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# Immobilization and stabilization of alcohol dehydrogenase on polyvinyl alcohol fibre

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## Highlights

- Knitted polyvinyl fabrics are an excellent support for enzyme immobilization
- The enzyme was covalently immobilized on knitted fabrics
- Immobilization enhanced the stability of the enzyme
- The enzyme immobilized on knitted fabric ideally suited to microfluidic or continuous flow processing applications.

## Abstract

**A polyvinyl alcohol (PVA) fibrous carrier has been chemically modified for the immobilization of yeast alcohol dehydrogenase (ADH) with an aim to increase its stability over a wide pH range, prolong its activity upon storage, and enhance its reusability. The strategy for immobilization involved functionalization of the fibrous carrier with chloropropionyl chloride followed by amination with ethylenediamine. Tethering of the ADH enzyme to the PVA scaffold was achieved with glutaraldehyde. The activity profile**

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