PERFORM, together with sister projects, holds the webinar NiChe: Non-conventional energy sources for feedstock material processing

- *The Niche Cluster, made up by the DESTINY, LIBERATE, PERFORM and SIMPLIFY projects will showcase their different approaches to enable the transition towards a more sustainable chemical sector using non-conventional energy sources for feedstock material processing.*

Madrid, November 2, 2022. The **PERFORM** (PowER platFORM), together with **DESTINY** (Development of an Efficient Microwave System for Material Transformation in energy INtensive processes for an improved Yield), **LIBERATE** (Lignin Biorefinery Approach using Electrochemical Flow) and **SIMPLIFY** (Sonication and Microwave Processing of Material Feedstocinitiatives), projects under the European Commission Horizon 2020 SPIRE (Sustainable Process Industry through Resources) programme will hold, on November 10, a webinar entitled *NiChe: Non-conventional energy sources for feedstock material processing.*

For one hour and ten minutes, from 10:30 to 11:40 (CEST), the NiChe cluster will showcase their different approaches to enable the transition towards a more sustainable chemical sector using non-conventional energy sources for feedstock material processing.

More information and free registrations on: https://bit.ly/3LZOK38

About PERFORM

The expected impact of the PERFORM project derives from its multi-level approach that includes a combined integration between electrification, reduction of process complexity, avoiding the use of coreactants through system integration, innovation in processes and bio-based use of feedstocks, as well as the development of a flexible PowerPlatform pilot plant platform.

PERFORM is expected to contribute to technology development to reduce the environmental impact of the chemical industry. The technology developed in PERFORM will reduce CO_2 emissions from the production of chemicals due to the efficient utilization of renewable bio-based feedstocks and renewable energy. It will also be essential for a future sustainable society that uses local resources.

www.performproject.eu

About DESTINY

Horizon 2020
European Union Funding
for Research & Innovation

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 820723

The DESTINY project aims to realize a functional, green and energy saving, scalable and replicable solution, employing microwave energy for continuous material processing in energy intensive industries. The target is to develop and demonstrate a new concept of firing for granular feedstock to realize material transformation using full microwave heating as alternative energy source and complement to the existing conventional production. The DESTINY system is conceived as cellular kilns in a mobile modular plant with significant advantages in terms of resource and energy efficiency, flexibility, replicability, scalability and a reduced environmental footprint.

https://www.destinyh2020andbeyond.eu/

About LIBERATE

The LIBERATE project aims at designing an electrochemical plant to demonstrate the commercial opportunities of converting low-cost lignin feedstock into high-value bio sustainable chemicals such as vanillin, antioxidants, or polyamide. Thus, its main objectives are:

- Electrochemical depolymerisation of kraft lignin to synthesise vanillin with a 7% yield.
- Electrochemical depolymerisation of organosolv lignin to synthesise mixed phenolic derivate oligomers with a yield of > 35%.
- Electrochemical oxidation of bio sustainable cyclohexanol derivatives to synthesise propyl adipic acid with a yield of up to 80%.

www.liberate-project.eu

About SIMPLIFY

Sonication and Microwave Processing of Material Feedstock (SIMPLIFY) is an innovation action in which leading European industries and university groups in process intensification, ultrasound, microwave, multiphase processes, polymerization, and crystallization team up to address the domain of electrification of chemical industry. In four years, a consortium of 11 European organizations, led by KU Leuven, will focus on intensified processes, where alternative energy sources enable flexible continuous technologies to achieve localized ultrasound and microwave actuation of multiphase, flow reactors powered by electricity from renewable sources for the purpose of high-value product synthesis.

https://www.aspire2050.eu/simplify

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