

Special Issue

Novel Catalytic Strategies for the Synthesis of Levulinic Acid and Their Derivatives

Message from the Guest Editor

Levulinic acid (LA, also known as 4-oxopentanoic acid or α -ketovaleric acid) is one of the most valuable C5 molecules with extensive use in the global economy. Presently, LA finds applications in pharmaceuticals, pesticides, cosmetics, and food additives, and minor uses in nylons, synthetic rubbers, and plastics. LA is also an important biomass-derived platform chemical that exhibits a carboxylic acid and ketone functionality, which greatly enhances its reactivity, and application in the production of a wide range of chemicals such as levulinate esters, γ -valerolactone (GVL), acrylic acid, 1,4-pentanediol, angelica lactone, 2-methyltetrahydrofuran (MTHF), α -aminolevulinic acid (DALA), etc. This Special Issue embraces original research articles or relevant critical reviews on the recent achievements, current challenges and future opportunities of new catalytic strategies for the synthesis of levulinic acid and its derivatives.

Guest Editor

Dr. Ana Cristina Fernandes

Inst Super Tecn, Ctr Quim Estrutural, Univ Lisbon, Av Rovisco Pais, P-1049001 Lisbon, Portugal

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

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