DATAR PUSTAKA

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LAMPIRAN

Lampiran 1. Hasil Pengujian XRD

*** Basic Data Process ***

Group : Standard
Data : xrd#keratin

Strongest 3 peaks

no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	14	23.0100	3.86205	100	0.70000	114	6499
2	19	27.6541	3.22312	49	0.60170	56	1635
3	17	25.7850	3.45236	48	0.71000	55	2120

Group : Standard
Data : kc#0

Strongest 3 peaks

no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	69	44.0399	2.05452	100	0.16880	408	3376
2	16	19.8800	4.46249	28	0.00000	116	0
3	15	19.6400	4.51647	24	0.00000	96	0

Group : Standard
Data : kc#2

Strongest 3 peaks

no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	76	44.0638	2.05346	100	0.17880	348	3434
2	12	19.5000	4.54858	30	0.00000	103	0
3	13	19.7800	4.48482	26	0.00000	91	0

Group : Standard
Data : kc#5

Strongest 3 peaks

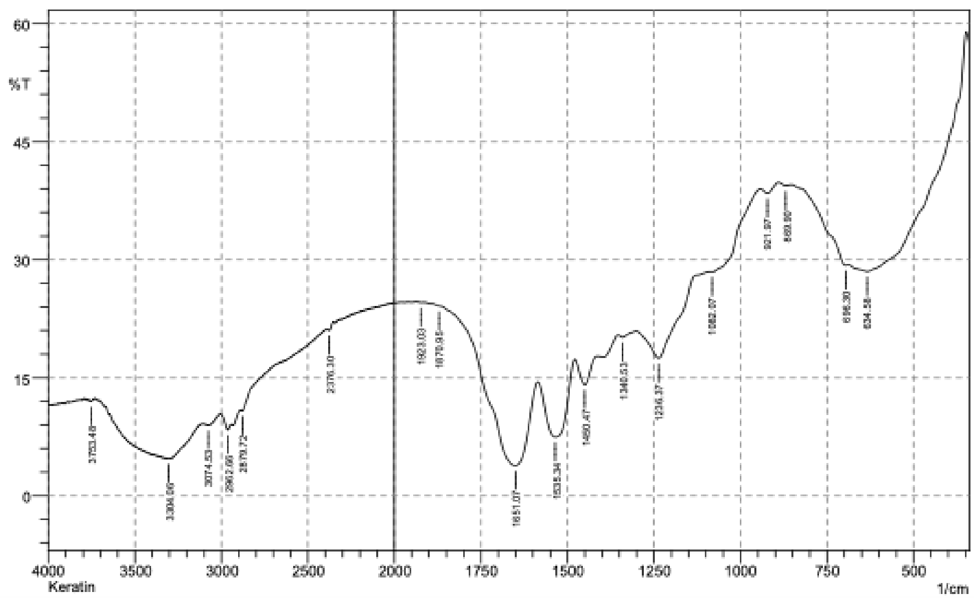
no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	84	44.0167	2.05555	100	0.17280	265	2434
2	23	19.5600	4.53476	67	0.00000	177	0
3	24	19.7800	4.48482	61	0.00000	162	0

Group : Standard
Data : kc#8

Strongest 3 peaks

no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	15	44.0615	2.05356	100	0.17140	619	5542
2	13	37.8187	2.37694	13	0.15120	79	720
3	8	18.9600	4.67689	13	0.00000	78	0

Lampiran 2. Hasil Pengujian FTIR



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	634.58	28.501	5.542	688.59	347.19	155.009	24.977
2	696.3	29.28	0.562	852.54	688.59	74.909	0.153
3	869.9	39.402	0.252	889.18	854.47	14	0.056
4	921.97	38.45	0.856	941.26	891.11	20.526	0.252
5	1082.07	28.457	0.433	1087.85	943.19	70.053	1.45
6	1236.37	17.452	5.735	1300.02	1089.78	136.928	8.861
7	1340.53	20.125	0.387	1352.1	1301.95	34.519	0.17
8	1450.47	14.12	3.355	1477.47	1413.82	51.035	2.875
9	1535.34	7.447	8.322	1583.56	1479.4	102.889	19.531
10	1651.07	3.827	12.896	1865.17	1585.49	261.956	58.362
11	1870.95	24.099	0.047	1915.31	1867.09	29.58	-0.013
12	1923.03	24.547	0.047	1938.46	1915.31	14.106	0.009
13	2376.3	21.013	0.528	2389.8	2355.08	23.264	0.205
14	2879.72	10.8	0.273	2889.37	2391.73	386.99	0.111
15	2962.66	8.38	1.088	3005.1	2943.37	63.993	1.405
16	3074.53	8.966	0.581	3107.32	3007.02	102.878	1.505
17	3304.06	4.732	4.839	3645.46	3109.25	640.811	97.849
18	3753.48	11.972	0.312	3772.76	3732.26	37.08	0.206

Comment;
Keratin

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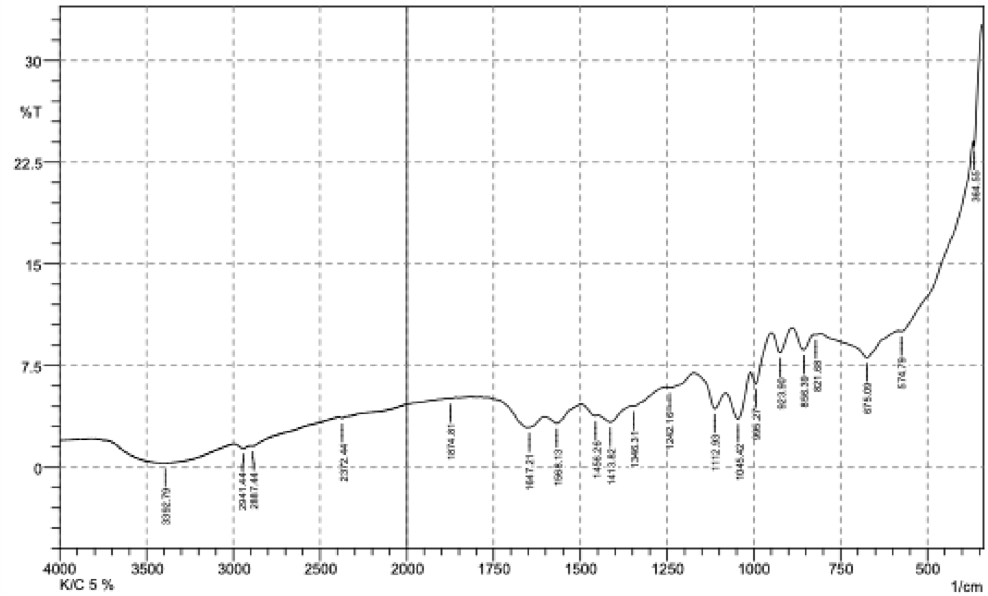
No. of Scans;
Resolution;
Apodization;

SHIMADZU



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	364.55	23.74	0.957	366.48	341.4	13.674	-0.188
2	574.79	10.022	0.541	582.5	368.4	180.466	7.751
3	675.09	8.079	1.888	806.25	584.43	230.305	7.972
4	821.68	9.783	0.015	825.53	808.17	17.508	0.008
5	856.39	8.671	1.348	889.18	827.46	63.557	1.899
6	923.9	8.45	1.621	948.98	891.11	59.668	2.054
7	995.27	6.166	1.495	1008.77	950.91	64.165	1.888
8	1045.42	3.572	2.654	1080.14	1010.7	92.053	8.201
9	1112.93	4.319	1.661	1170.79	1082.07	111.43	4.006
10	1242.16	5.863	0.22	1255.66	1172.72	99.98	1.112
11	1346.31	4.51	0.077	1350.17	1257.59	119.02	0.316
12	1413.82	3.333	0.725	1444.68	1352.1	131.056	3.305
13	1456.26	3.792	0.107	1494.83	1452.4	58.738	0.359
14	1568.13	3.24	0.771	1602.85	1521.84	116.408	3.623
15	1647.21	2.922	0.052	1649.14	1604.77	65.755	0.284
16	1874.81	5.076	0.031	1882.52	1859.38	29.922	0.044
17	2372.44	3.627	0.101	2389.8	2355.08	49.816	0.223
18	2887.44	1.566	0.083	2902.87	2391.73	805.396	0.353
19	2941.44	1.397	0.243	2993.52	2904.8	161.305	3.117
20	3392.79	0.305	0.02	3398.57	2995.45	859.189	5.828

Comment;
K/C 5 %

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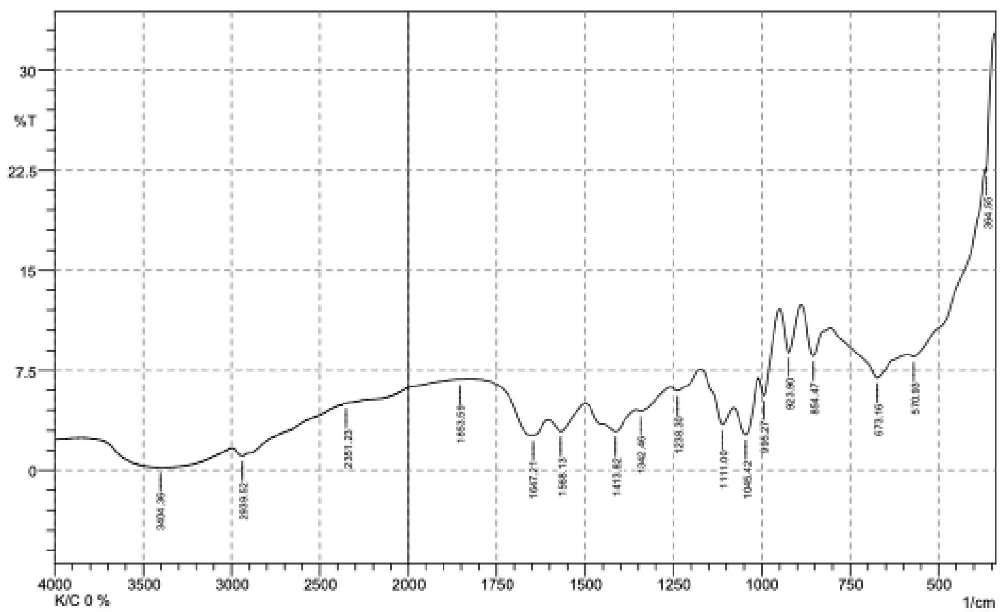
Resolution;
Apodization;

SHIMADZU



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	364.55	22.465	0.934	366.48	341.4	13.787	-0.383
2	570.93	8.538	1.248	588.29	368.4	200.102	12.786
3	673.16	6.935	2.52	806.25	590.22	231.075	11.476
4	854.47	8.584	3.061	889.18	808.17	80.701	4.527
5	923.9	8.847	3.348	948.98	891.11	56.7	3.869
6	995.27	5.6	2.506	1008.77	950.91	63.198	3.369
7	1045.42	2.673	3.096	1078.21	1010.7	95.095	11.228
8	1111	3.415	2.237	1172.72	1080.14	120.481	6.988
9	1238.3	5.974	0.586	1257.59	1174.65	98.455	2.154
10	1342.46	4.443	0.3	1354.03	1259.52	121.473	1.339
11	1413.82	2.925	0.976	1452.4	1355.96	139.865	4.889
12	1568.13	2.924	1.298	1604.77	1498.69	151.256	7.163
13	1647.21	2.605	0.116	1651.07	1606.7	66.997	0.609
14	1853.59	6.81	0.014	1857.45	1845.88	13.497	0.005
15	2351.23	5.049	0.01	2355.08	2333.87	27.485	0.019
16	2939.52	1.094	0.862	2995.45	2357.01	999.038	25.269
17	3404.36	0.223	0	3408.22	3398.57	25.565	0.004

Comment;

K/C 0 %

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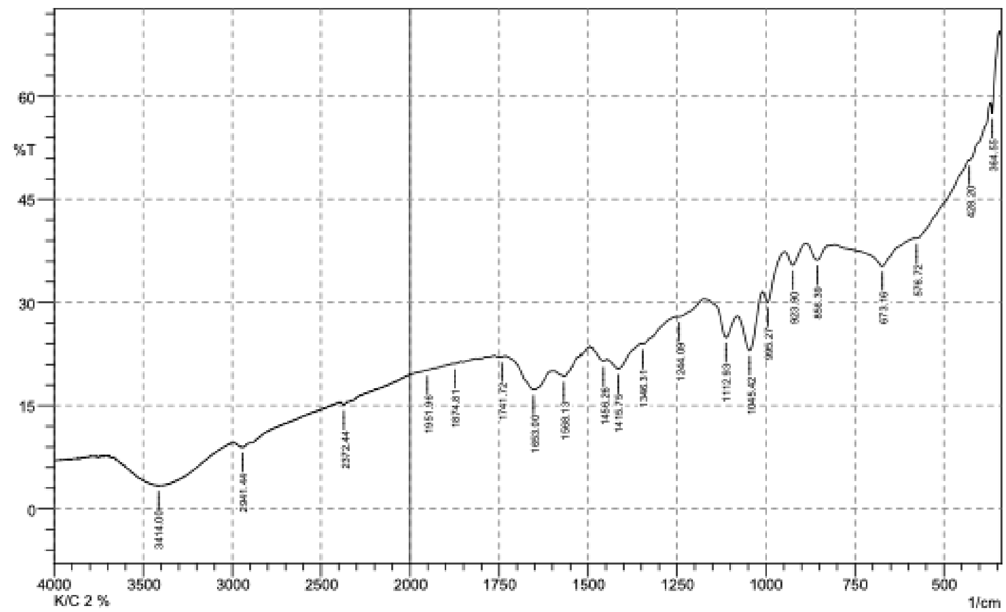
No. of Scans;

Resolution;

Apodization;

SHIMADZU



No.	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	364.55	57.49	3.77	370.33	343.33	5.372	0.142
2	428.2	50.704	0.269	430.13	370.33	16.03	0.432
3	576.72	39.34	0.161	578.64	432.05	51.894	0.681
4	673.16	35.309	3.65	806.25	580.57	96.136	3.533
5	856.39	36.189	2.333	887.26	808.17	33.648	0.861
6	923.9	35.434	2.448	947.05	889.18	25.076	0.772
7	995.27	30.042	2.809	1008.77	948.98	28.345	0.733
8	1045.42	23.037	6.76	1080.14	1010.7	40.268	3.752
9	1112.93	24.913	3.961	1172.72	1082.07	50.206	1.804
10	1244.09	27.95	0.201	1249.87	1174.65	40.463	0.303
11	1346.31	23.952	0.23	1350.17	1251.8	57.48	0.137
12	1415.75	20.348	2.087	1444.68	1352.1	61.057	1.725
13	1456.26	21.454	0.662	1487.12	1446.61	26.576	0.343
14	1568.13	19.258	0.405	1571.99	1529.55	29.307	0.327
15	1653	17.339	0.308	1722.43	1649.14	51.88	-0.032
16	1741.72	22.042	0.106	1747.51	1737.86	6.326	0.012
17	1874.81	21.102	0.094	1880.6	1859.38	14.294	0.034
18	1951.96	20.17	0.055	1955.82	1932.67	16.03	0.019
19	2372.44	15.111	0.49	2391.73	2333.87	46.987	0.366
20	2941.44	8.962	1.163	2991.59	2393.66	547.434	4.727
21	3414	3.382	0.099	3643.53	3408.22	313.93	5.465

Comment;

K/C 2 %

Date/Time; 6/8/2023 4:53:53 PM

No. of Scans;

Resolution;

Apodization;

Lampiran 3. Hasil Pengujian Texture Analyzer

Kementerian Perindustrian
REPUBLIK INDONESIA

BADAN STANDARDISASI DAN KEBIJAKAN JASA INDUSTRI
LABORATORIUM PENGUJI BBSPJIHPMM
Jalan Prof. Dr. H. Abdurrahman Basalamah, MA No.28 Makassar 90231
Telp: (0411) 441207 Fax: (0411) 441135 Website: www.bbihp.kemenperin.go.id E-mail: bbihp@kemenperin.go.id

LAPORAN PENGUJIAN
Nomor : 2.3565/LU-BBSPJIHPMM/VI/2023

Nomor Analisis : P. 3302
Tanggal Penerimaan : 30 Mei 2023
Nama Pelanggan : Gunawan
Alamat : Jurusan Fisika, Universitas Hsanuddin
Nama Contoh : Bioplastik
Keterangan Contoh : Kode 760.1055.1, Sampel KC 0%, Keadaan Contoh Baik, Untuk Analisis Fisika
Pengambilan Contoh : -
Berita Acara : -
Tanggal Analisis : 05 Juni 2023
Tanggal Penerbitan : 13 Juni 2023

Setelah dilakukan pengujian, diperoleh hasil sebagai berikut :

Parameter	Satuan	Hasil	Metode Uji
Kuat Tarik	N/mm^2	0,5127	IK-MT-28.01
		0,5632	
Kuat Mulur	%	132,16	IK-MT-28.01
		110,55	

Koordinator Inspeksi Teknis, Pengujian dan Kalibrasi

MAMANG

Kementerian Perindustrian
REPUBLIK INDONESIA

BADAN STANDARDISASI DAN KEBIJAKAN JASA INDUSTRI
LABORATORIUM PENGUJI BBSPJIHPMM
Jalan Prof. Dr. H. Abdurrahman Basalamah, MA No.28 Makassar 90231
Telp: (0411) 441207 Fax: (0411) 441135 Website: www.bbihp.kemenperin.go.id E-mail: bbihp@kemenperin.go.id

LAPORAN PENGUJIAN
Nomor : 2.3566/LU-BBSPJIHPMM/VI/2023

Nomor Analisis : P. 3303
Tanggal Penerimaan : 30 Mei 2023
Nama Pelanggan : Gunawan
Alamat : Jurusan Fisika, Universitas Hsanuddin
Nama Contoh : Bioplastik
Keterangan Contoh : Kode 760.1055.2, Sampel KC 2%, Keadaan Contoh Baik, Untuk Analisis Fisika
Pengambilan Contoh : -
Berita Acara : -
Tanggal Analisis : 05 Juni 2023
Tanggal Penerbitan : 13 Juni 2023

Setelah dilakukan pengujian, diperoleh hasil sebagai berikut :

Parameter	Satuan	Hasil	Metode Uji
Kuat Tarik	N/mm^2	0,3189	IK-MT-28.01
		0,2933	
Kuat Mulur	%	101,00	IK-MT-28.01
		101,73	

Koordinator Inspeksi Teknis, Pengujian dan Kalibrasi

MAMANG

Kementerian Perindustrian REPUBLIK INDONESIA

BADAN STANDARDISASI DAN KEBIJAKAN JASA INDUSTRI
LABORATORIUM PENGUJI BBSPJIHPMM
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LAPORAN PENGUJIAN

Nomor : 2.3567/LU-BBSPJIHPMM/VI/2023

Nomor Analisis	:	P. 3304
Tanggal Penerimaan	:	30 Mei 2023
Nama Pelanggan	:	Gunawan
Alamat	:	Jurusan Fisika, Universitas Hsanuddin
Nama Contoh	:	Bioplastik
Keterangan Contoh	:	Kode 760.1055.3, Sampel KC 5%, Keadaan Contoh Baik, Untuk Analisis Fisika
Pengambilan Contoh	:	-
Berita Acara	:	-
Tanggal Analisis	:	05 Juni 2023
Tanggal Penerbitan	:	13 Juni 2023

Setelah dilakukan pengujian, diperoleh hasil sebagai berikut :

Parameter	Satuan	Hasil	Metode Uji
Kuat Tarik	N/mm^2	0,3438	IK-MT-28.01
		0,4903	
Kuat Mulur	%	108,78	IK-MT-28.01
		133,18	

Koordinator Inspeksi Teknis, Pengujian dan Kalibrasi

MAMANG

Kementerian Perindustrian REPUBLIK INDONESIA

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LABORATORIUM PENGUJI BBSPJIHPMM
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LAPORAN PENGUJIAN

Nomor : 2.3568/LU-BBSPJIHPMM/VI/2023

Nomor Analisis	:	P. 3305
Tanggal Penerimaan	:	30 Mei 2023
Nama Pelanggan	:	Gunawan
Alamat	:	Jurusan Fisika, Universitas Hasanuddin
Nama Contoh	:	Bioplastik
Keterangan Contoh	:	Kode 760.1055.4, Sampel KC 8%, Keadaan Contoh Baik, Untuk Analisis Fisika
Pengambilan Contoh	:	-
Berita Acara	:	-
Tanggal Analisis	:	05 Juni 2023
Tanggal Penerbitan	:	13 Juni 2023

Setelah dilakukan pengujian, diperoleh hasil sebagai berikut :

Parameter	Satuan	Hasil	Metode Uji
Kuat Tarik	N/mm^2	0,4265	IK-MT-28.01
		0,3395	
Kuat Mulur	%	67,99	IK-MT-28.01
		112,95	

Koordinator Inspeksi Teknis, Pengujian dan Kalibrasi

MAMANG

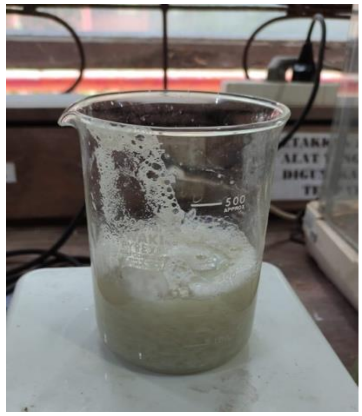
Lampiran 4. Dokumentasi Penelitian

- Proses Pembersihan Bulu Ayam




- Proses Ekstraksi Keratin



- Proses Pembuatan Bioplastik