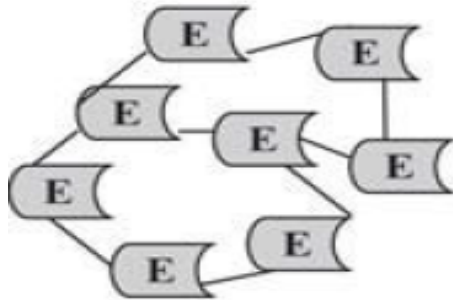
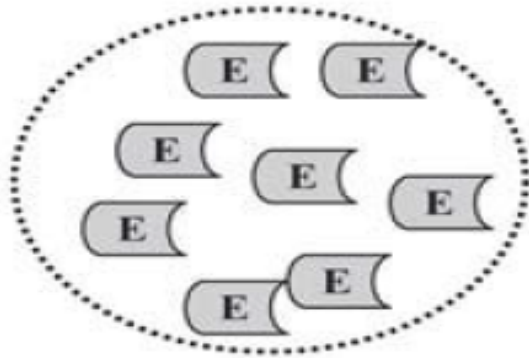
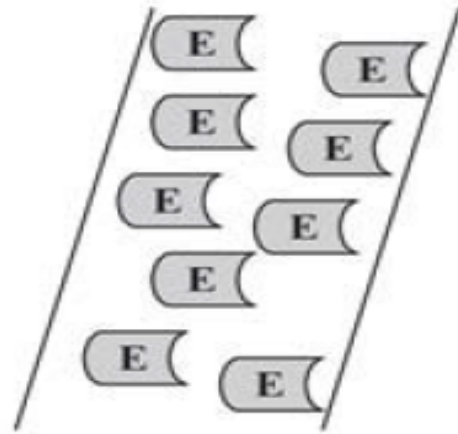
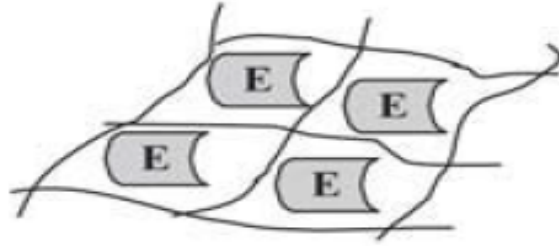
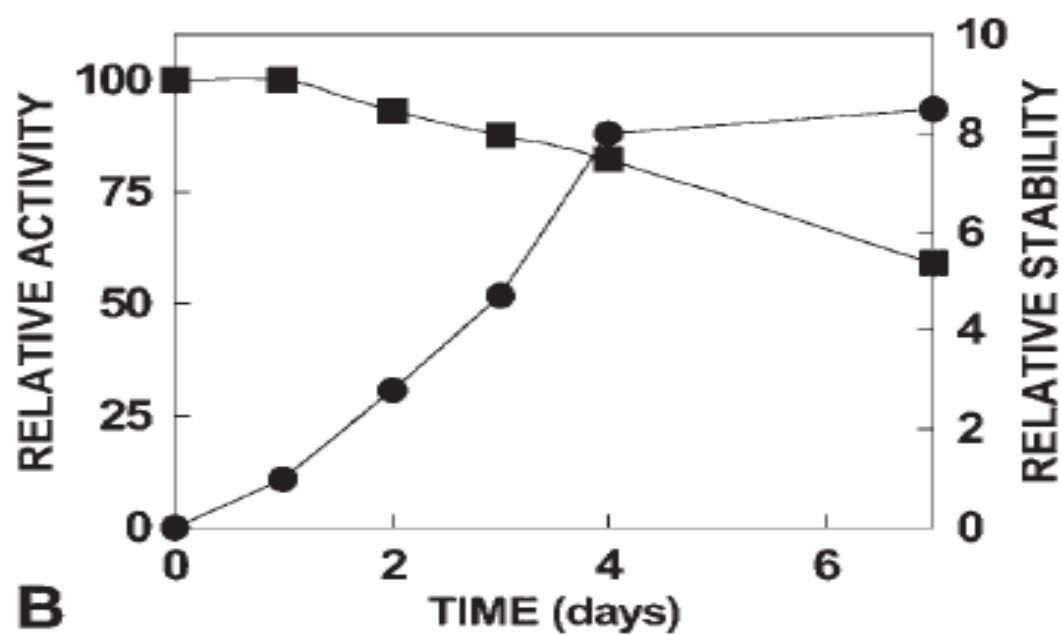
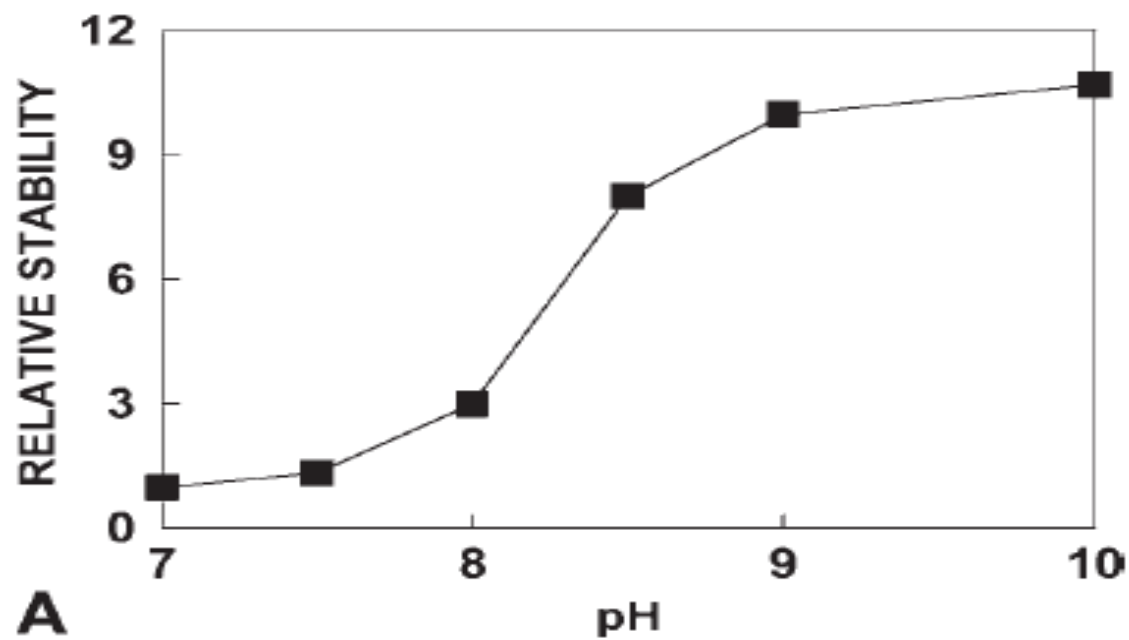


b)





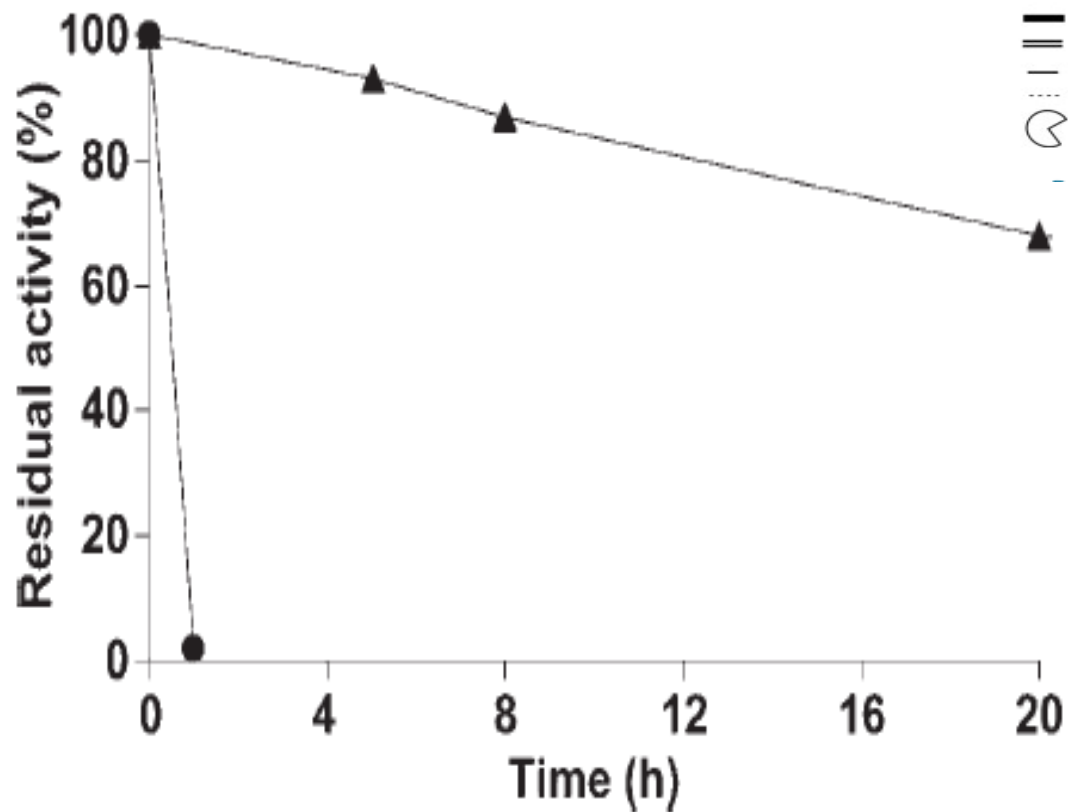


Fig. 4. Thermal stability of different GOX preparations. Triangle, immobilized on MANAE agarose activated with glutaraldehyde. Circle, soluble enzyme. Inactivation conditions were 56°C, pH 7.0, and 0.4 U/mL.



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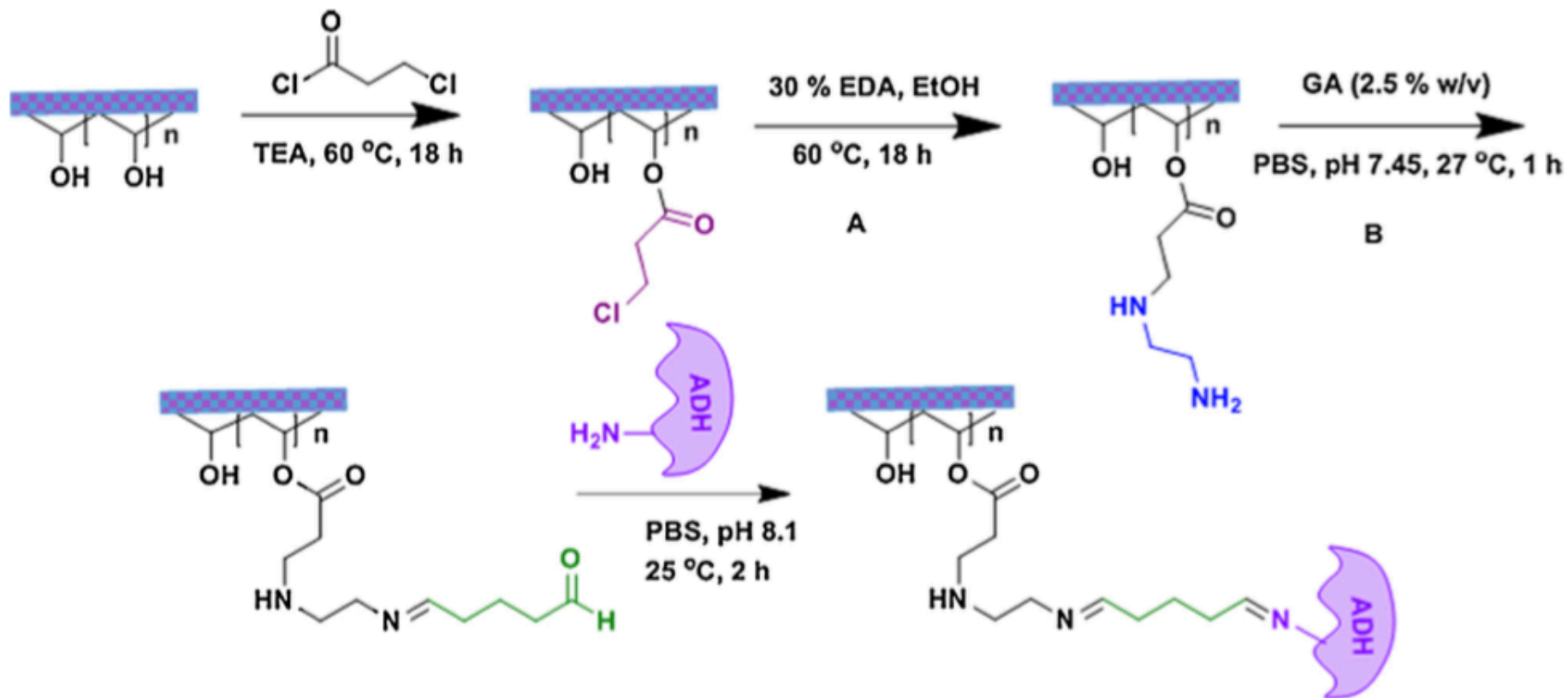
journal homepage: [www.elsevier.com/locate/btre](http://www.elsevier.com/locate/btre)

# Immobilization and stabilization of alcohol dehydrogenase on polyvinyl alcohol fibre

Priydarshani Shinde<sup>a,b</sup>, Mustafa Musameh<sup>a</sup>, Yuan Gao<sup>a</sup>, Andrea J. Robinson<sup>b</sup>, Ilias (Louis) Kyratzis<sup>a,\*</sup>

<sup>a</sup> CSIRO Manufacturing, Clayton, VIC 3168, Australia

<sup>b</sup> School of Chemistry, Monash University, Clayton, VIC 3800, Australia

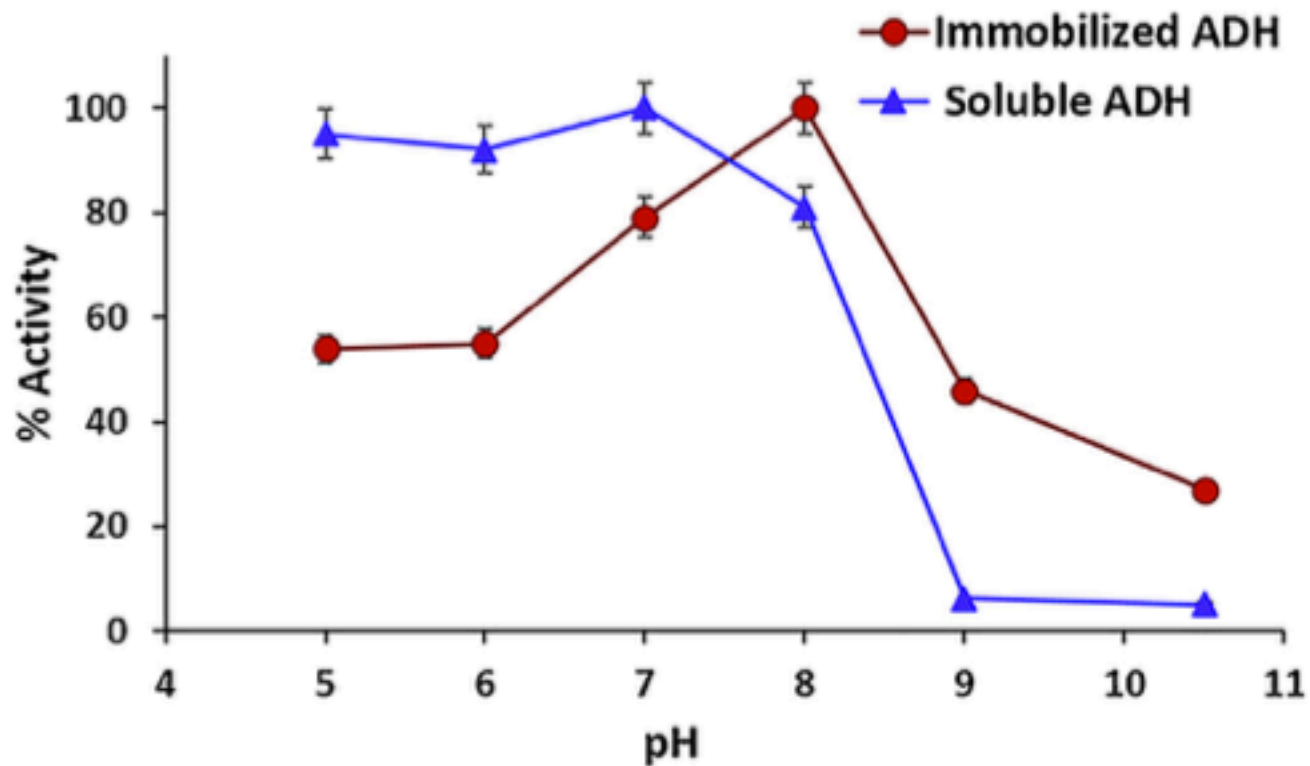


**Fig. 1.** Schematic representation of covalent immobilization of ADH on modified PVA fibrous carrier.

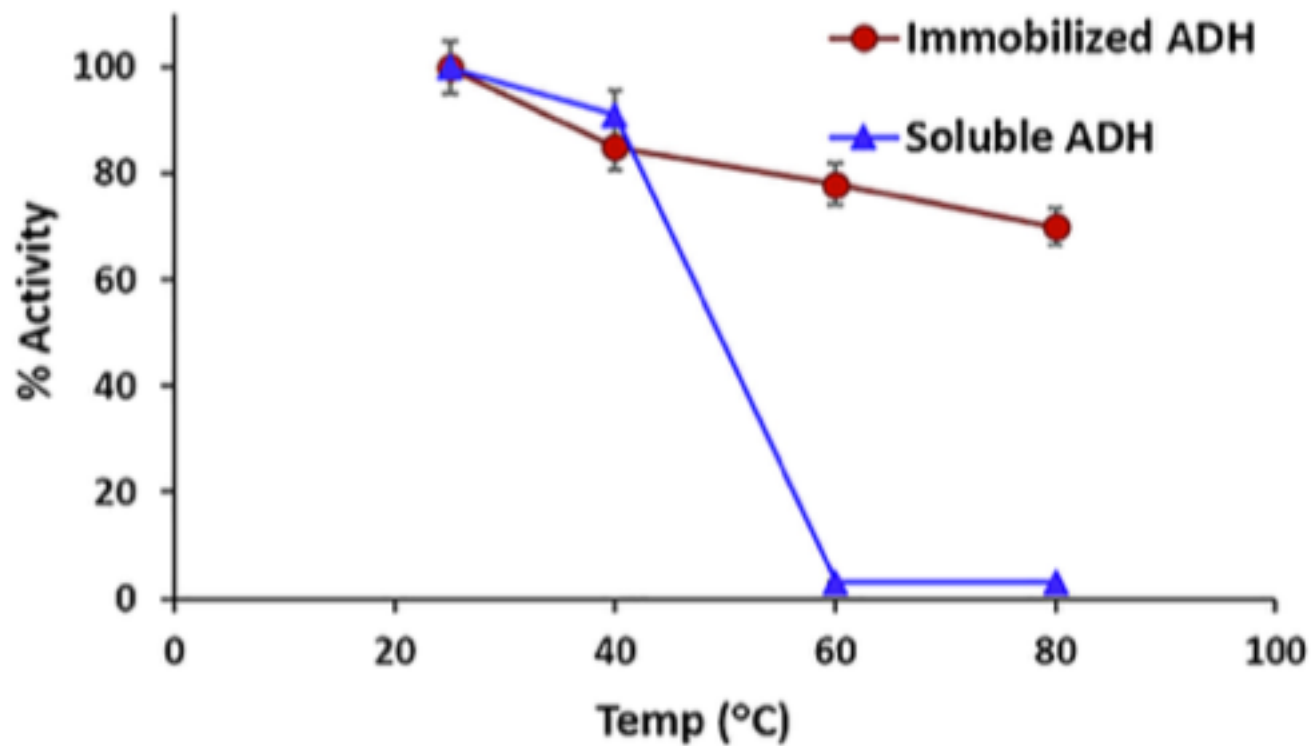
**Table 1**

ADH activity after immobilization on various modified PVA carriers.

PVA fibrous carriers	Activity (mmol/g min)
PVA-Cl-EDA-GA +ADH	0.765 ± 0.03
PVA-Cl-EDA + ADH	0.210 ± 0.02
PVA-Cl + ADH	0.170 ± 0.02
PVA + ADH	0.105 ± 0.07

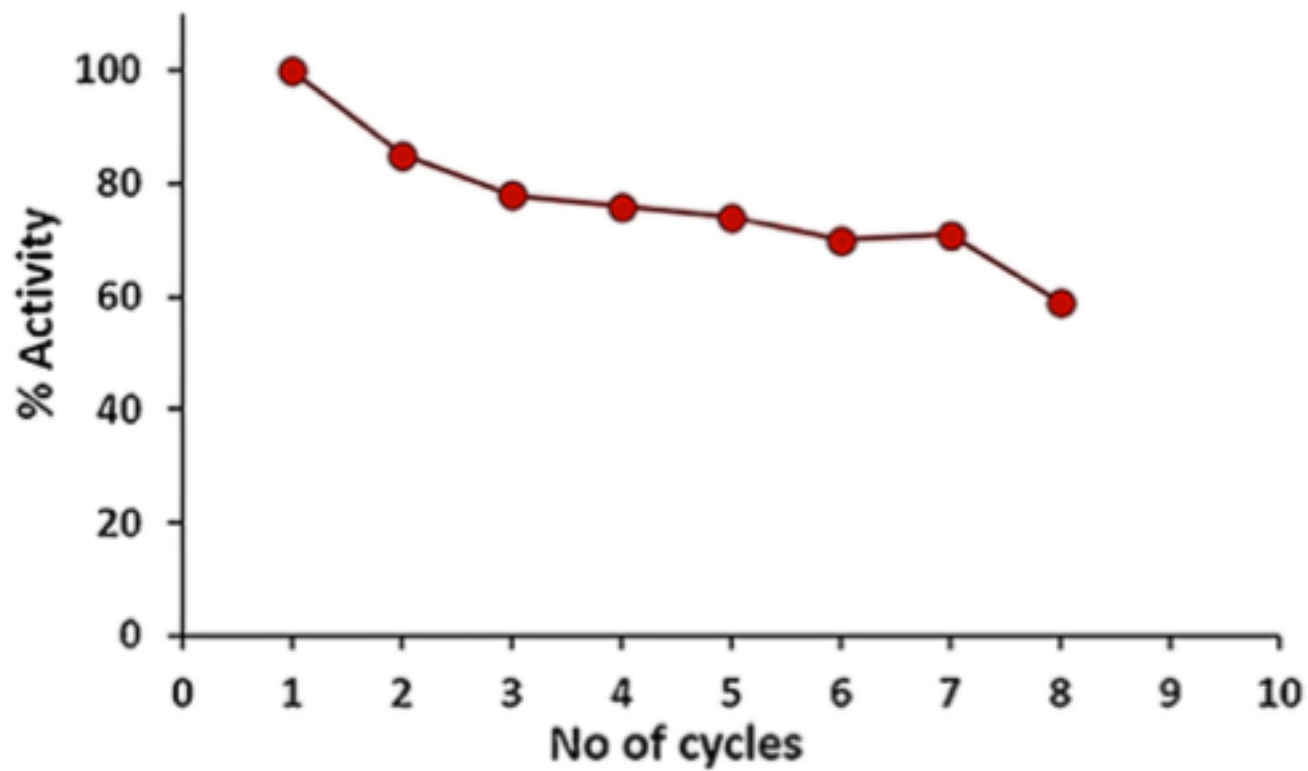


**Fig. 5.** Stability of soluble and immobilized ADH at different pHs. Both soluble ADH and immobilized ADH were incubated at 40 °C for 2 h in different pH buffered solutions.



**Fig. 6.** Thermostability of soluble and immobilized ADH after being heated at different temperatures in phosphate buffer (0.05 M, pH 8.1) for 2 h.





**Fig. 7.** Reusability of the immobilized ADH.



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# Glucose and Fructose Production by *Saccharomyces cerevisiae* Invertase Immobilized on MANAE-Agarose Support

Table 1: Immobilization yields of invertase from *S. cerevisiae* on various supports.

Enzyme preparation	Immobilized Protein		Activity (V0)	
	(mg protein.mL <sup>-1</sup> derivative)	Immobilization yield (%)	U.mg <sup>-1</sup>	Recovered activity (%)
Soluble (3.5mg prot.mL <sup>-1</sup> )	-	-	29.5	100.0
Glyoxyl-agarose	2.2	62	1.7	5.8
MANAE-agarose	2.1	60	21.6	73.5
MANAE-agarose + glutaraldehyde	2.1	60	13.1	44.4
Glutaraldehyde-agarose	3.3	92	10.8	36.8
Sepabeads	3.4	94	2.0	6.8
Eupergit	3.4	95	0.2	0.5

Assays performed in 50mM sodium acetate buffer at pH 5.0 and 40 °C, with 1% sucrose as substrate.

