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## **CO2 Capture, Utilization and Storage: Catalysts Design**

Guest Editors:

## Dr. Leonarda Francesca Liotta

Institute of Nanostructured Materials, Palermo Research Division, CNR - ISMN, Via Ugo La Malfa 153, 90146 Palermo, Italy

## Dr. Hongjing Wu

School of Physical Science and Technology, Northwestern Polytechnical University, Xi'an 710072, China

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## **Message from the Guest Editors**

The present Special Issue aims to cover all the aspects related to CO<sub>2</sub> recycling from the use of hybrid metal-free nanostructures (like POSS organic–inorganic hybrid molecules) able to convert CO<sub>2</sub> into cyclic carbonates, to the production of renewable fuels through methanation, reforming reactions, and the photo-catalytic activation of CO<sub>2</sub> over transition metal oxides and perovskites.

For CO<sub>2</sub> conversion reactions, catalyst performance represents a challenge to date. With respect to the selected catalytic reactions, the papers collected in the present Special Issue aim at understanding catalyst properties and possible reaction pathways through a knowledge-driven approach. The insight into the correlation between catalyst formulation, synthesis route parameters, structural features and catalytic performance will provide the opportunity for the fine-tuning of catalysts and ultimately of CO<sub>2</sub> recycling.



