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News

**Fundamental Research** 

Renewable energies

**Bio-based chemistry** 



On 15 october, Rémi Hocq, a former IFPEN PHD student was awarded the 2020 Marcel Loncin prize by the association of chemists, engineers and executives in the food and agricultural Industries (Acia) for his research work on Clostridium beijerinckii DSM 6423, an emerging platform strain for solvent bioproduction.

This thesis, defended in 2019 and previously singled out for the 2020 Yves Chauvin Prize and the Dufrenoy silver medal was conducted at IFPEN and supervised by Nicolas Lopes Ferreira and François Wasels, with technical support provided by the Genoscope d'Evry French National Sequencing Center and Paris Saclay University. In particular, Rémi Hocq validated the use of a genetic modification tool based on CRISPR-Cas9 technology in the DSM 6423 strain and patented a first strain compatible with a genetic improvement approach. He also determined the fermentation performances of this microorganism on model or industrial substrates (ethanol distillery beet or sugarcane molasses). Lastly, via an in-depth multi-omics study, he acquired a large volume of biological data in order to gain a better understanding of the physiology and regulation mechanisms inherent to this new platform strain for the production of bio-based Isopropanol and n-Butanol.

Rémi Hocq is currently a postdoctoral researcher at Boku Vienna (University of Natural Resources and Life Sciences).

>> More information on research relating to Clostridium beijerinckii (in French)

Rémi Hocq, a former IFPEN PhD student, receives a 3rd award for his research work 08 November 2021

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