



methane

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CNG and LNG for Sustainable Transportation Systems

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Message from the Guest Editors

In recent years, challenges related to both climate change and the energy transition need to be faced simultaneously. The energy sector's transition toward carbon neutrality presents many challenges. Due to the favorable ratio of H atoms to C atoms and its higher knock resistance, methane combustion allows reducing CO₂ formation and the Global Warming Index with respect to gasoline fueling. In this regard, methane-based fuels are considered transitional fuels in the route to climate neutrality.

In the near future, the role of natural gas in propulsion systems is expected to attract growing interest in the transport sector. With a view to sustainable mobility, both CNG and LNG can be used not only in conventional propulsion systems but also in combination with electric ones. Methane-based hybrid propulsion systems, also considering the limitations of the local infrastructure of fully electric ones, could be a viable solution in energy transition. In this Special Issue, authors are invited to share their knowledge about the natural gas used in conventional/electric hybrid systems and other combined conventional/battery/fuel cell propulsion systems.



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Special Issue