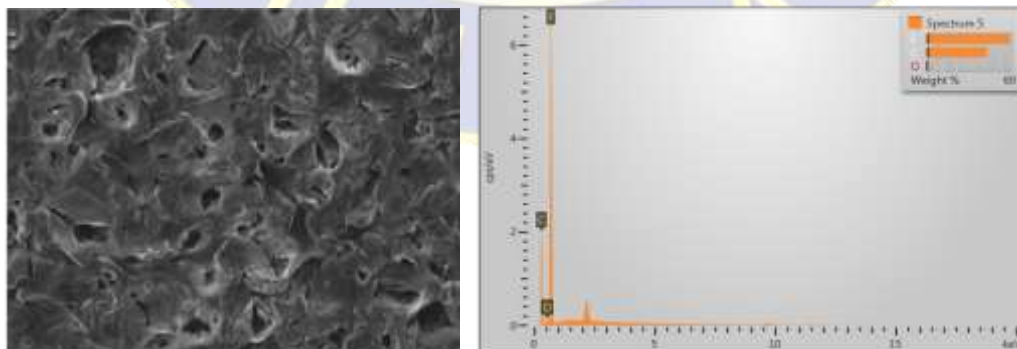
LAMPIRAN 7
HASIL EDS MEMBRAN



Gambar V.34 Hasil EDS membran Co-PVDF kering

Tabel V.12
Hasil EDS membran Co-PVDF kering

Element	Wt%	Wt% Sigma
C	42,94	0,65
O	0,00	0,35
F	57,06	0,65
Ti	0,00	0,06
Total:	100,00	



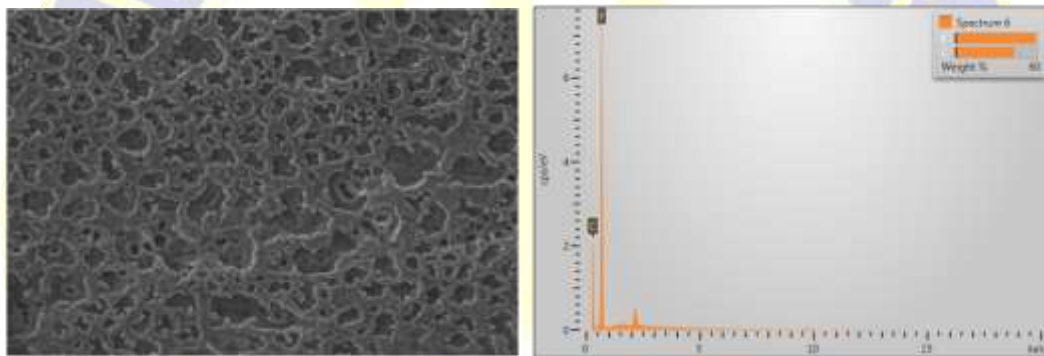
Gambar V.35 Hasil EDS membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,05% kering

**LAMPIRAN 7
(LANJUTAN)**

Tabel V.13

Hasil EDS membran Co-PVDF/ rGO 0,1%/TiO₂ 0,05% kering

Element	Wt%	Wt% Sigma
C	41,58	0,53
O	1,02	0,22
F	57,40	0,53
Total:	100,00	



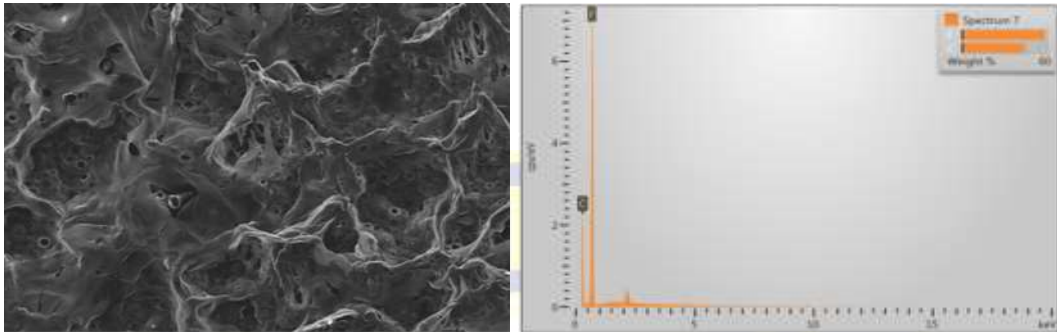
Gambar V.36 Hasil EDS membran Co-PVDF/rGO 0,1%/TiO₂ 0,1% kering

Tabel V.14

Hasil EDS membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,1% kering

Element	Wt%	Wt% Sigma
C	42,00	0,50
F	58,00	0,50
Total:	100,00	

LAMPIRAN 7 (LANJUTAN)

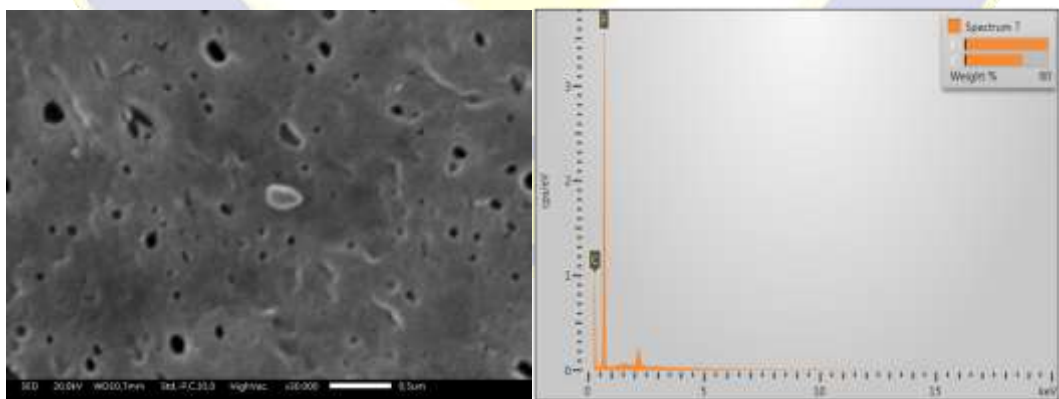


Gambar V.37 membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,2% kering

Tabel V.15

Hasil EDS membran Co-PVDF/rGO 0,1%/TiO₂ 0,2% kering

Element	Wt%	Wt% Sigma
C	43,13	0,49
F	56,87	0,49
Total:	100,00	



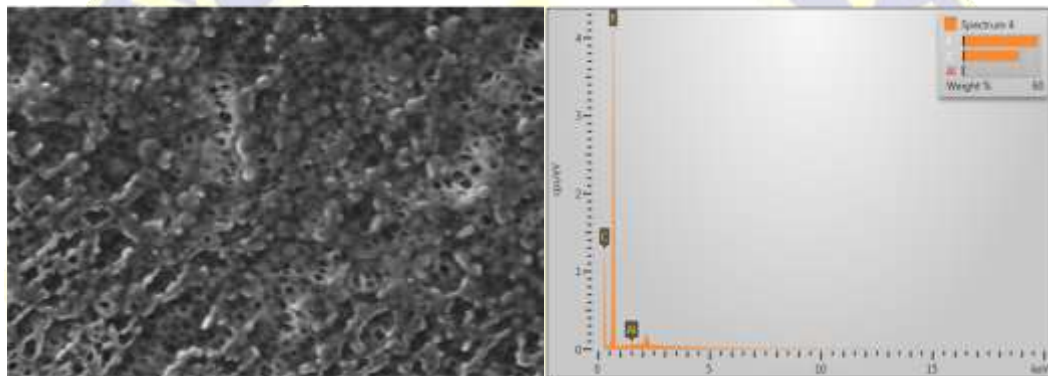
Gambar V.38 Hasil EDS membran Co-PVDF Basah

**LAMPIRAN 7
(LANJUTAN)**

Tabel V.16

Hasil EDS membran Co-PVDF basah

Element	Wt%	Wt% Sigma
C	40,89	0,72
F	59,11	0,72
Total:	100,00	



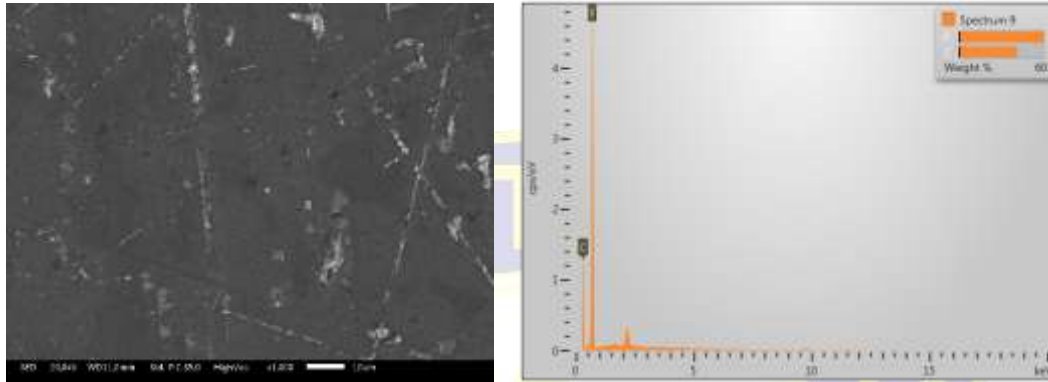
Gambar V.39 Hasil EDS membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,05% Basah

Tabel V.17

Hasil EDS membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,05% Basah

Element	Wt%	Wt% Sigma
C	42,85	0,64
F	56,98	0,64
Al	0,18	0,05
Total:	100,00	

**LAMPIRAN 7
(LANJUTAN)**

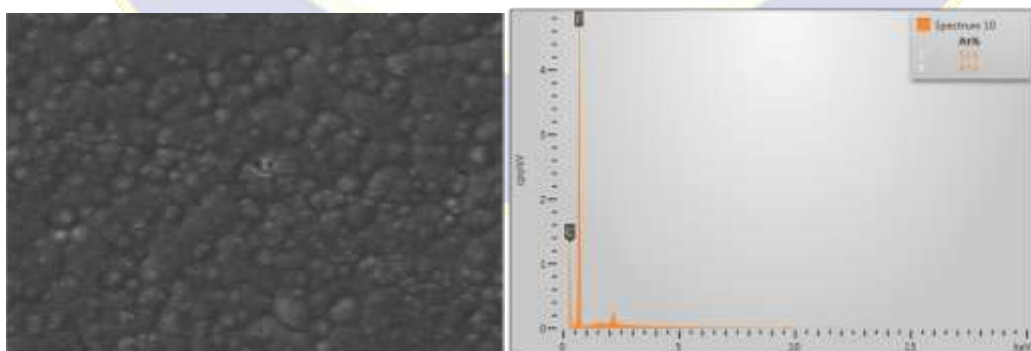


Gambar V.40 Hasil EDS membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,1% Basah

Tabel V.18

Hasil membran Co-PVDF/rGO 0,1%/TiO₂ 0,1% Basah

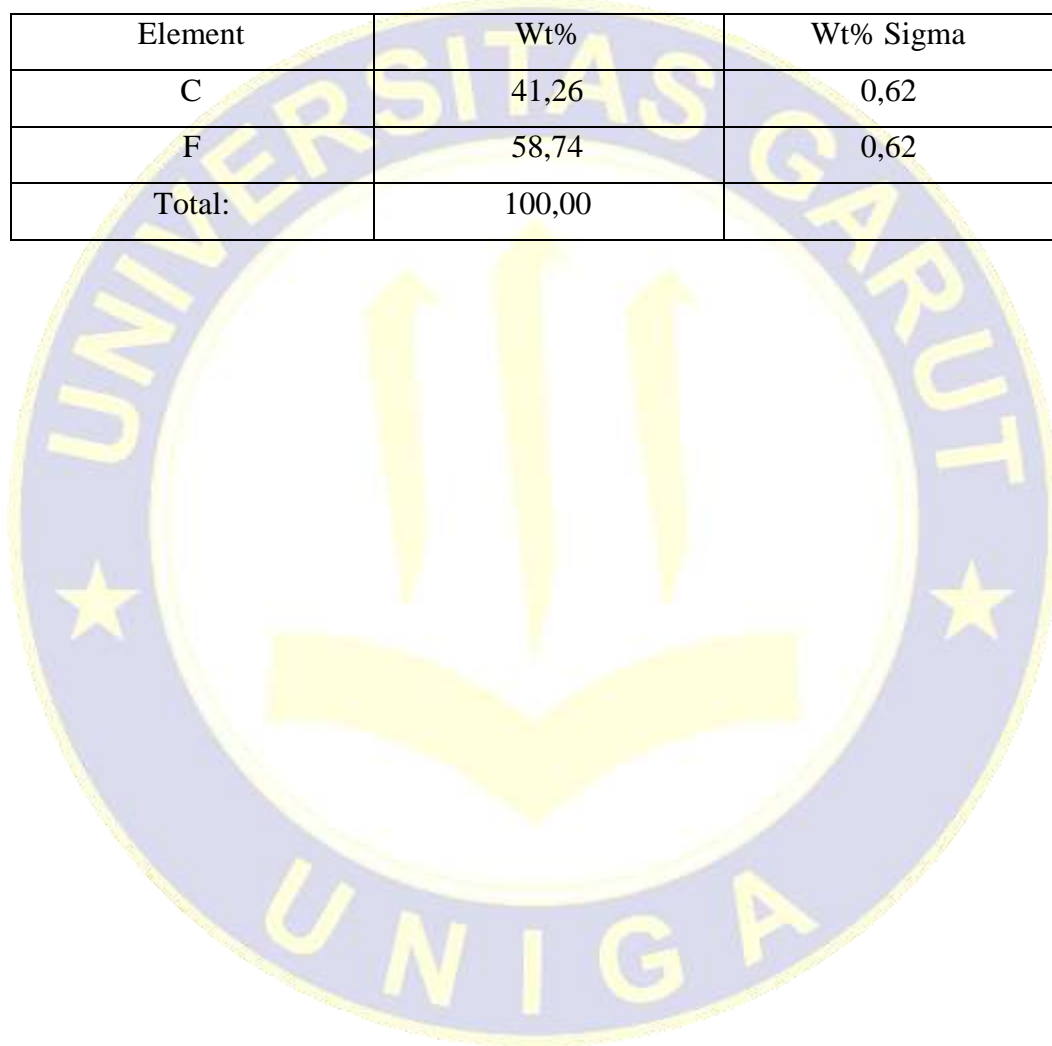
Element	Wt%	Wt% Sigma
C	40,61	0,64
F	59,39	0,64
Total:	100,00	



Gambar V.41 Hasil EDS membran Co-PVDF/ rGO 0.1 %/TiO₂ 0.2% Basah

**LAMPIRAN 7
(LANJUTAN)****Tabel V.19**Hasil membran Co-PVDF/ rGO 0.1 %/TiO₂ 0.2% Basah

Element	Wt%	Wt% Sigma
C	41,26	0,62
F	58,74	0,62
Total:	100,00	

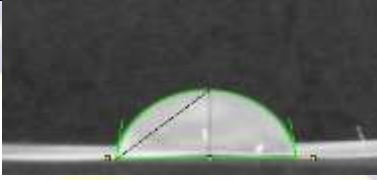
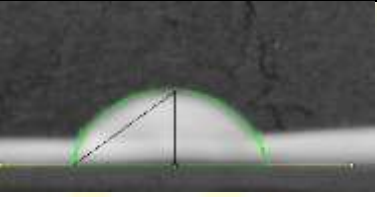
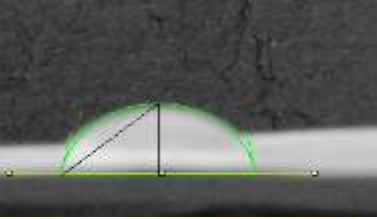
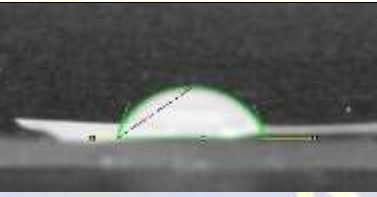
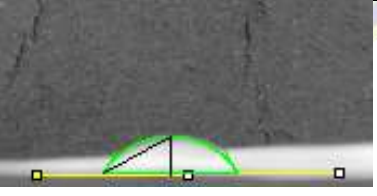
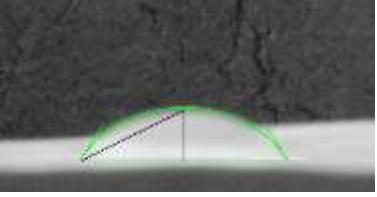


LAMPIRAN 8

SPREADING TIME MEMBRAN

Tabel V.20





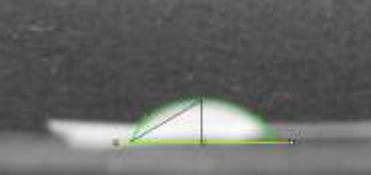

Hasil *spreading time* membran Co-PVDF

Waktu (menit)	Co-PVDF Kering	
	Sudut Kontak	
0	117,586	
30	113,627	
60	108,719	
90	105,54	
120	98,138	
150	96,671	

**LAMPIRAN 8
(LANJUTAN)**

Tabel V.21

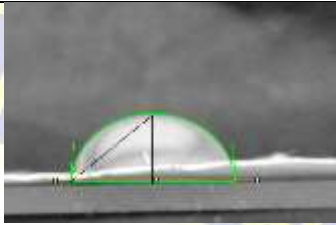
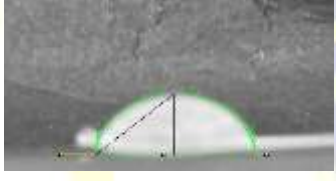
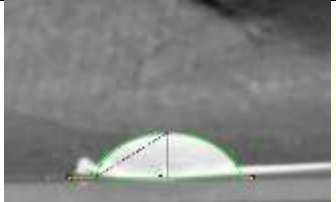
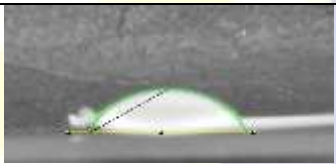
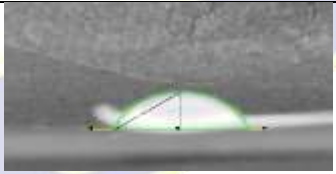
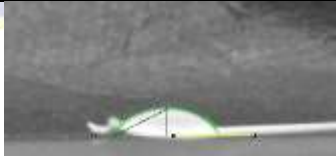
Hasil *spreading time* membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,05%

waktu (menit)	Sudut Kontak	
0	93,063	
30	90,718	
60	70,323	
90	64,611	
120	58,154	
150	50,793	

**LAMPIRAN 8
(LANJUTAN)**

Tabel V.22

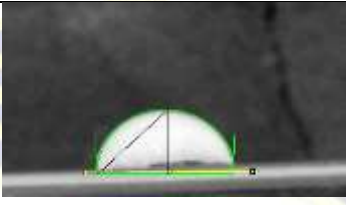
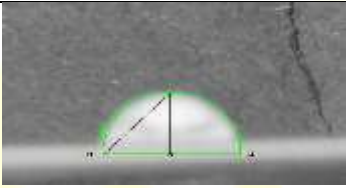
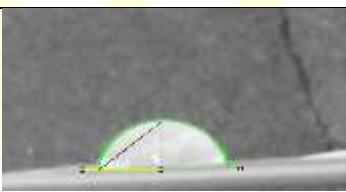
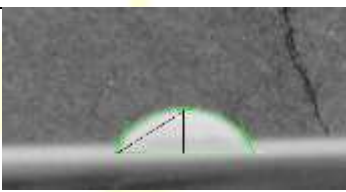
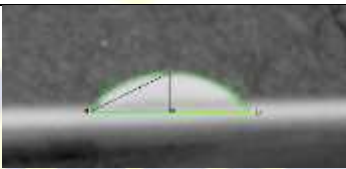
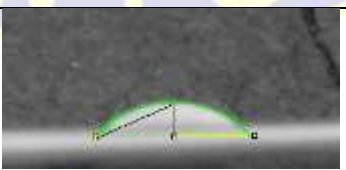
Hasil *spreading time* membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,1%

waktu (menit)	Sudut Kontak	
0	92,449	
30	92,008	
60	78,281	
90	66,997	
120	54,947	
150	52,246	

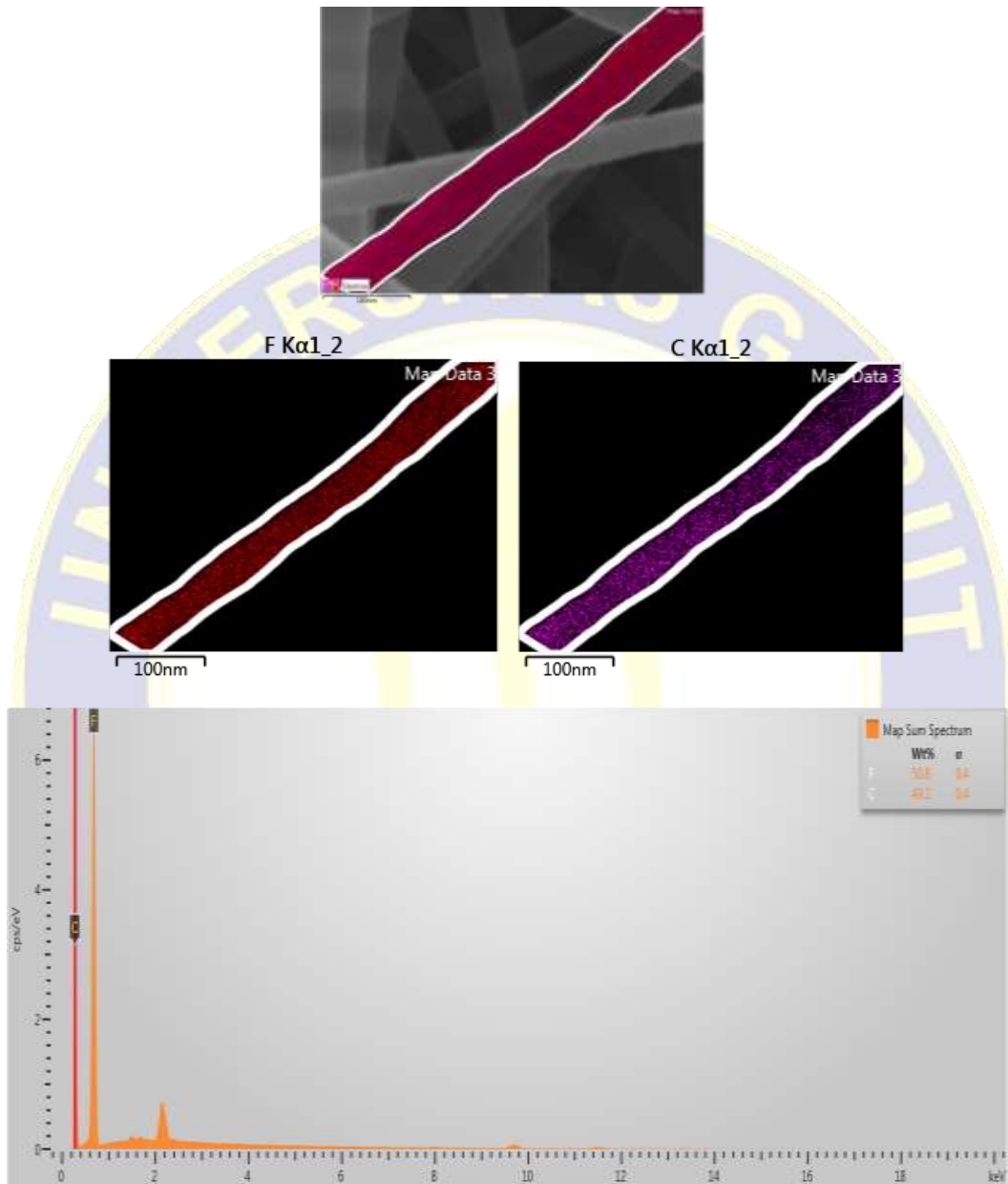
**LAMPIRAN 8
(LANJUTAN)**

Tabel V.23

Hasil *spreading time* membran Co-PVDF/ rGO 0,1 %/TiO₂ 0,2% kering

waktu (menit)	Sudut Kontak	
0	85,185	
30	81,692	
60	67,493	
90	63,392	
120	63,105	
150	60,62	

LAMPIRAN 9
HASIL EDS NANOFIBER

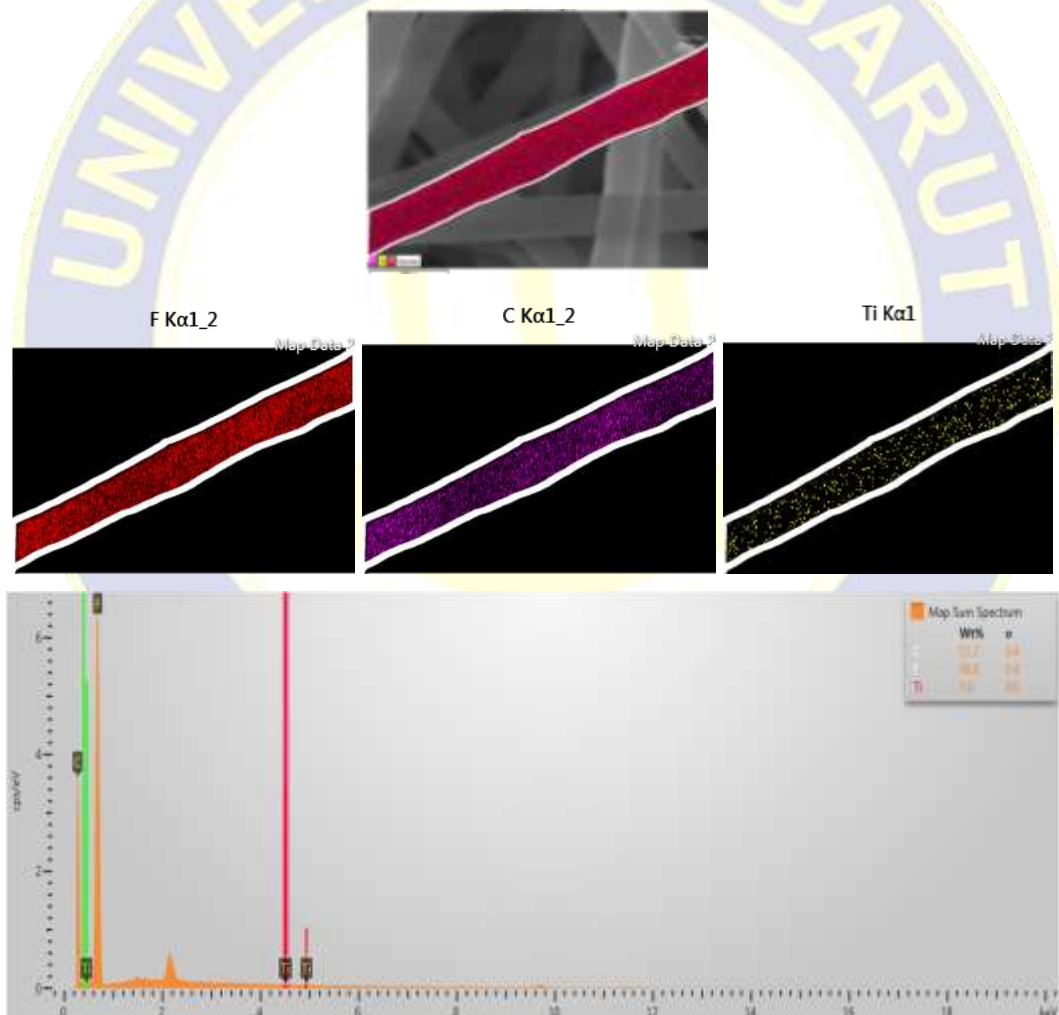


Gambar V.42 Hasil EDS *nanofiber* Co-PVDF

**LAMPIRAN 9
(LANJUTAN)**

Tabel V.24
Hasil EDS *nanofiber* Co-PVDF

Element	Wt%	Wt% Sigma
C	49,24	0,41
F	50,76	0,41
Total:	100,00	



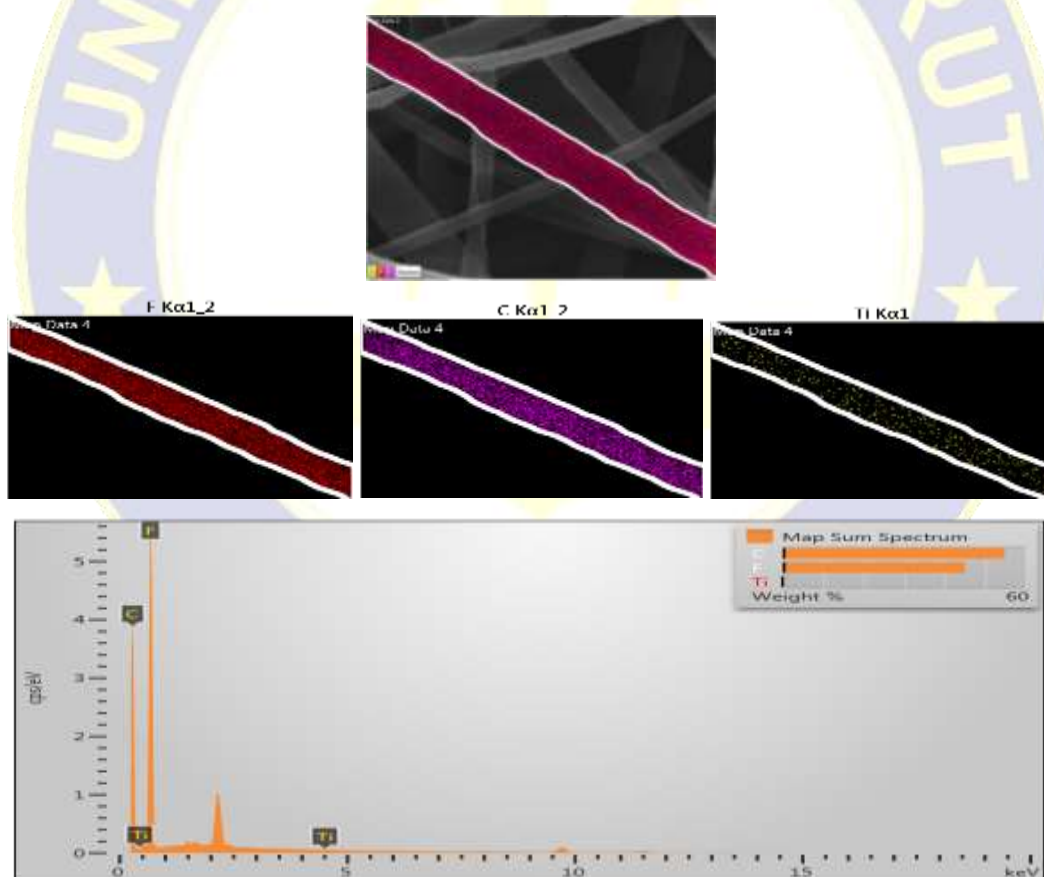
Gambar V.43 Hasil EDS *nanofiber* Co-PVDF/rGO 0,05%/TiO₂ 0,05%

**LAMPIRAN 9
(LANJUTAN)**

Tabel V.25

Hasil EDS *nanofiber* Co-PVDF/rGO 0,05%/TiO₂ 0,05%

Element	Wt%	Wt% Sigma
C	51,22	0,37
F	48,78	0,37
Ti	0,00	0,04
Total:	100,00	



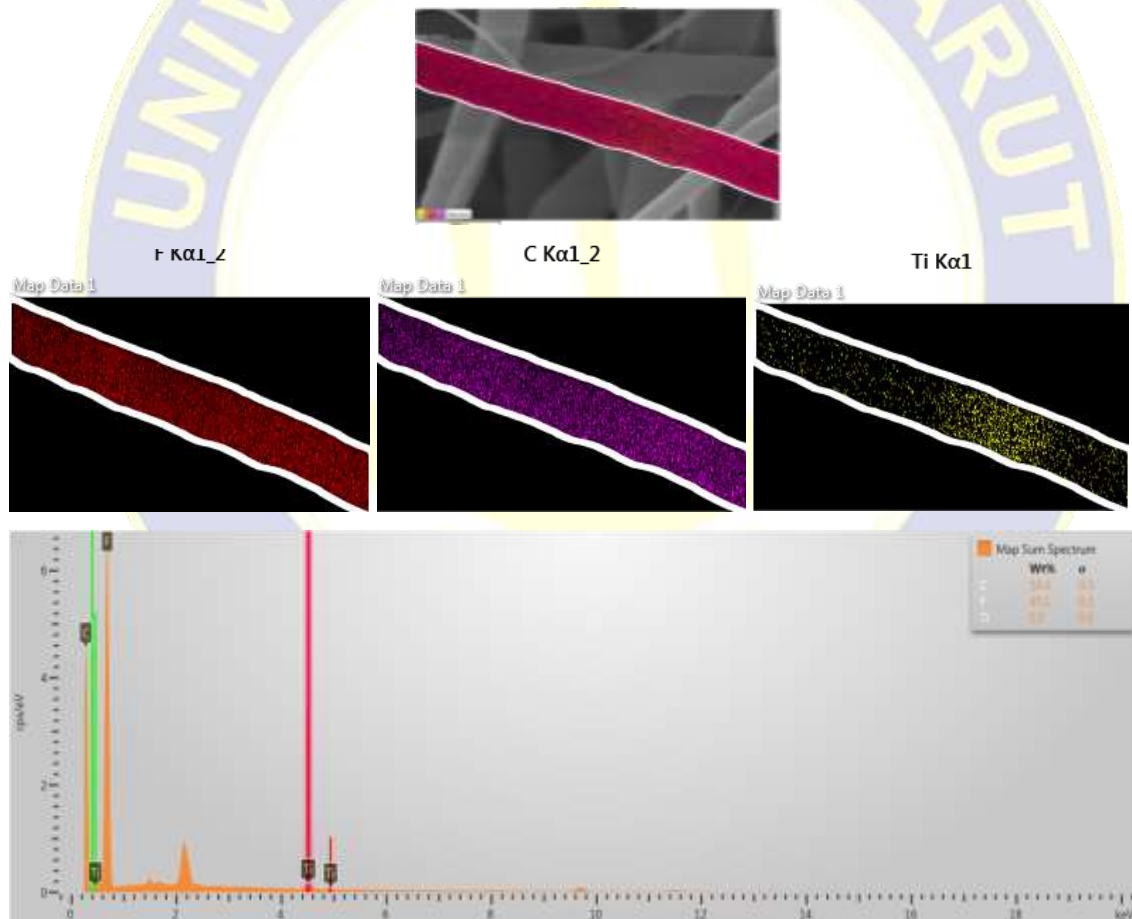
Gambar V.44 Hasil EDS *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,05%

**LAMPIRAN 9
(LANJUTAN)**

Tabel V.26

Hasil *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,05%

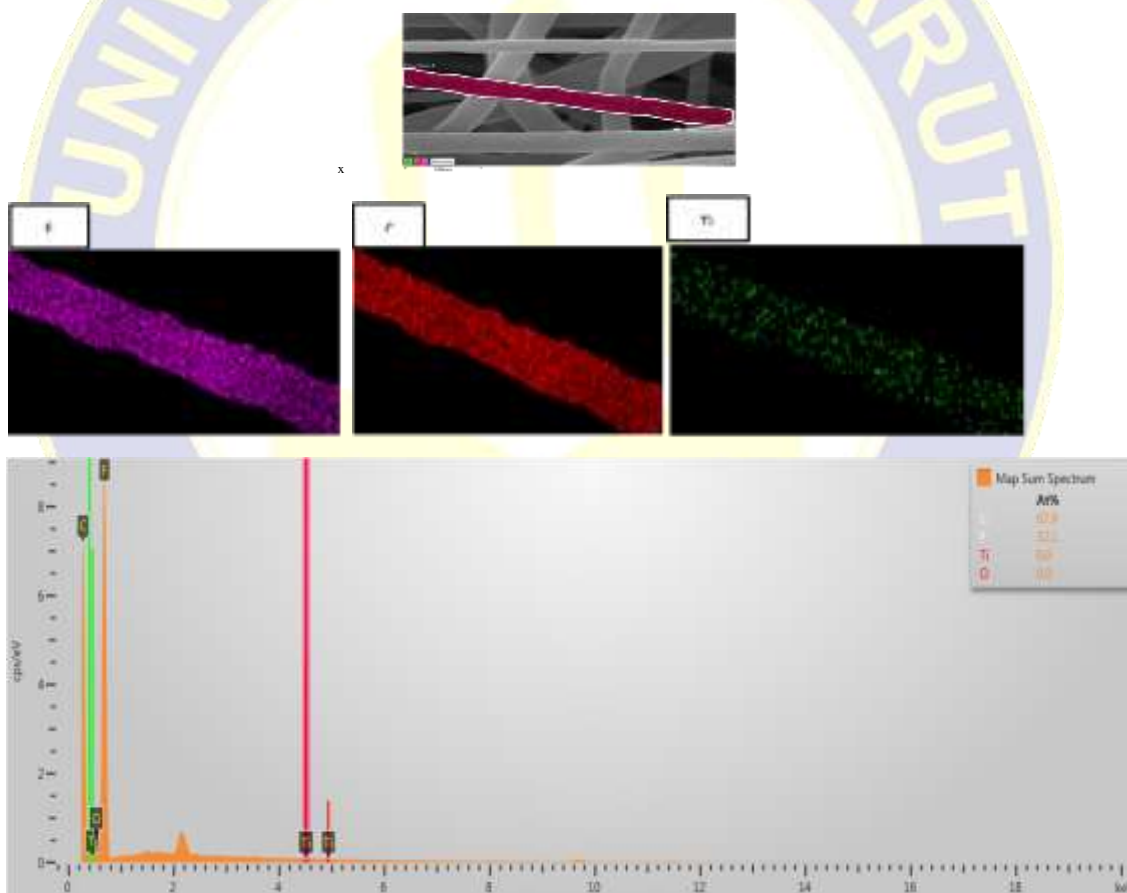
Element	Wt%	Wt% Sigma
C	54,95	0,37
F	45,05	0,37
Ti	0,00	0,04
Total:	100,00	



Gambar V.45 Hasil EDS *nanofiber* Co-PVDF/rGO 0,5%/TiO₂ 0,05%

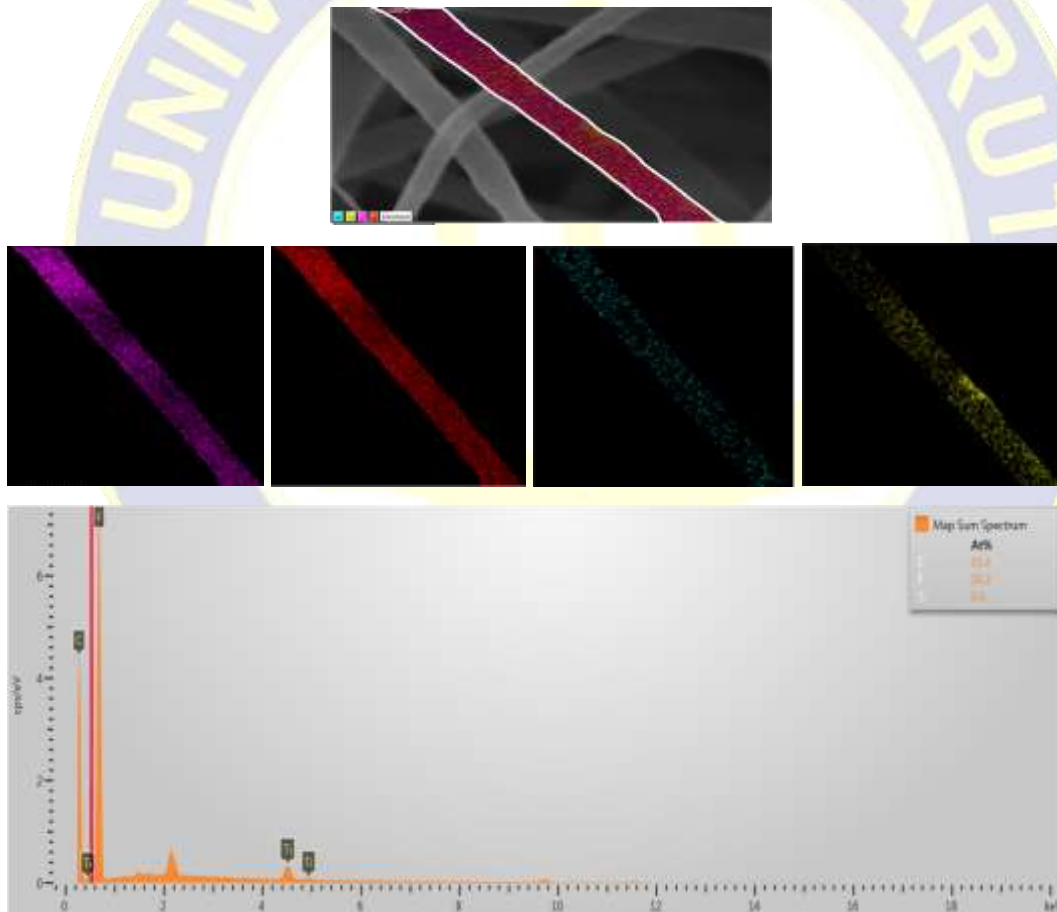
**LAMPIRAN 9
(LANJUTAN)****Tabel V.27**Hasil EDS *nanofiber* Co-PVDF/rGO 0,5%/TiO₂ 0,05%

Element	Wt%	Wt% Sigma
C	54,41	0,31
F	45,06	0,30
Ti	0,54	0,04
Total:	100,00	

**Gambar V.46** Hasil EDS *nanofiber* Co-PVDF/rGO 0,05%/TiO₂ 0,05%

**LAMPIRAN 9
(LANJUTAN)****Tabel V.28**Hasil EDS *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,05%

Element	Wt%	Wt% Sigma
C	54,41	0,31
F	45,06	0,30
Ti	0,54	0,04
Total:	100,00	

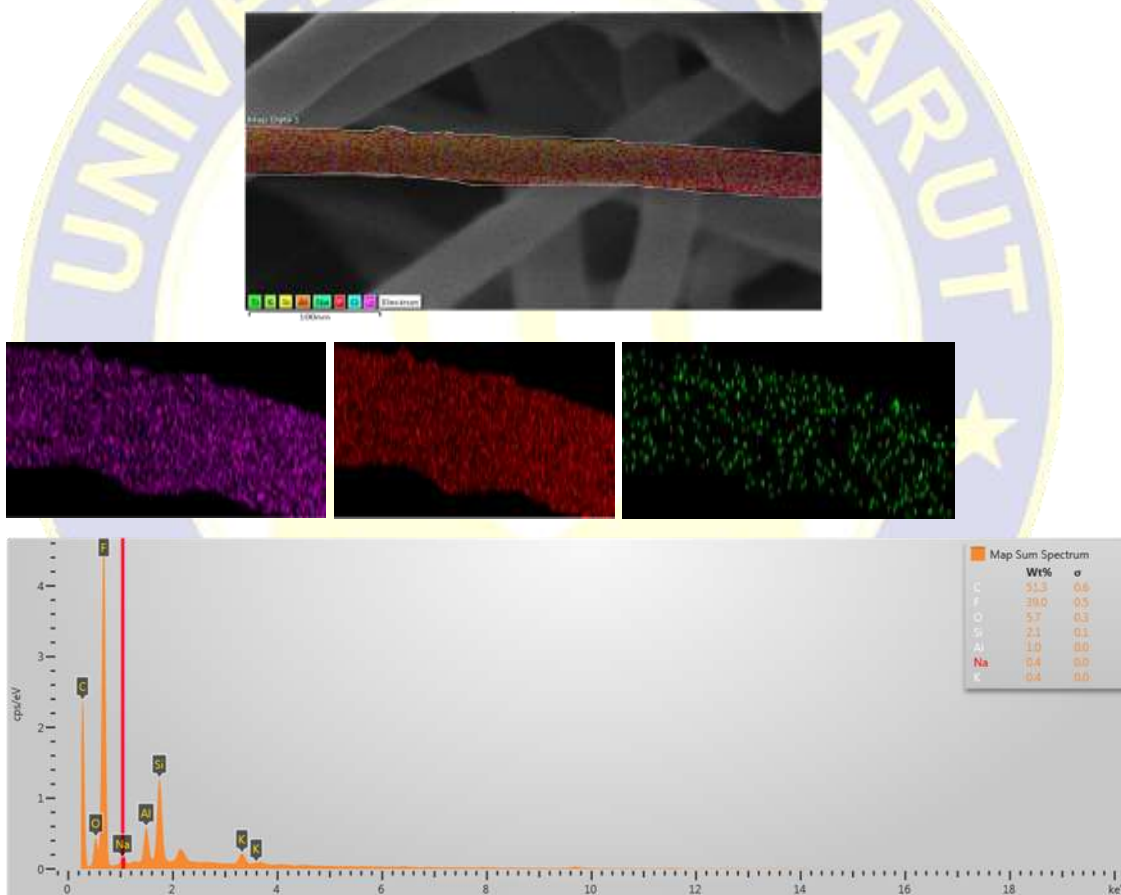
**Gambar V.47** Hasil EDS *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,1%

LAMPIRAN 9 (LANJUTAN)

Tabel V.29

Hasil EDS *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,1%

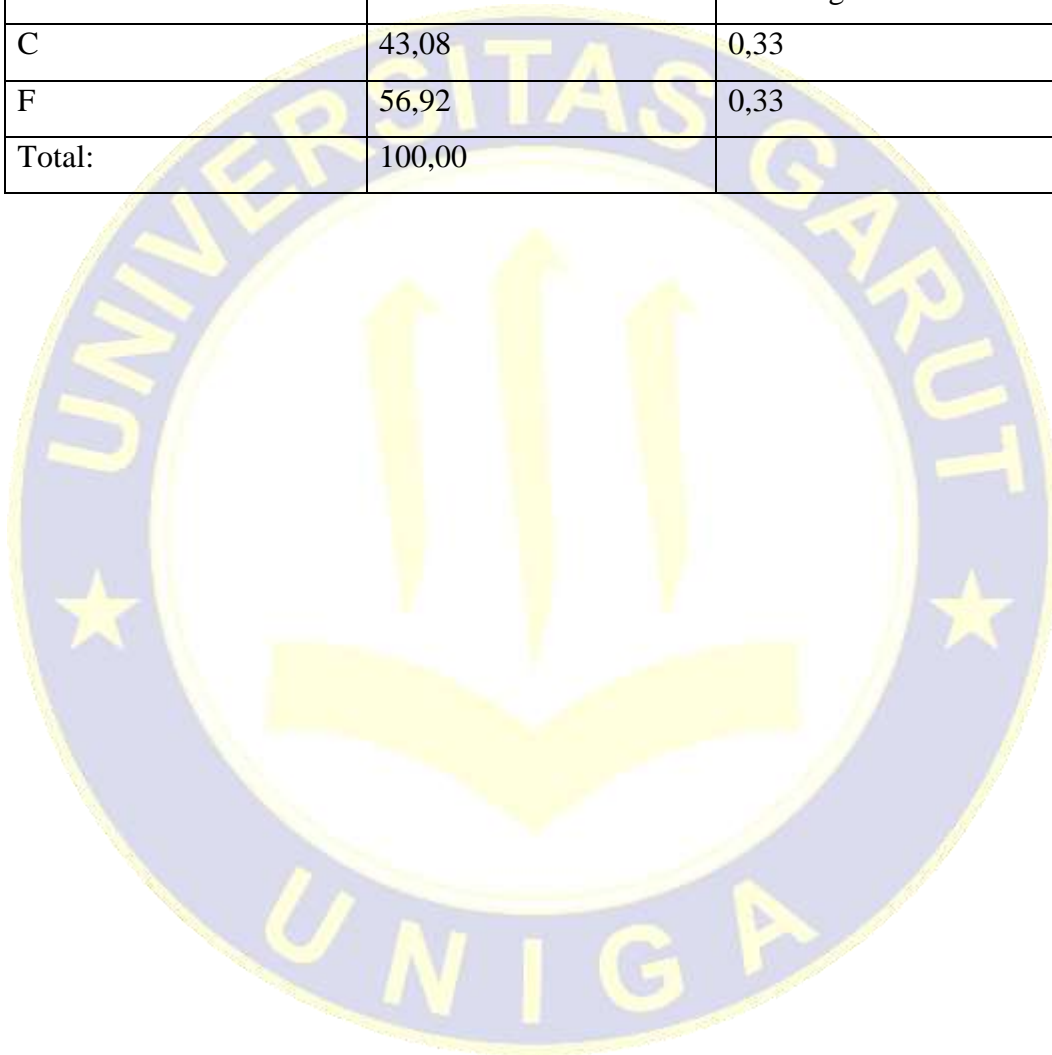
Element	Wt%	Wt% Sigma
C	43,01	0,37
F	56,99	0,37
Total:	100,00	



Gambar 6.48 Hasil EDS *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,2%








**LAMPIRAN 9
(LANJUTAN)****Tabel V.30**Hasil EDS *nanofiber* Co-PVDF/rGO 0,1%/TiO₂ 0,2%

Element	Wt%	Wt% Sigma
C	43,08	0,33
F	56,92	0,33
Total:	100,00	



LAMPIRAN 10
(HASIL SPREADING TIME NANOFIBER)








Tabel V.31
 Hasil *spreading time* membran Co-PVDF

waktu (menit)	Sudut Kontak	
0	137,681	
30	119,922	
60	111,708	
90	91,708	
120	62,579	
150	37,259	
180	0	

LAMPIRAN 10
(LANJUTAN)

Tabel V.32




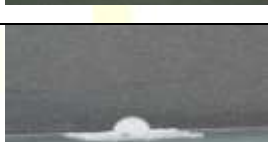



Hasil *spreading time* membran Co-PVDF/rGO 0,05%/TiO₂0,05%

waktu (menit)	Sudut Kontak	
0	133,526	
30	120,550	
60	113,656	
90	90	
120	58,280	
150	31,788	
180	0	

**LAMPIRAN 10
(LANJUTAN)**

Tabel V.33








Hasil *spreading time* membran Co-PVDF/rGO 0,1%/TiO₂0,05%

waktu (menit)	Sudut Kontak	
0	127,055	
30	114,210	
60	103,172	
90	88,856	
120	57,044	
150	22,941	
180	0	

LAMPIRAN 10
(LANJUTAN)

Tabel V.34








Hasil *spreading time* membran Co-PVDF/rGO 0,5%/TiO₂0,05%

waktu (menit)	Sudut Kontak	
0	121,290	
30	113,278	
60	103,581	
90	89,469	
120	51,753	
150	14,050	
180	0	

LAMPIRAN 10
(LANJUTAN)

Tabel V.35






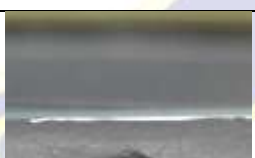

Hasil *spreading time* membran Co-PVDF/rGO 0,1%/TiO₂0,05%

waktu (menit)	Sudut Kontak	
0	123,378	
30	113,378	
60	102,890	
90	92,670	
120	49,80	
150	29,223	
180	0	

LAMPIRAN 10
(LANJUTAN)

Tabel V.36





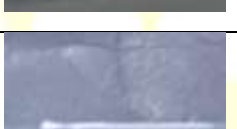
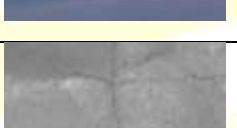

Hasil *spreading time* membran Co-PVDF/rGO 0,1%/TiO₂0,1%

waktu (menit)	Sudut Kontak	
0	125,787	
30	113,536	
60	103,268	
90	85,346	
120	27,732	
150	13,896	
180	0	

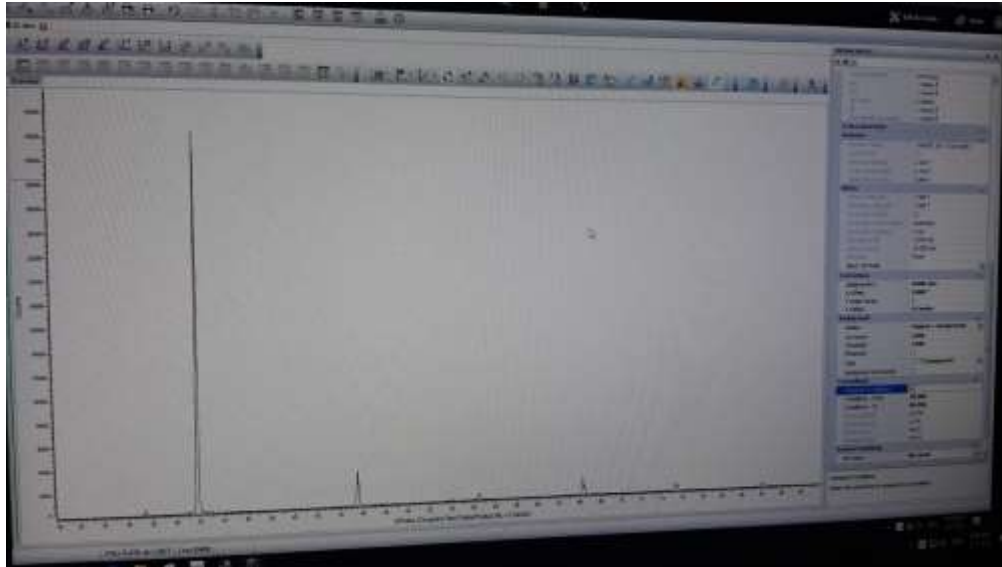
**LAMPIRAN 10
(LANJUTAN)**

Tabel V.37

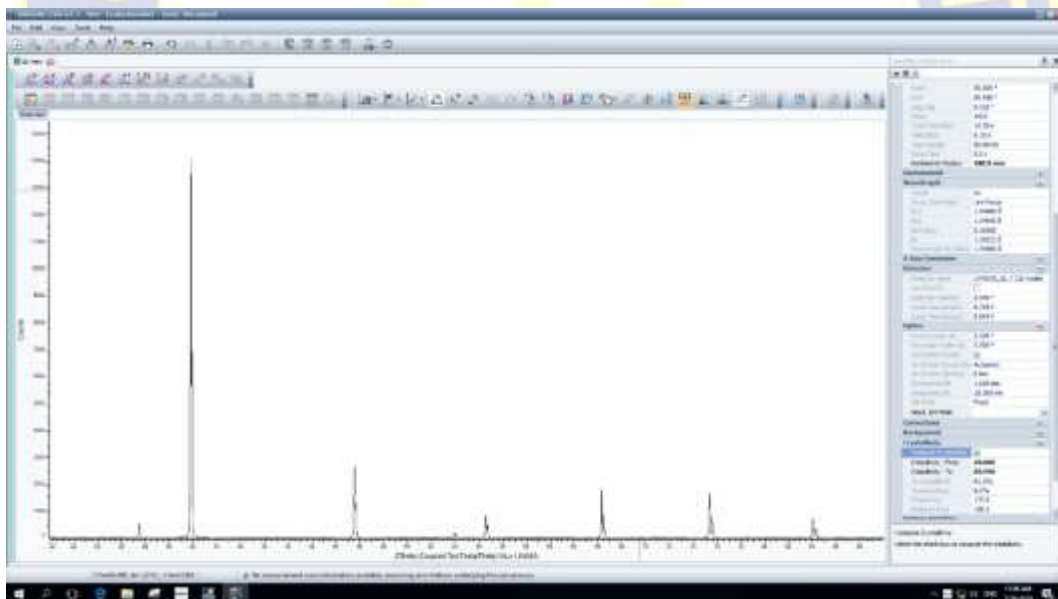
Hasil *spreading time* membran Co-PVDF/rGO 0,1%/TiO₂0,2%

waktu (menit)	Sudut Kontak	
0	122,333	
30	113,149	
60	105,218	
90	94,521	
120	70,335	
150	37,692	
180	0	

LAMPIRAN 11 (LANJUTAN)

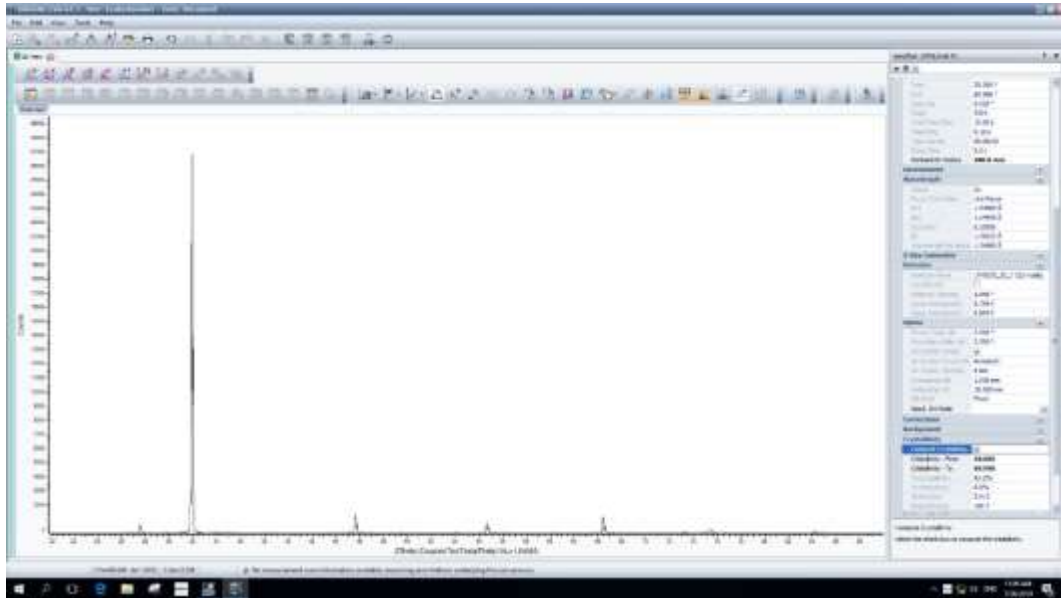


Gambar V.50 Garam Murni

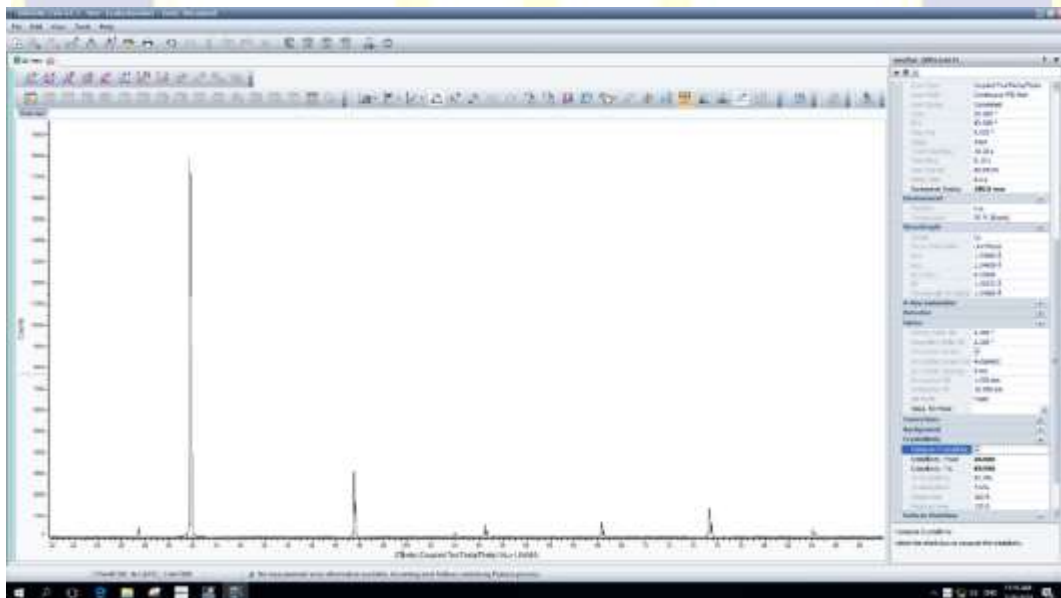


Gambar V.51 Garam rekristalisasi dengan *nanofiber* 5 psi

LAMPIRAN 11 (LANJUTAN)

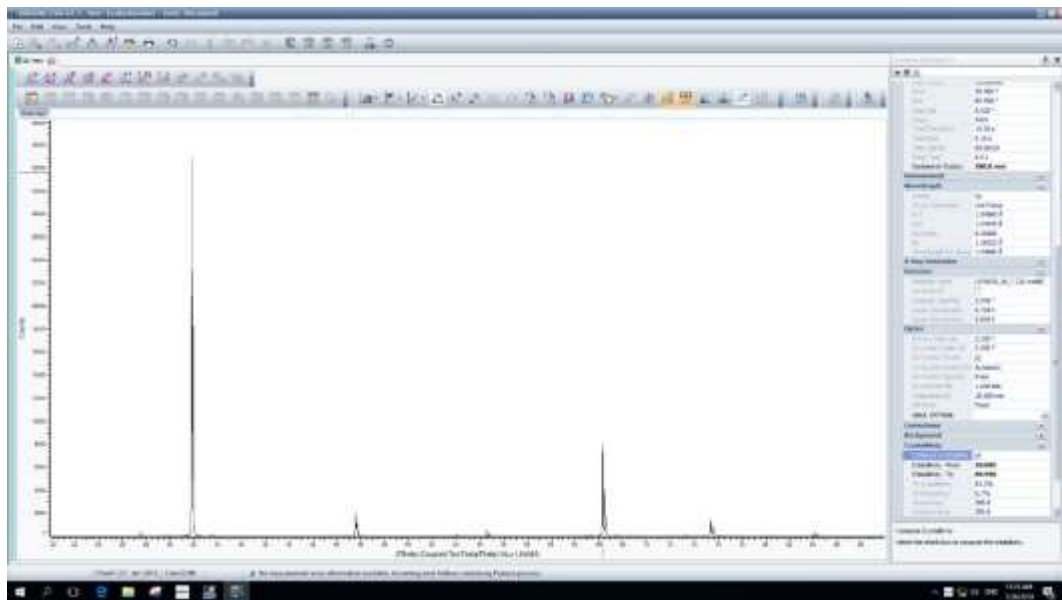


Gambar V.52 Garam rekristalisasi dengan *nanofiber* 10 psi



Gambar V.53 Garam rekristalisasi dengan *nanofiber* 15 psi.

LAMPIRAN 11 (LANJUTAN)



Gambar V.54 Garam rekristalisasi dengan membran 5 psi

