

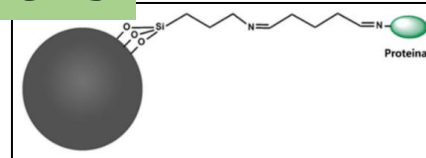
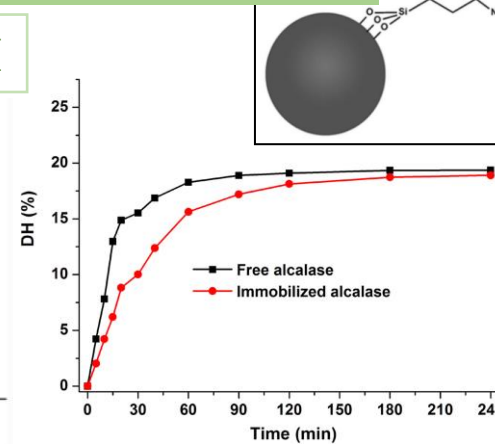
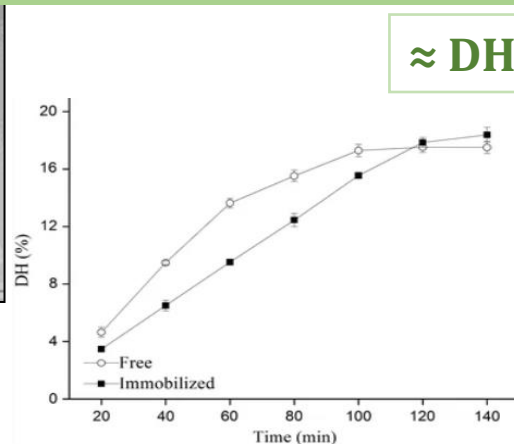
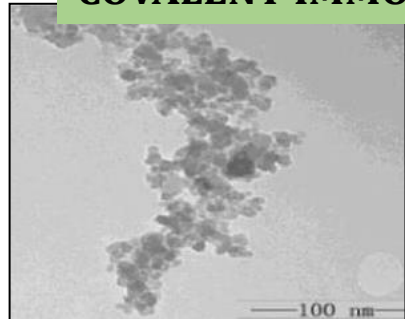
OBJECTIVES

- Obtain contrasted information about enzyme immobilization in soy protein hydrolysis.
- Compare free enzyme and immobilized enzyme activities.
- Learn benefits and limitations of these techniques.
- Identify the immobilization technique with best results for soy protein hydrolysis.

RESULTS

- ↑ Activity at higher **temperatures**
- ↑ Activity at higher **pH**
- ↑ **Thermal** and **storage** stability
- ↑ **Reusability**
- ? **Degree of hydrolysis (DH)**

COVALENT IMMOBILIZATION ON MAGNETIC NANOPARTICLES

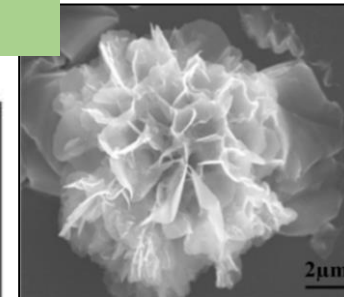
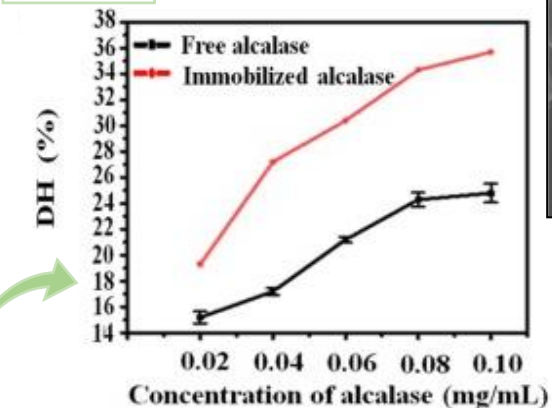


CONCLUSIONS

- Enzyme immobilization is a very useful tool for soy protein hydrolysis.
- Nanoflowers obtain better results, with a higher degree of hydrolysis.
- Few research has been reported, so more deep and detailed studies are needed to obtain better conclusions.

NANOFLOWERS

↑ DH



- ↑ surface area ↑ surface activity →
- ↑ mass transfer ↑ contact with the substrate
- = Increase the hydrolysis activity