

# Oxygen Barrier Performance of Poly (Vinyl Alcohol) Coating Films with Different Induced Crystallinity and Model Predictions

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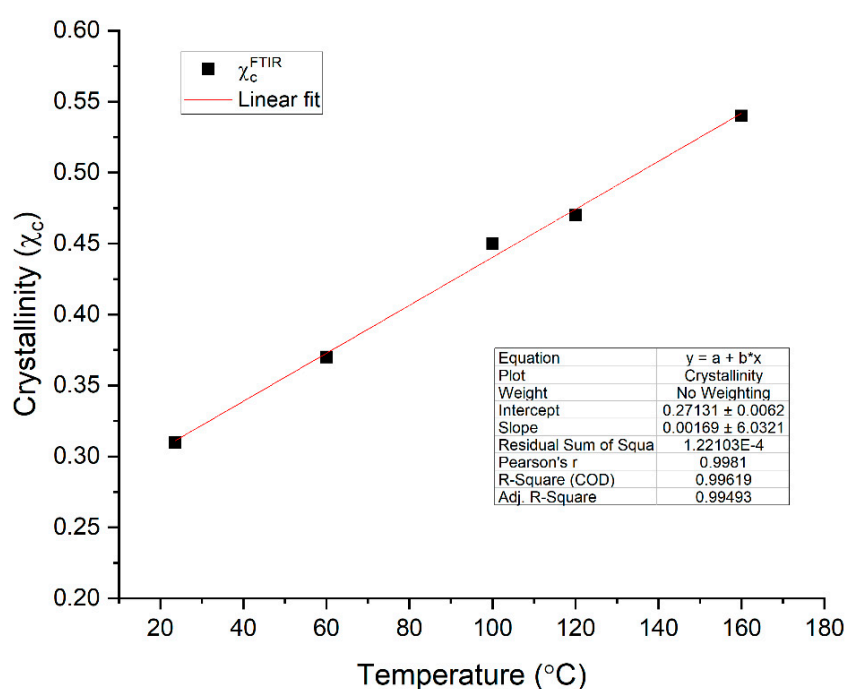
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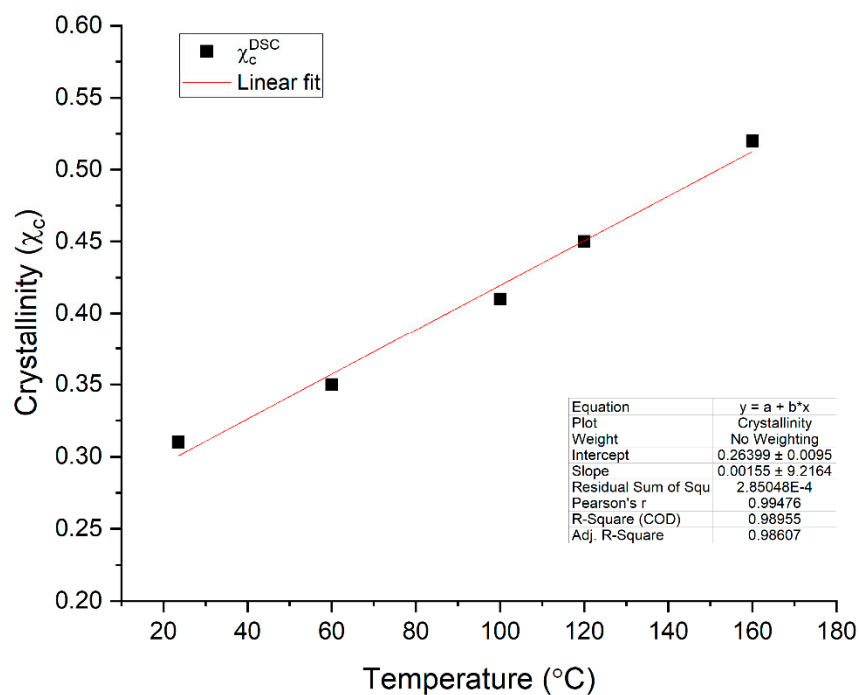
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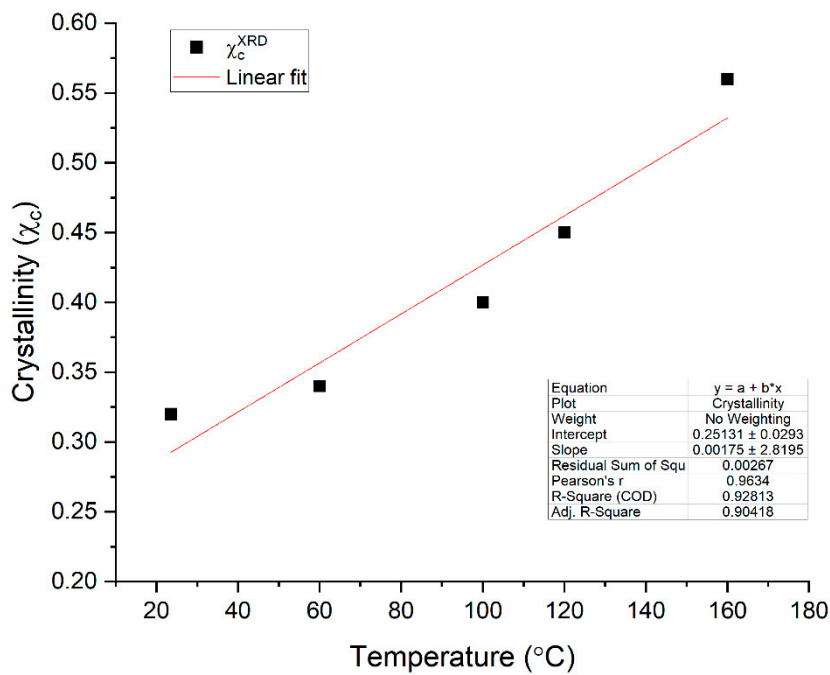
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**Figure S1.** Linear fit of the degree of crystallinity of PVOH coating films determined using FTIR absorbance spectra versus annealing temperatures.



**Figure S2.** Linear plot of the degree of crystallinity of PVOH films determined using DSC thermogram versus annealing temperatures.



**Figure S3.** Linear fit of the degree of crystallinity of PVOH coating films determined using XRD diffractogram versus annealing temperatures.

**Table S1.** Thickness measurement of PVOH coating film and PET substrate.

S. No.	Sample Names	OTR (cc/[m <sup>2</sup> ·day])			SD
		1	2	Average	
1	PET substrate	15.89577	15.77931	15.8375	0.0824
2	PVOH -RT	1.87694	1.58036	1.7287	0.2097
3	PVOH-60	1.41631	1.25155	1.3339	0.1165
4	PVOH-100	1.08052	1.17448	1.1275	0.0664
5	PVOH-120	0.89845	0.71357	0.8060	0.1307
6	PVOH-160	0.20939	0.47136	0.3404	0.1852