

SELECTIVELI

CONCEPTUAL STUDY OF ELECTROCHEMICAL BASED NOVEL PROCESS USING LIGNOSULFONATES TO PRODUCE BIO-BASED MONOMERS & POLYMERS



FACTS & FIGURE

“Conceptual Study of Electrochemical based novel process using Lignosulfonates to produce bio-based monomers & polymers”

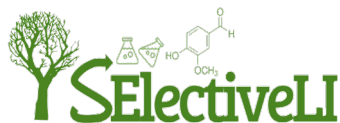
H2020 – N. 837276

Duration

2019 – 2023 (48 months)

BBIJU

€ 2,497,224.00



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DESCRIPTION

Project's aim

Bio-based industries are central to building a European circular economy; meanwhile, using Europe's own biomass resources improves raw material security by reducing reliance on fossil-based feedstock imports.

However, extracting higher-value compounds from lignin (a by-product of paper and pulp production), one of the most important low-cost feedstocks, is currently inefficient and expensive. The SElectiveLI project will address this challenge by using electrochemical processes that take advantage of surplus energy available via smart grids. This

should reduce the cost of production as well as making it more effective and environmentally superior.

Using this approach, SElectiveLI will extract a range of aldehydes for potential food, adhesive, and pharmaceutical applications and intermediates for conversion into polymers. It will also develop downstream separation and purification processes for the latter.



HOW WE CONTRIBUTE

We are in charge of carrying out the Life Cycle Assessment of all the innovative processes that are subject of the research, and of developing a web platform to collect data from all project members and provide environmental analysis and simulations



EXPLOITABLE RESULTS

coming soon