



Ralph KHADIGE

PhD student

Project: EPPIC: Eco-innovation of polymers production from sugar-by products.

Supervisor(s): Aras AHMADI & Johanne TEYCHENE

Funding: Agence nationale de la recherche (ANR)

Key words: Dextran, sugar by-products, seawater, Kinetic study & modeling, Downstream processing, Life cycle assessment (LCA).

Background

- Bachelor degree in chemical engineering- University of the holy spirit of kaslik (USEK).
From September 2019 till June 2024.
- Master 2 in processes for the valorization of renewable resources- Double diploma between USEK and the university of technology of compiègne (UTC).
From September 2024 till September 2025.

Currently working on

- ✓ Kinetic study and modeling of enzymatic dextran production using seawater as the reaction medium to reduce freshwater consumption and valorize sugar by-products as a sucrose source.
- ✓ Downstream processing of dextran: separation and purification using ultrafiltration.

Scientific communications

[Articles published/in progress]

- Writing my first article on the impact of water salinity on the enzymatic reaction of dextran polymerization.

[Congress/Posters/PhD day]

- Poster for the TBI PhD day in 2025.

Contact me

- Email: khadige@insa-toulouse.fr
- Phone number: 0748304311
- Linkedin: Ralph Khadige