

## Special Issue

# Heterogeneous Catalysts for CO<sub>2</sub> Valorisation

### Message from the Guest Editors

Today, several processes for CO<sub>2</sub> valorization are available or under development, including the CO<sub>2</sub> splitting to CO and O<sub>2</sub>; the hydrogenation of CO<sub>2</sub> to methane or to liquid hydrocarbons, to store energy excess from industrial wastes and/or nonprogrammable renewable sources in well-designed gas infrastructure; the reaction of CO<sub>2</sub> with CH<sub>4</sub>, called dry reforming; and the high temperature co-electrolysis of CO<sub>2</sub> with H<sub>2</sub>O or the artificial photosynthesis. However, the CO<sub>2</sub> molecule is thermodynamically stable, and its activation requires the use of suitable heterogeneous catalysts and alternative sustainable processes. In this regard, there is a continuous effort to improve the performances of the catalysts and their durability through the study of all the fundamental aspects involved in the catalytic process. This Special Issue covers the design, preparation, and characterization of novel heterogeneous catalysts, as well as new, advanced, and sustainable technologies, for CO<sub>2</sub> valorization.

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### Guest Editors

Dr. Igor Luisetto

Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Via Anguillarese 301, 00123 Rome, Italy

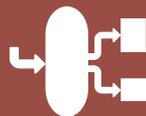
Dr. Stefano Stendardo

Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Via Anguillarese 301, 00123 Rome, Italy

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### Deadline for manuscript submissions

closed (15 August 2021)



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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto:processes@mdpi.com)

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### Editor-in-Chief

Prof. Dr. Giancarlo Cravotto  
Department of Drug Science and Technology, University of Turin, Via P.  
Giuria 9, 10125 Turin, Italy

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