

LAMPIRAN

A. Deskriptif

Descriptives

			Statistic	Std. Error
TEG. MAX (?U) (MPA)	Mean		31.6956	1.68030
	95% Confidence Interval for Mean	Lower Bound	28.1142	
		Upper Bound	35.2771	
	5% Trimmed Mean		31.3168	
	Median		29.0750	
	Variance		45.174	
	Std. Deviation		6.72118	
	Minimum		23.49	
	Maximum		46.72	
	Range		23.23	
	Interquartile Range		10.76	
	Skewness		.907	.564
	Kurtosis		-.127	1.091
	REGANGAN (?) (%)	Mean		1.2750
95% Confidence Interval for Mean		Lower Bound	1.1187	
		Upper Bound	1.4313	
5% Trimmed Mean			1.2611	
Median			1.2000	
Variance			.086	
Std. Deviation			.29326	
Minimum			.80	
Maximum			2.00	
Range			1.20	
Interquartile Range			.35	
Skewness			.915	.564
Kurtosis			1.513	1.091
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN		Mean		25.8562
	95% Confidence Interval for Mean	Lower Bound	22.2989	
		Upper Bound	29.4136	
	5% Trimmed Mean		25.8969	
	Median		26.4300	
	Variance		44.567	
	Std. Deviation		6.67585	
	Minimum		12.99	
	Maximum		37.99	
	Range		25.00	
	Interquartile Range		9.60	
	Skewness		-.221	.564
	Kurtosis		-.307	1.091

B. Uji Normalitas

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
TEG. MAX (?U) (MPA)	.265	16	.004	.875	16	.032
REGANGAN (?) (%)	.216	16	.044	.927	16	.216
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN	.088	16	.200*	.987	16	.996

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

C. Uji Homogenitas

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
TEG. MAX (?U) (MPA)	.628	3	12	.611
REGANGAN (?) (%)	.801	3	12	.517
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN	1.252	3	12	.334

D. Uji Anova

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TEG. MAX (?U) (MPA)	Between Groups	255.445	3	85.148	2.420	.117
	Within Groups	422.170	12	35.181		
	Total	677.615	15			
REGANGAN (?) (%)	Between Groups	.080	3	.027	.264	.850
	Within Groups	1.210	12	.101		
	Total	1.290	15			
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN	Between Groups	194.742	3	64.914	1.644	.231
	Within Groups	473.762	12	39.480		
	Total	668.504	15			

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
TEG. MAX (?U) (MPA)	0 %	4	29.2250	6.64099	3.32049	18.6577	39.7923	23.49	38.64
	0.13 %	4	38.2275	7.58251	3.79126	28.1620	50.2930	28.32	46.72
	0.26 %	4	31.5150	5.65853	2.82927	22.5110	40.5190	27.78	39.82
	0.40 %	4	27.8150	2.66590	1.33295	23.5730	32.0570	24.09	30.07
	Total	16	31.6956	6.72118	1.68030	28.1142	35.2771	23.49	46.72
REGANGAN (?) (%)	0 %	4	1.3750	.41932	.20966	.7078	2.0422	1.10	2.00
	0.13 %	4	1.2750	.33040	.16520	.7493	1.8007	.90	1.70
	0.26 %	4	1.1750	.29881	.14930	.6998	1.6502	.80	1.50
	0.40 %	4	1.2750	.17078	.08539	1.0032	1.5468	1.10	1.50
	Total	16	1.2750	.29328	.07331	1.1187	1.4313	.80	2.00
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN	0 %	4	22.6350	7.91685	3.95843	10.0375	35.2325	12.99	32.20
	0.13 %	4	30.3475	2.44941	1.22471	26.4499	34.2451	27.48	33.09
	0.26 %	4	28.1650	8.21845	4.10923	15.0876	41.2424	18.52	37.99
	0.40 %	4	22.2775	4.65849	2.32924	14.8648	29.6902	16.06	27.34
	Total	16	25.8583	6.67585	1.66896	22.2989	29.4136	12.99	37.99

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TEG. MAX (?U) (MPA)	Between Groups	255.445	3	85.148	2.420	.117
	Within Groups	422.170	12	35.181		
	Total	677.615	15			
REGANGAN (?) (%)	Between Groups	.080	3	.027	.264	.850
	Within Groups	1.210	12	.101		
	Total	1.290	15			
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN	Between Groups	194.742	3	64.914	1.644	.231
	Within Groups	473.762	12	39.480		
	Total	668.504	15			

E. Post Hoc Tests

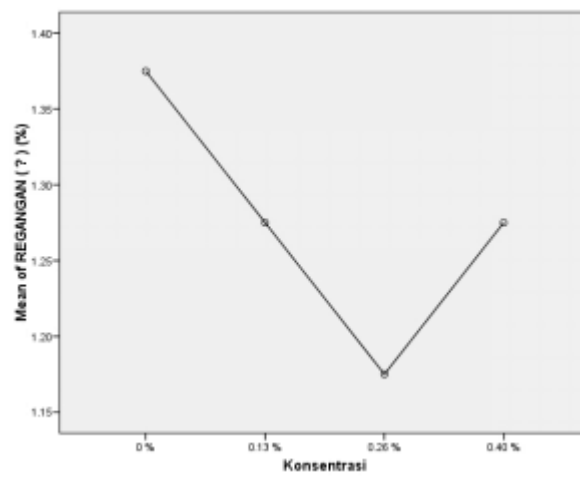
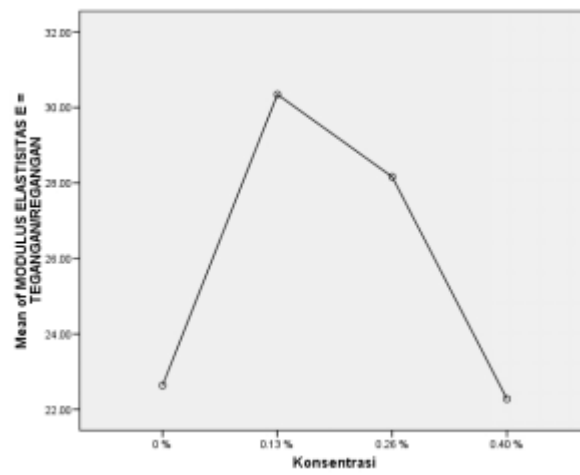
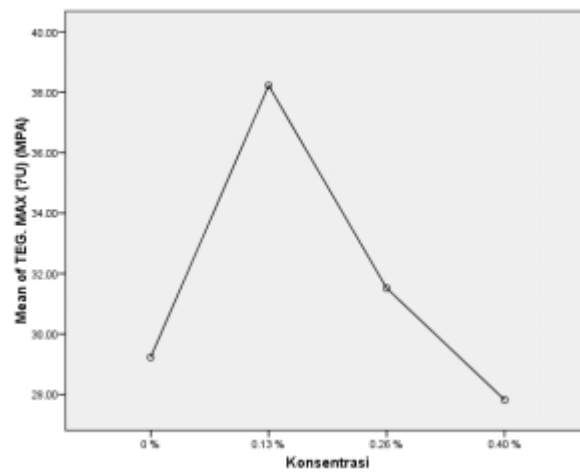
Multiple Comparisons

LSD

Dependent Variable	(I) Konsentrasi	(J) Konsentrasi	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
TEG. MAX (?U) (MPA)	0 %	0.13 %	-9.00250	4.19409	.053	-18.1406	.1356
		0.26 %	-2.29000	4.19409	.595	-11.4281	6.8481
		0.40 %	1.41000	4.19409	.743	-7.7281	10.5481
	0.13 %	0 %	9.00250	4.19409	.053	-.1356	18.1406
		0.26 %	6.71250	4.19409	.135	-2.4256	15.8506
		0.40 %	10.41250*	4.19409	.029	1.2744	19.5506
	0.26 %	0 %	2.29000	4.19409	.595	-6.8481	11.4281
		0.13 %	-6.71250	4.19409	.135	-15.8506	2.4256
		0.40 %	3.70000	4.19409	.395	-5.4381	12.8381
	0.40 %	0 %	-1.41000	4.19409	.743	-10.5481	7.7281
		0.13 %	-10.41250*	4.19409	.029	-19.5506	-1.2744
		0.26 %	-3.70000	4.19409	.395	-12.8381	5.4381
REGANGAN (?) (%)	0 %	0.13 %	.10000	.22454	.664	-.3892	.5892
		0.26 %	.20000	.22454	.391	-.2892	.6892
		0.40 %	.10000	.22454	.664	-.3892	.5892
	0.13 %	0 %	-.10000	.22454	.664	-.5892	.3892
		0.26 %	.10000	.22454	.664	-.3892	.5892
		0.40 %	.00000	.22454	1.000	-.4892	.4892
	0.26 %	0 %	-.20000	.22454	.391	-.6892	.2892
		0.13 %	-.10000	.22454	.664	-.5892	.3892
		0.40 %	-.10000	.22454	.664	-.5892	.3892
	0.40 %	0 %	-.10000	.22454	.664	-.5892	.3892
		0.13 %	.00000	.22454	1.000	-.4892	.4892
		0.26 %	.10000	.22454	.664	-.3892	.5892
MODULUS ELASTISITAS E = TEGANGAN/REGANGAN	0 %	0.13 %	-7.71250	4.44298	.108	-17.3929	1.9679
		0.26 %	-5.53000	4.44298	.237	-15.2104	4.1504
		0.40 %	.35750	4.44298	.937	-9.3229	10.0379
	0.13 %	0 %	7.71250	4.44298	.108	-1.9679	17.3929
		0.26 %	2.18250	4.44298	.632	-7.4979	11.8629
		0.40 %	8.07000	4.44298	.094	-1.6104	17.7504
	0.26 %	0 %	5.53000	4.44298	.237	-4.1504	15.2104
		0.13 %	-2.18250	4.44298	.632	-11.8629	7.4979
		0.40 %	5.88750	4.44298	.210	-3.7929	15.5679
	0.40 %	0 %	-.35750	4.44298	.937	-10.0379	9.3229
		0.13 %	-8.07000	4.44298	.094	-17.7504	1.6104
		0.26 %	-5.88750	4.44298	.210	-15.5679	3.7929

*. The mean difference is significant at the .05 level.

F. Means Plots



G. NPar Tests

Kruskal-Wallis Test

Ranks

	Konsentrasi	N	Mean Rank
TEG. MAX (?U) (MPA)	0 %	4	6.25
	0.13 %	4	12.25
	0.26 %	4	9.25
	0.40 %	4	6.25
	Total	16	

Test Statistics^{a,b}

	TEG. MAX (?U) (MPA)
Chi-Square	4.368
df	3
Asymp. Sig.	.224

a. Kruskal Wallis Test

b. Grouping Variable: Konsentrasi

H. Uji Etik



UMY UNIVERSITAS
MUHAMMADIYAH
YOGYAKARTA

FAKULTAS
KEDOKTERAN DAN
ILMU KESEHATAN

Nomor : 050/EP-FKIK-UMY/1/2018

KETERANGAN LOLOS Uji ETIK *ETHICAL APPROVAL*

Komite Etik Penelitian Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta dalam upaya melindungi hak asasi dan kesejahteraan responden/subyek penelitian, telah mengkaji dengan teliti protokol berjudul :

The Ethics Committee of the Faculty of Medicine and Health Sciences, University of Muhammadiyah Yogyakarta, with regards of the protection of human rights and welfare in research, has carefully reviewed the research protocol entitled :

"Pengaruh Konsentrasi Nano Kitosan Terhadap Modulus Elastisitas Resin Akrilik"

Peneliti Utama : Fahmy Yahya

Principal Investigator

Nama Institusi : Program Studi Kedokteran Gigi FKIK UMY

Name of the Institution

Negara : Indonesia

Country

Dan telah menyetujui protokol tersebut diatas.

And approved the above-mentioned protocol.

Yogyakarta, 03 Februari 2018

Ketua
Chairman

Dr. dr. Titiek Hidayati, M.Kes.,
FSPH., FISC.M.

***Peneliti Berkeajiban :**

1. Menjaga kerahasiaan identitas subyek penelitian
2. Memberitahukan status penelitian apabila :
 - a. Setelah masa berlakunya keterangan lolos uji etik, penelitian masih belum selesai, dalam hal ini *ethical clearance* harus diperpanjang
 - b. Penelitian berhenti di tengah jalan
3. Melaporkan kejadian serius yang tidak diinginkan (*serious adverse events*)
4. Peneliti tidak boleh melakukan tindakan apapun pada responden/subyek sebelum penelitian lolos uji etik

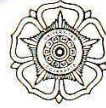
ADDRESS

Kampus Terpadu UMY Gd. Siti Walidah LT.3
Jl. Brawijaya (Lingkar Selatan)
Tamantirto - Kasihan - Bantul
D.I.Yogyakarta 55183

CONTACT

Phone : (0274) 387656 ext. 213
Fax : (0274) 387658
Email : fkik@umy.ac.id
www.fkik.umy.ac.id

I. Hasil Pengujian Tarik



LABORATORIUM BAHAN TEKNIK
DEPARTEMEN TEKNIK MESIN SEKOLAH VOKASI
UNIVERSITAS GADJAH MADA

HASIL PENGUJIAN TARIK
 No. 220 / P.Trk / BT.DTM / 2017

Spesimen Komposit Acrylic Resin + Nano kitosan

No.	Kode	Teg. Max (σ_u) (MPa)	Regangan (ϵ) (%)
1	0%	1	25.97
2		2	38.64
3		3	28.80
4		4	23.49
5	0.13%	1	46.72
6		2	39.71
7		3	28.32
8		4	38.16
9	0.26%	1	28.07
10		2	30.39
11		3	27.78
12		4	39.82
13	0.40%	1	30.07
14		2	24.09
15		3	27.75
16		4	29.35

Lembar asli, tidak untuk digandakan

Keterangan :

1. Pengujian dilakukan pada tanggal 08 Desember 2017

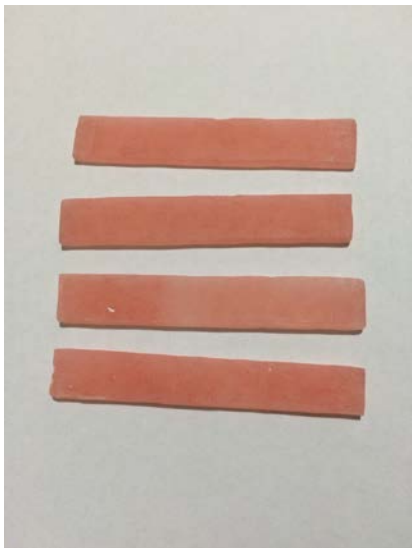
Yogyakarta, 11 Desember 2017
 Staf Laboratorium Bahan Teknik



Puji Priyana, SST.
 NIP. 196704101999031002



Gambar 1. Pengujian uji tarik dengan UTM



Gambar 2. Plat Resin Akrilik