## CARBAFIN

## Developing a glycosylation platform technology to an industrial level

Zorica Ubiparip<sup>1</sup>, Christiane Luley<sup>2</sup>, Tom Desmet<sup>1</sup>, Bernd Nidetzky<sup>2</sup> <sup>1</sup>Ghent University, Centre for Synthetic Biology, Coupure Links 653, building B, BE-9000 Ghent <sup>2</sup>ACIB GmbH, Petersgasse 14, 8010 Graz, Austria zorica.ubiparip@UGent.be

CARBAFIN is a collaborative research project (01/2018-12/2021) involving the EU-consortium which consists of eight members coming from five different countries, co-financed by the European Union with a funding of 5.3 million Euros. The aim of the project is to establish a new value chain for utilization of surplus sugar beet biomass in the EU by converting glucose and fructose separately into value-added products. The glucoside products of CARBAFIN (glucosylglycerol and cellodextrin) have large-scale uses in nutrition and feed, cosmetics and detergents. Fructose will be exploited in the production of 5-hydroxymethylfurfural (HMF), a versatile chemical building block currently considered for making biobased plastics with the aim of replacing petroleum-based chemicals with bio-based building blocks. Furthermore, CARBAFIN will contribute to the establishment of new, fully renewables-based value chains across the European industries, linking the sugar industry sector to the cosmetics, chemicals, polymer and detergents sectors and strengthening the sugar industries' role in food and feed. The project will support the efficient cascading use of sugar beet-derived sucrose in combination with biomass-derived base chemicals (e.g. glycerol, glucose). CARBAFIN will thus contribute to development of a chemical industry that is low-carbon, resource-efficient and sustainable and help Europe to maintain global leadership in industrial biotechnology and secure position as innovation leader in sugar-based products.

More information at: <a href="http://www.carbafin.eu/">http://www.carbafin.eu/</a>

## Acknowledgement:

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 761030.

The content of this abstract reflects only the author's view, the EU-Commission is not responsible for any use that may be made of the information it contains.