

New Technologies and Processes Toward Sustainable Society †

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† Presented at Materials Chemistry and Physics (Materials Chemistry 2020) - International e-Conference

Received: 16.09.2020; Revised: 20.09.2020; Accepted: 24.09.2020; Published: 27.09.2020

Abstract: With the depletion of fossil sources, research is currently intensively focused on exploiting renewable ones. Particular attention is paid to wastes and raw materials for producing biodiesel, lubricants, surfactants, polymers, solvents, and fine chemicals [1-2].

In this area, heterogeneous catalysis plays a prominent role, due to the remarkable advantages of robustness and recyclability. A huge number of new heterogeneous nanocatalysts have been applied to exploiting biomass and raw materials [3,4].

Another sustainable approach flows chemistry, which has rapidly gained interest due to the advantages of automation, reproducibility, safety, and easy up-scale. Many applications to the synthesis of vegetable oil derivatives and waxes are reported [5,6].

Keywords: green oxidation; circular economy; bio-plastics; flow chemistry; photocatalysis.

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Funding

This work is partially supported by funds from European Union -19 FESR "PON Ricerca e Innovazione 2014–2020. Progetto: 20 Energie per l'Ambiente TARANTO-Cod. ARS01_00637".

Acknowledgments

Acknowledge the Chemistry Student: Vincenzo Pantone, Amelita Grazia Laurenza, Francesca Russo.

Conflicts of Interest

The authors declare no conflict of interest.

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