Special Issue

Carbon Capture, Utilisation and Storage

Message from the Guest Editors

This Special Issue explores and promotes research and applications in the field of CCUS to achieve carbon neutral processes, clean energy development, safe storage methods and climate change mitigation at large. Potential topics include, but are not limited to, the following:

- Pre- and post-combustion carbon capture from the chemical process industry—technologies and methodologies;
- Carbon capture and storage applications in power generation;
- Direct air carbon capture;
- CO2 transmission in pipelines;
- Bioenergy with Carbon Capture and Storage;
- Negative emissions technologies;
- The thermal, electrochemical, and photochemical conversion of CO2 into fuels and chemicals;
- The biological utilisation of CO2 into value-added products;
- The CO2 mineralisation into inorganic materials;
- System optimisation, digital twins, and decision-making models;
- Techno-economic feasibility and life-cycle analysis evaluation of CCUS;
- Risk assessment, intelligent monitoring, advanced sensors, and process control of CCUS processes;
- Supply chain, economics, social factors, governmental policies, and regulations regarding CCUS applications.

Guest Editors

Dr. Humbul Suleman

School of Computing, Engineering & Digital Technologies, Teesside University, Middlesbrough TS1 3BX, UK

Dr. Rizwan Nasir

Department of Chemical Engineering, University of Jeddah, Jeddah 21959, Saudi Arabia

Deadline for manuscript submissions

closed (20 February 2023)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/103316

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

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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