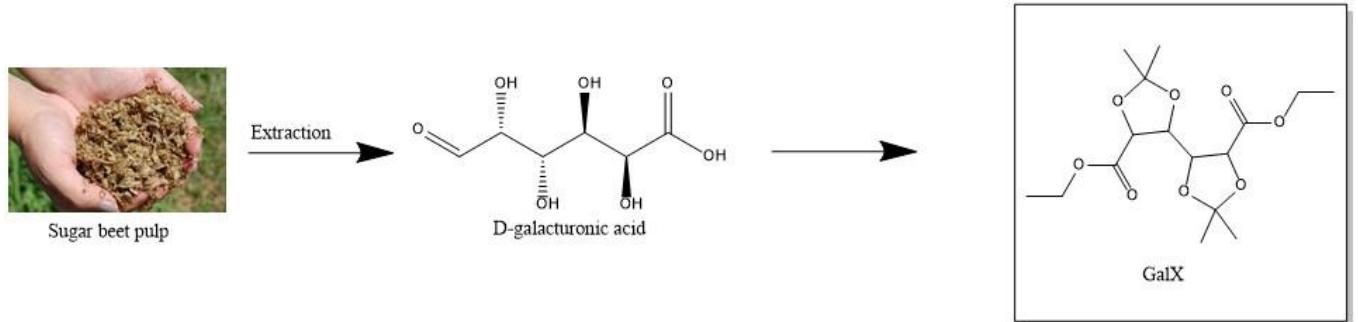


PhD Project Jesse Jongstra

From sugar industry side stream to biodegradable polymeric materials for coatings

In the coming four years I will be working on the conversion of waste beet pulp to biodegradable polyesteramides. From the beet pulp D-galacturonic acid is extracted. This is further converted to the useful monomer named GalX, as shown in figure 1.



Together with several amino acids and citric acid, bio-based monomers will be synthesized that later can be used to make polyesteramide coatings. These will be tested for their mechanical properties, thermal properties, biodegradability, and rheology.

About me:

I started the bachelor chemical engineering on the Hanze hogeschool in 2012. During this time I did a pre-master and in 2016 I continued with the chemical engineering master on the RUG. When this was done I worked on the devulcanization of rubber tyres and in December 2019 I started the PhD.

In my free time I like to play bass guitar or go out into nature.

