













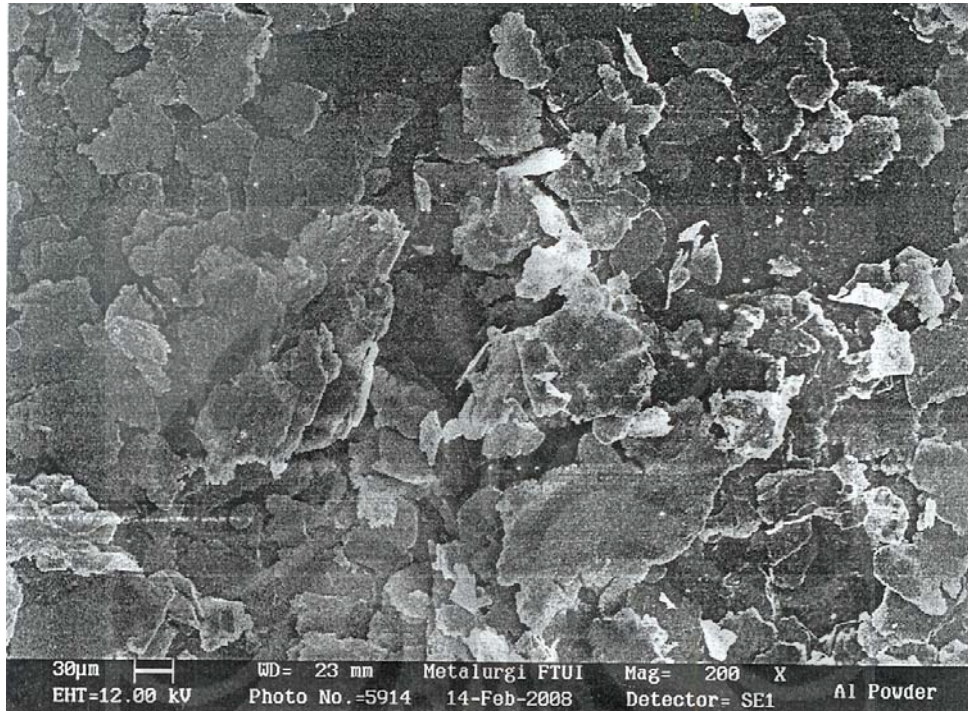
Lampiran 1

Foto Sampel Aluminium Busa Hasil Disolusi

No.	Varibel Garam	Posisi	
		Datar	Tegak
1.	0%		
2.	30%		
3.	50%		
4.	70%		
5.	90%		

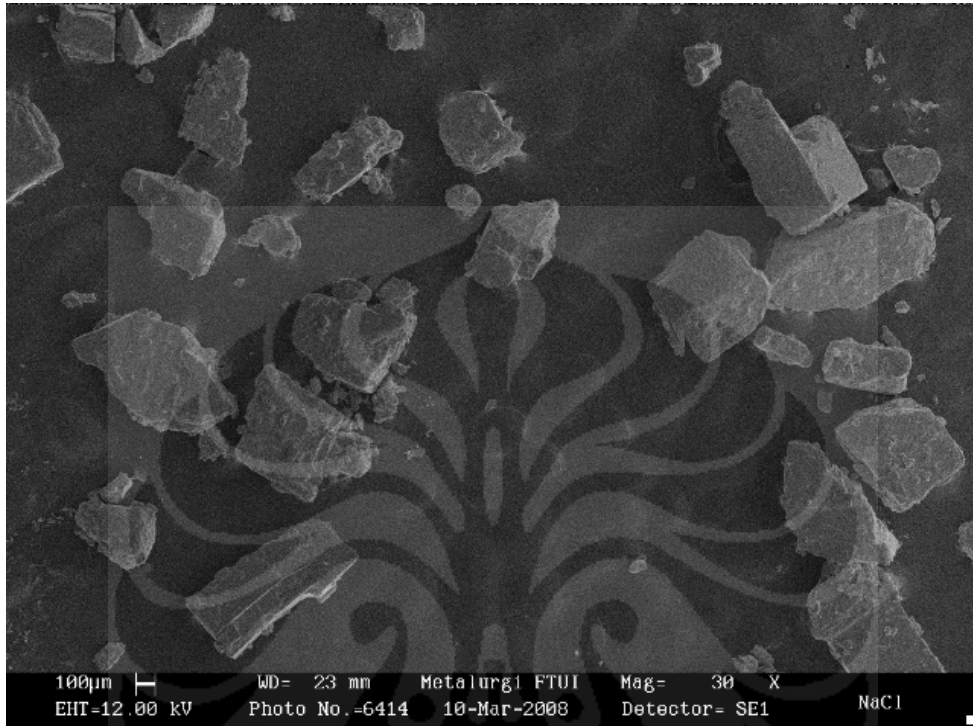
Lampiran 2

Gambar SEM serbuk aluminium (perbesaran 200X)



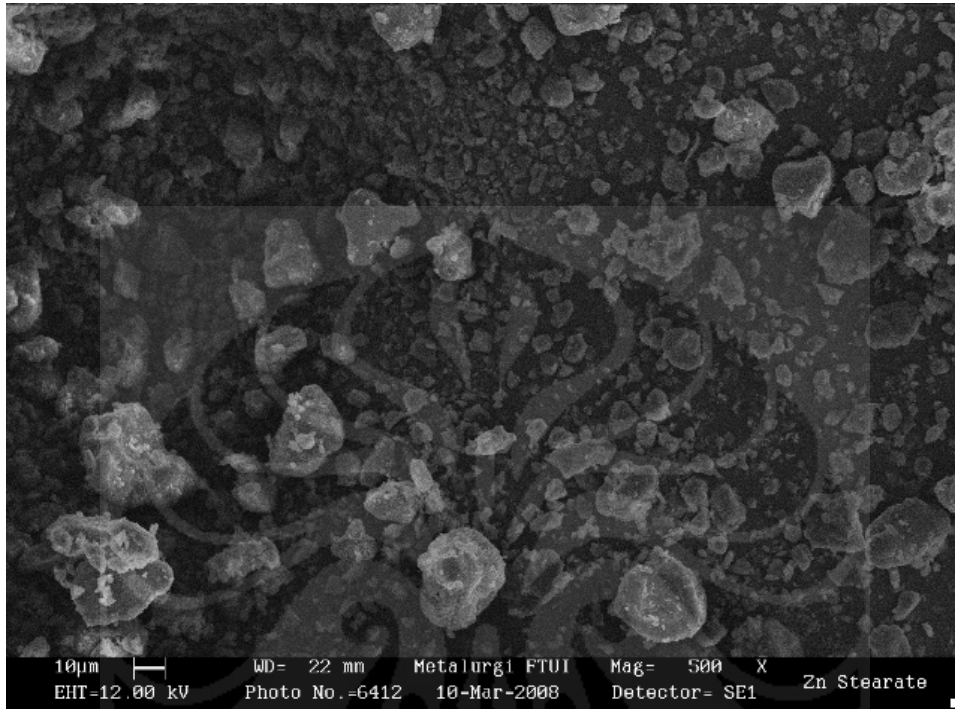
Lampiran 3

Gambar SEM serbuk NaCl (perbesaran 30X)



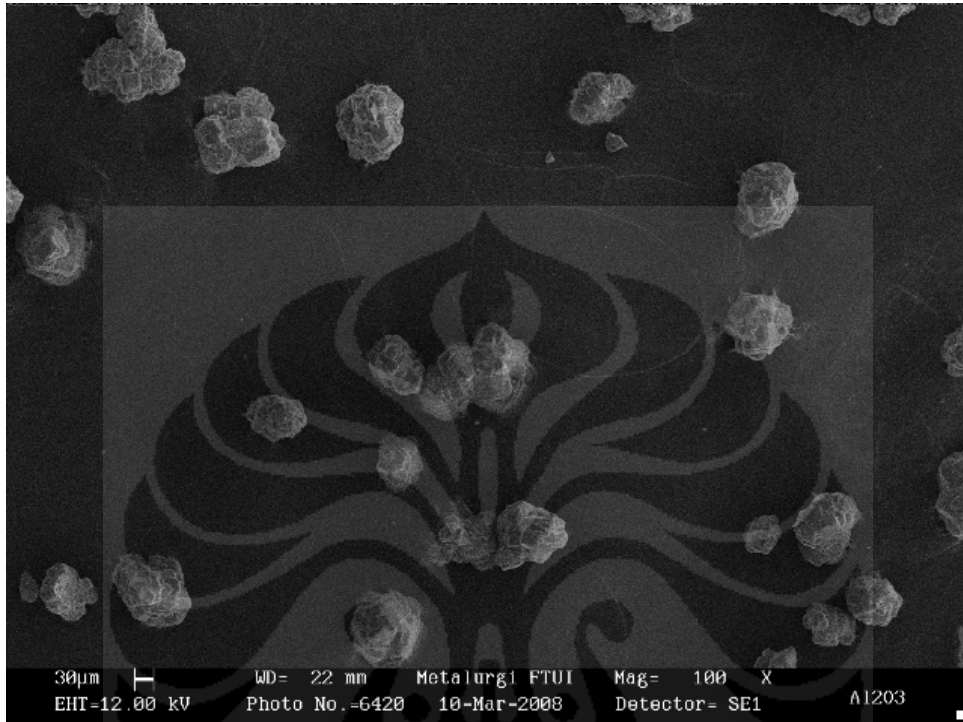
Lampiran 4

Gambar SEM serbuk zinc stearat (perbesaran 500X)



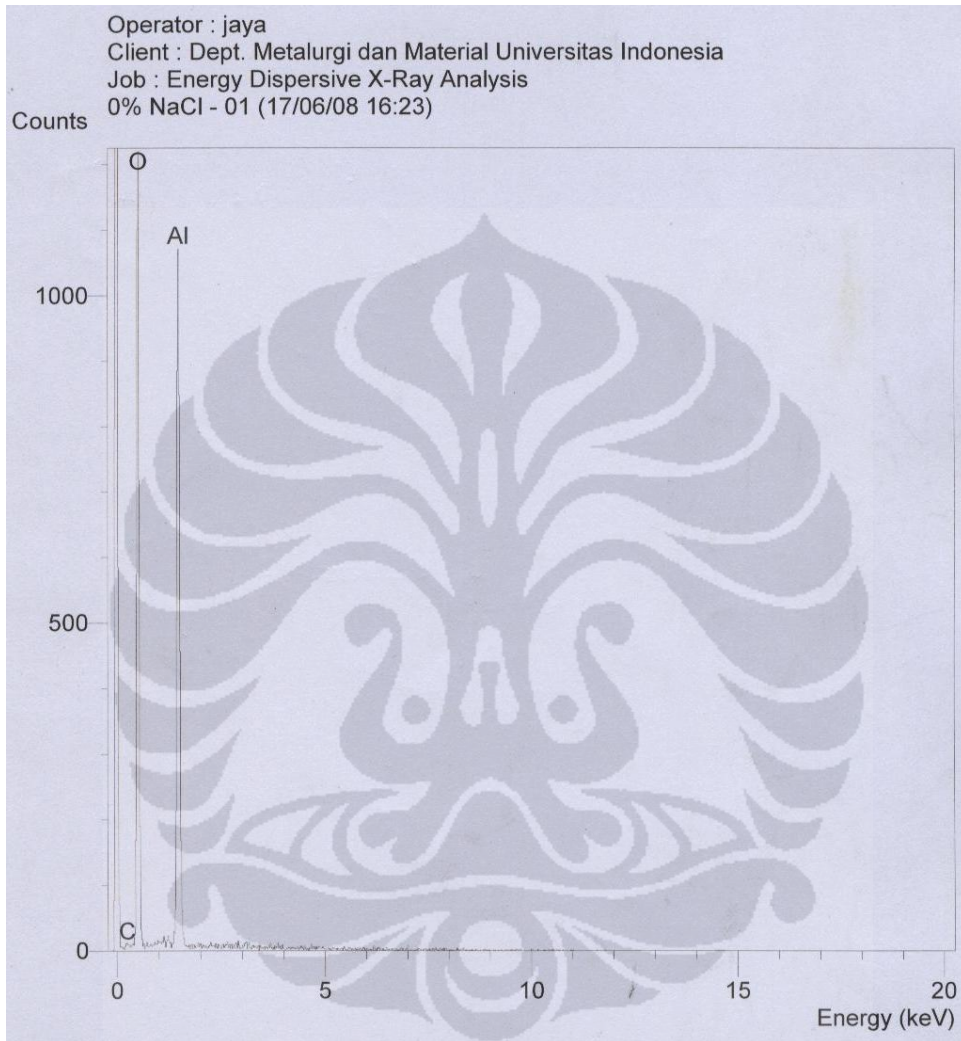
Lampiran 5

Gambar SEM serbuk alumina (perbesaran 100X)



Lampiran 6

Gambar grafik EDAX 0% garam - 1



Lampiran 7

Data EDAX 0% garam - 1

SEMQuant results. Listed at 16:25:06 on 17/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: 0% NaCl - 01

System resolution = 59 eV

Quantitative method: ZAF (2 iterations).
Analysed all elements and normalised results.

Standards :

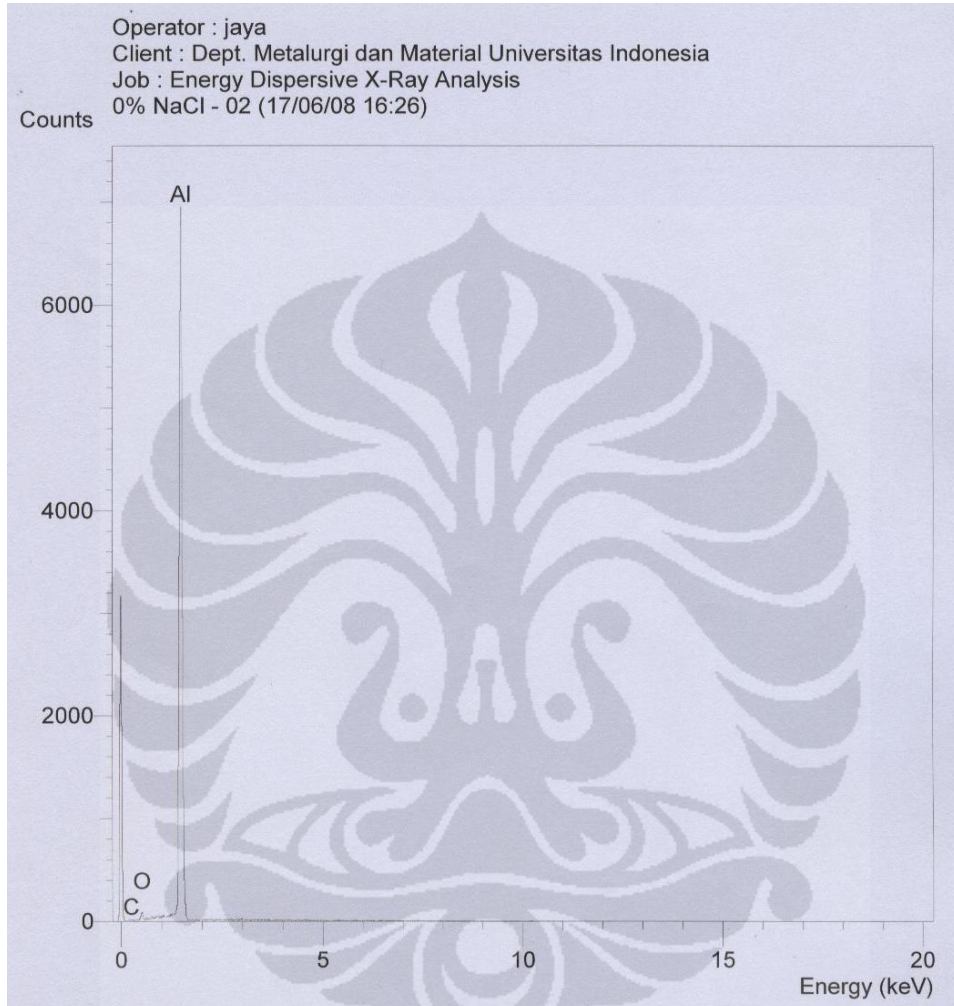
C K Carbon Low 13/09/06
O K AL2O3 22/03/06
Al K CeAl2 03/03/07

Elmt	Spect.	Element	Atomic
	Type	%	%
C K	ED	0.43	0.69
O K	ED	57.73	69.46
Al K	ED	41.84	29.85
Total		100.00	100.00

* = <2 Sigma

Lampiran 8

Gambar grafik EDAX 0% garam - 2



Lampiran 9

Data EDAX 0% garam - 2

SEMQuant results. Listed at 16:27:28 on 17/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: 0% NaCl - 02

System resolution = 59 eV

Quantitative method: ZAF (2 iterations).
Analysed all elements and normalised results.

Standards :

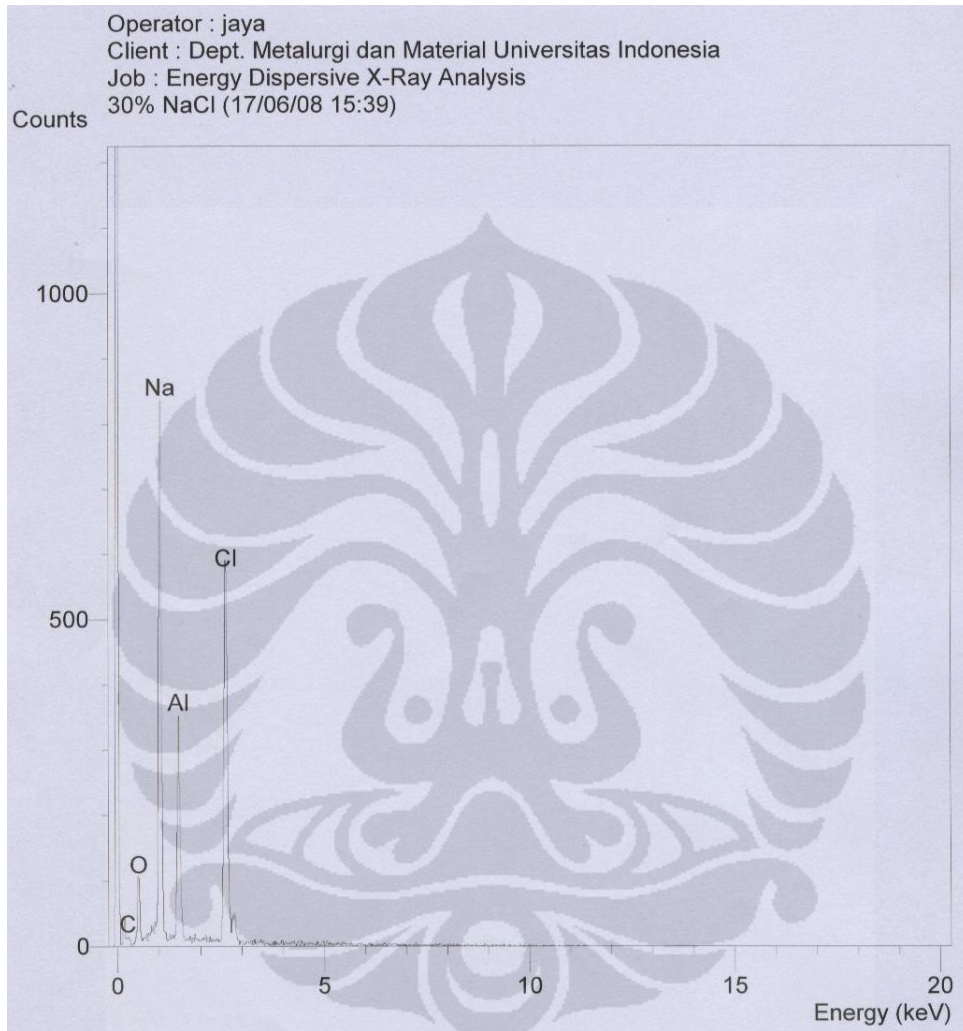
C K	Carbon Low	13/09/06
O K	AL2O3	22/03/06
Al K	CeAl2	03/03/07

Elmt	Spect.	Element	Atomic
	Type	%	%
C K	ED	0.29	0.65
O K	ED	2.20	3.64
Al K	ED	97.51	95.71
Total		100.00	100.00

* = <2 Sigma

Lampiran 10

Gambar grafik EDAX 30% garam



Lampiran 11

Data EDAX 30% garam

SEMQuant results. Listed at 15:40:18 on 17/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: 30% NaCl

System resolution = 60 eV

Quantitative method: ZAF (3 iterations).
Analysed all elements and normalised results.

Standards :

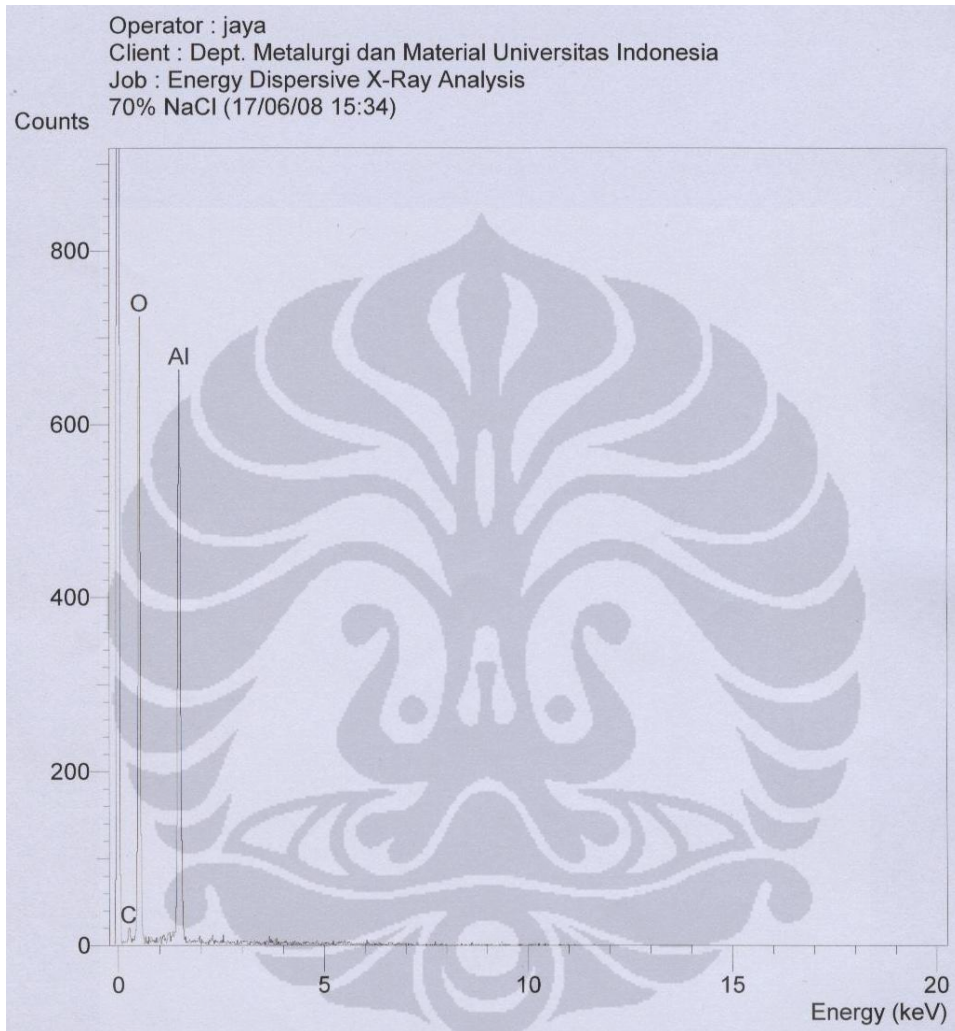
C K	Carbon Low	13/09/06
O K	AL2O3	22/03/06
Na K	Orthoclase	22/03/06
Al K	CeAl2	03/03/07
Cl K	KCl	15/02/94

Elmt	Spect.	Element	Atomic
	Type	%	%
C K	ED	0.64	1.51
O K	ED	6.00	10.73
Na K	ED	24.63	30.66
Al K	ED	6.32	6.71
Cl K	ED	62.42	50.39
Total		100.00	100.00

* = <2 Sigma

Lampiran 12

Gambar grafik EDAX 70% garam



Lampiran 13

Data EDAX 70% garam

SEMQuant results. Listed at 15:37:39 on 17/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: 70% NaCl

System resolution = 59 eV

Quantitative method: ZAF (2 iterations).
Analysed all elements and normalised results.

Standards :

C K Carbon Low 13/09/06
O K AL2O3 22/03/06
Al K CeAl2 03/03/07

Elmt	Spect.	Element	Atomic
	Type	%	%
C K	ED	0.93	1.49
O K	ED	56.88	68.42
Al K	ED	42.19	30.09
Total		100.00	100.00

* = <2 Sigma

Lampiran 14

Keterangan:

Berat air = 488,24 gram

Volume air = 500 mL

Densitas air = 0,98 gram/cm³

Pengolahan Data Porositas dan Densitas

variabel (%NaCl)	no sampel	berat setelah kompaksi (gr)	berat sinter (gr)	berat basah (gr)	berat kering (gr)	volum sampel (cm ³)	ρ sampel (gr/cm ³)	porositas (%)	rata-rata porositas (%)	rata-rata ρ (gr/cm ³)
0	1	3,81	3,71	1,59	3,73	1,63	2,29	15,16	16,71	2,25
	2	3,34	3,26	1,33	3,26	1,36	2,39	11,35		
	3	3,89	3,77	1,70	3,77	1,74	2,17	19,80		
	4	3,53	3,40	1,57	3,45	1,61	2,15	20,53		
30	1	5,34	5,03	2,82	4,48	2,89	1,55	42,54	41,37	1,58
	2	5,66	5,57	3,08	4,30	3,15	1,36	49,51		
	3	5,22	4,68	2,48	4,61	2,54	1,82	32,77		
	4	5,35	4,99	2,70	4,43	2,77	1,60	40,66		
50	1	7,44	7,40	3,62	3,02	3,71	0,81	69,83	70,09	0,81
	2	7,42	7,34	3,71	3,15	3,80	0,83	69,29		
	3	7,44	7,20	3,92	2,72	4,01	0,68	74,91		
	4	7,44	7,06	4,07	3,79	4,17	0,91	66,32		
70	1	7,41	7,32	1,78	0,63	1,82	0,35	87,20	85,05	0,40
	2	7,44	6,53	1,79	0,71	1,83	0,39	85,65		
	3	7,43	7,37	2,28	1,00	2,33	0,43	84,14		
	4	7,44	7,25	2,67	1,24	2,73	0,45	83,20		
90	1	7,45	7,40	2,65	0,68	2,71	0,25	90,72	91,70	0,22
	2	7,45	7,33	2,15	0,40	2,20	0,18	93,27		
	3	7,44	7,24	2,36	0,58	2,42	0,24	91,11		
	4	7,45	7,22	2,27	0,52	2,32	0,22	91,72		

Lampiran 15

Keterangan:

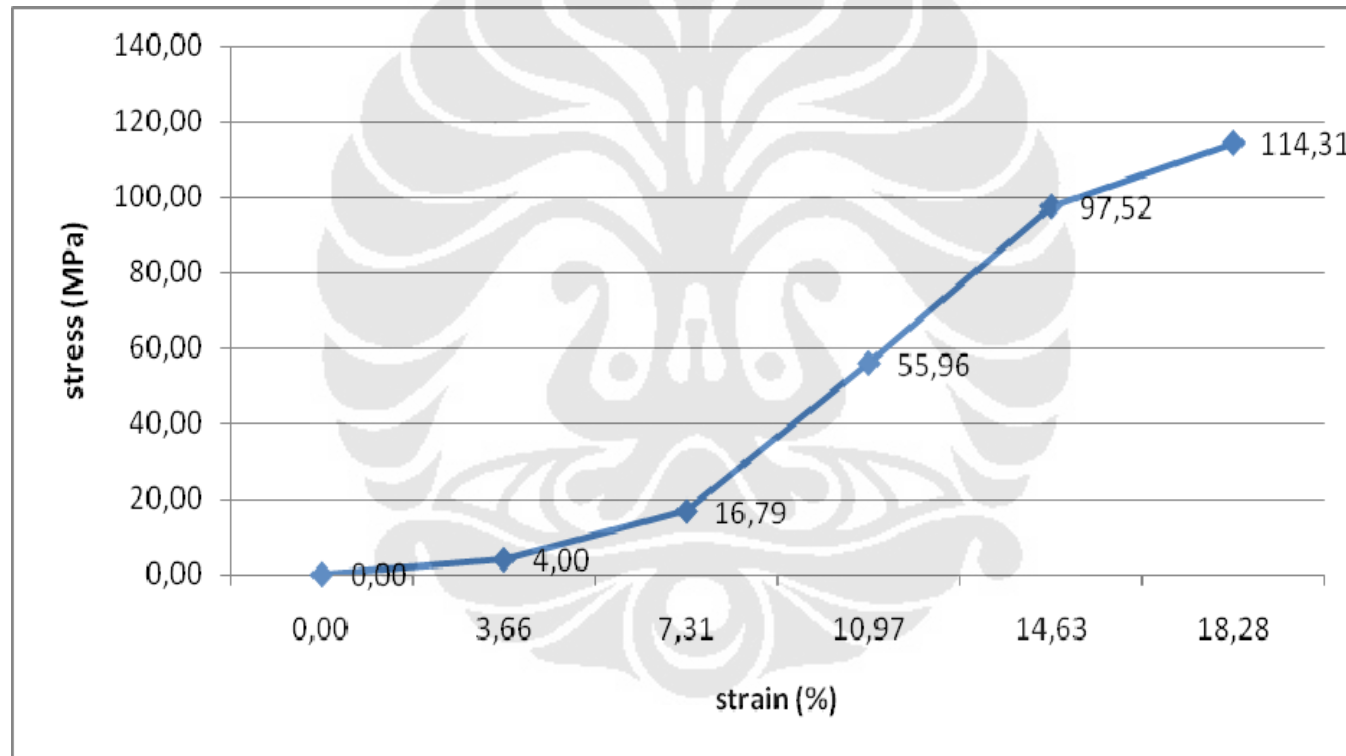
- diameter awal = 19,96 mm
- tinggi awal = 5,47 mm
- luas awal = 312,75 mm²
- diameter akhir = 20,11 mm
- tinggi akhir = 4,77 mm
- luas akhir = 317,46 mm²

Data Uji Tekan Sampel 0% NaCl

sumbu X (mm)	gaya tekan (kN/cm)	ΔL (mm)	gaya tekan (N)	stess (N/mm ² atau MPa)	Strain (%)
0	0	0	0	0,00	0,00
1	5	0,2	1250	4,00	3,66
2	21	0,4	5250	16,79	7,31
3	70	0,6	17500	55,96	10,97
4	122	0,8	30500	97,52	14,63
5	143	1	35750	114,31	18,28

Lampiran 16

Grafik Uji Tekan Sampel 0% NaCl



Lampiran 17

Keterangan:

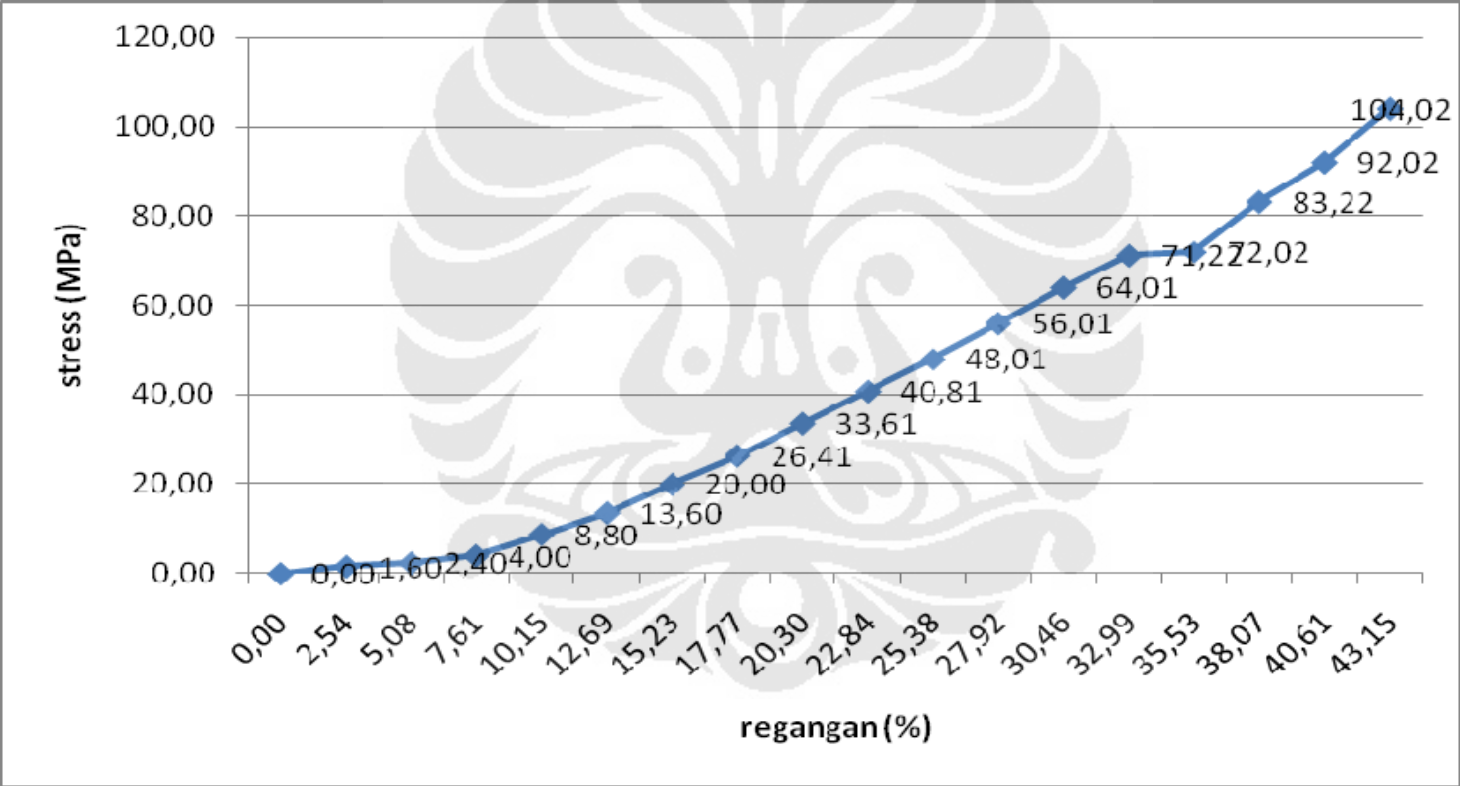
- diameter awal = 19,95 mm
- tinggi awal = 7,88 mm
- luas awal = 312,43 mm²
- diameter akhir = 21,55 mm
- tinggi akhir = 5,84 mm
- luas akhir = 364,55 mm²

Data Uji Tekan Sampel 30% NaCl

sumbu X (mm)	gaya tekan (kN/cm)	ΔL (mm)	gaya tekan (N)	stress (MPa)	strain (%)
0	0	0	0	0,00	0,00
1	2	0,2	500	1,60	2,54
2	3	0,4	750	2,40	5,08
3	5	0,6	1250	4,00	7,61
4	11	0,8	2750	8,80	10,15
5	17	1	4250	13,60	12,69
6	25	1,2	6250	20,00	15,23
7	33	1,4	8250	26,41	17,77
8	42	1,6	10500	33,61	20,30
9	51	1,8	12750	40,81	22,84
10	60	2	15000	48,01	25,38
11	70	2,2	17500	56,01	27,92
12	80	2,4	20000	64,01	30,46
13	89	2,6	22250	71,22	32,99
14	90	2,8	22500	72,02	35,53
15	104	3	26000	83,22	38,07
16	115	3,2	28750	92,02	40,61
17	130	3,4	32500	104,02	43,15

Lampiran 18

Grafik Uji Tekan Sampel 30% NaCl



Lampiran 19

Keterangan:

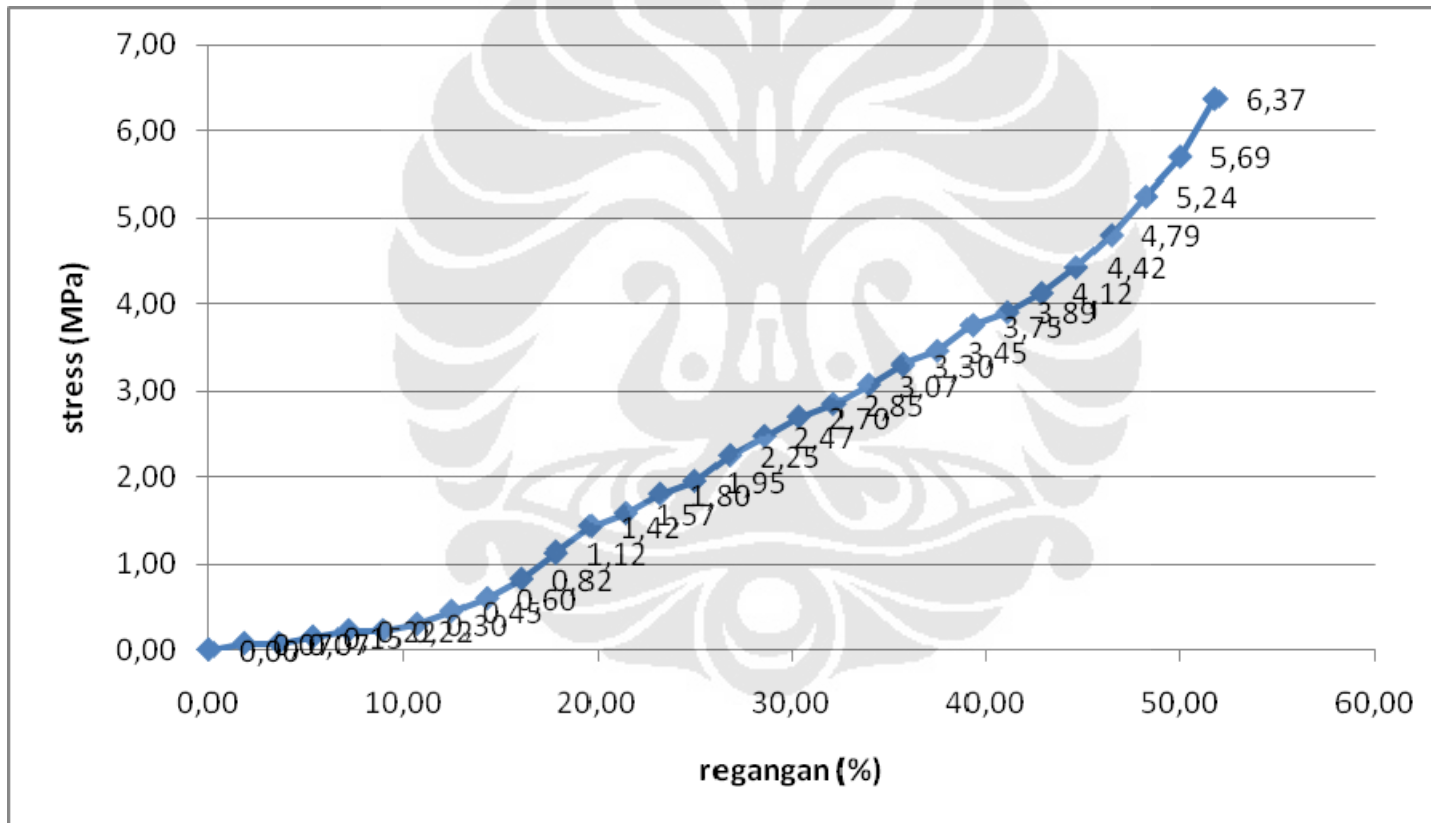
- diameter awal = 20,62 mm
- tinggi awal = 11,20 mm
- dimensi akhir = hancur

Data Uji Tekan Sampel 50% NaCl

sumbu X (mm)	gaya tekan (kN/cm)	ΔL (mm)	gaya tekan (N)	stess (MPa)	strain (%)
0	0	0	0	0,00	0,00
1	1	0,2	25	0,07	1,79
2	1	0,4	25	0,07	3,57
3	2	0,6	50	0,15	5,36
4	3	0,8	75	0,22	7,14
5	3	1	75	0,22	8,93
6	4	1,2	100	0,30	10,71
7	6	1,4	150	0,45	12,50
8	8	1,6	200	0,60	14,29
9	11	1,8	275	0,82	16,07
10	15	2	375	1,12	17,86
11	19	2,2	475	1,42	19,64
12	21	2,4	525	1,57	21,43
13	24	2,6	600	1,80	23,21
14	26	2,8	650	1,95	25,00
15	30	3	750	2,25	26,79
16	33	3,2	825	2,47	28,57
17	36	3,4	900	2,70	30,36
18	38	3,6	950	2,85	32,14
19	41	3,8	1025	3,07	33,93
20	44	4	1100	3,30	35,71
21	46	4,2	1150	3,45	37,50
22	50	4,4	1250	3,75	39,29
23	52	4,6	1300	3,89	41,07
24	55	4,8	1375	4,12	42,86
25	59	5	1475	4,42	44,64
26	64	5,2	1600	4,79	46,43
27	70	5,4	1750	5,24	48,21
28	76	5,6	1900	5,69	50,00
29	85	5,8	2125	6,37	51,79

Lampiran 20

Grafik Uji Tekan Sampel 50% NaCl



Lampiran 21

Grafik Uji Tekan dengan Mesin Schenck Trebel untuk tiga Variabel

