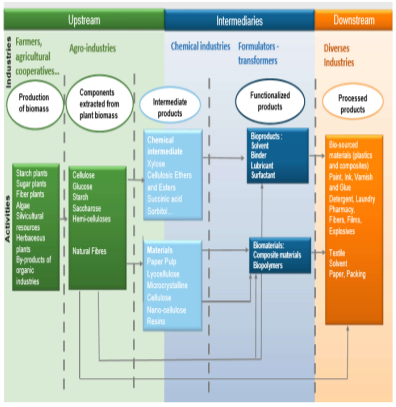
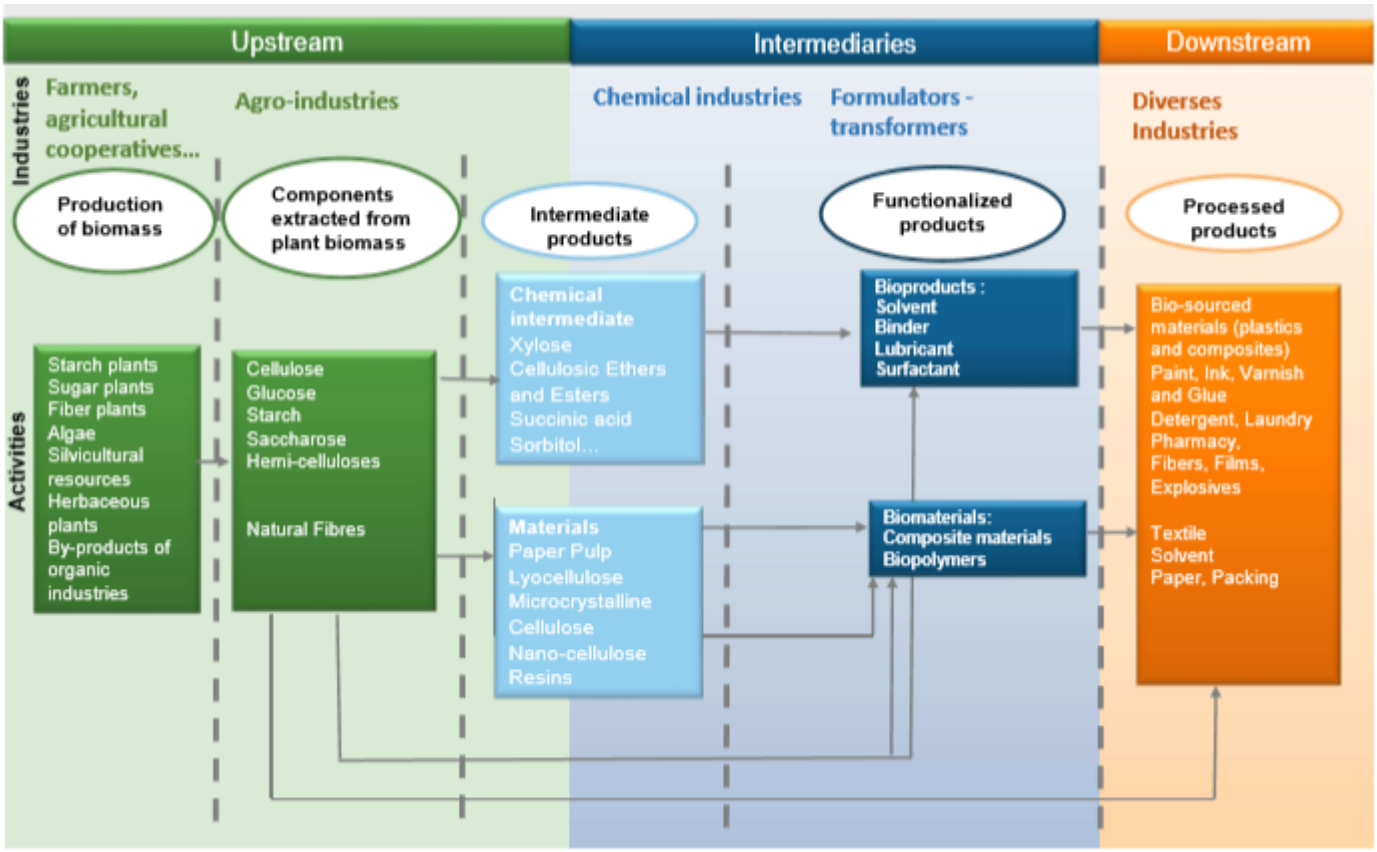


Innovation Potentials Triggered by Glycoscience Research

Description

Glycoscience is an interdisciplinary Ã¯Â¬Âeld, which leads to diÃ¯Â¬â?¬erent industrial applications derived from physicochemical and/or biological properties of carbohydrates. This study aims to evaluate how glycoscience may act as a driving force to make research innovative and sustainable in industrial and/or commercial areas. To this end, the two main properties of carbohydrate molecules were rationalized into three main value chains.



The regional biomass (sucrose, starch, wood) value-chain exploits the physicochemical properties of carbohydrates; the glycomics explores the biological functions of carbohydrates and the non-regional biomass (microbial, pectin, chitin) value-chain exploits the two properties. Each value-chain harbours

one or more niches prone to or at an emerging stage of development, and all these niches share a techno-scientiÃ¯Â¬Âc push approach aimed at developing high value-added products with new functionalities, new bioactive glycans, and new enabling technologies that will lead to new applications and possible novel therapies and diagnostics tools.

Category

1. News