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LAMPIRAN

Lampiran 1. Dokumentasi Penelitian



(a) Sisik Ikan



(b) Bubuk Sisik Ikan



(c) Kitosan



(d) Deproteinasi



(e) Demineralisasi



(f) Deasetilasi



(g) Sintesis Sampel
Bioplastik



(h) Mencetak Bioplastik



(i) Pemanasan
Menggunakan Oven

Lampiran 2. Perhitungan Derajat Deasetilasi

$$A = 2 - \log \%T$$

$$\%T_{1655} = 12.80$$

$$\%T_{3450} = 3.75$$

$$A_{1655} = 2 - \log 12.80 = -1.107$$

$$A_{3450} = 2 - \log 3.75 = -0.574$$

$$\%DD = 87.8 - \left[3 \times \left(\frac{A_{1655}}{A_{3450}} \right) \right]$$

$$\%DD = 87.8 - \left[3 \times \left(\frac{-1.107}{-0.574} \right) \right]$$

$$\%DD = 87.8 - 5.78$$

$$\%DD = 84,1\%$$

Lampiran 3. Analisis Data XRD

Sampel	Sudut Difraksi (2θ)	FWHM (Deg)	Ukuran Kristal (nm)	Rata- Rata Ukuran Kristal (nm)
Bubuk kitosan	25.73	0.620	13.14	8.91
	31.98	1.380	5.98	
	39.61	0.890	9.46	
	46.55	0.890	9.76	
	49.39	0.860	10.19	
05KS/PVA/PEG	25.5	0.200	40.72	46,69
	31.4	0.466	17.68	
	39.55	0.126	66.62	
	44.06	0.157	54.34	
	49.07	0.161	54.10	
10KS/PVA/PEG	25.53	0.600	13.57	10,12
	31.82	1.365	6.05	
	39.45	1.300	6.49	
	46.42	0.720	12.00	
	49.21	0.700	12.48	
15KS/PVA/PEG	25.76	0.703	11.58	9,51
	32.00	1.375	6.01	
	39.62	1.200	7.03	
	46.78	0.800	10.81	
	49.54	0.720	12.15	
20KS/PVA/PEG	26.37	0.660	12.36	11,39
	32.64	1.455	5.68	
	40.24	1.080	7.83	
	47.35	0.580	14.95	
	48.71	0.540	16.14	