# Special Issue

# Carbon Utilization and Storage in Mahu Oil Reservoirs

## Message from the Guest Editor

With the global interest in energy transition, carbon capture, utilization and storage (CCUS) technology has become key to achieving the goal of carbon neutrality. As an important area of oil and gas production in China, the tight reservoirs of the Mahu Oilfield not only contain abundant resources but also have great potential for the large-scale geological storage of CO2. By injecting captured CO2 into the reservoir to drive crude oil extraction (CO2-EOR) and achieve long-term storage, the Mahu Oilfield can enable the coordination of energy security, economic benefits and low-carbon development. This Special Issue focuses on cutting-edge research into CCUS technology in the Mahu Oilfield, aiming to present innovative achievements in modeling, simulation, experimentation and field practice. Topics of interest include, but are not limited to, the following:

- Geological modeling and characterization of reservoirs;
- Coupling mechanism of CO2 oil displacement and storage;
- Multiphase and multi-component numerical simulation;
- New tools and field practices.

## Guest Editor

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## Deadline for manuscript submissions

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