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# Use of Unconventional Solutions for the Production of "Green Gas" in Terms of Environmental, Economic and Innovative

Guest Editors:

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Message from the Guest Editors

### Dear all,

The characteristic microflora of polydisperse substrates can be used in the biogas production process. The practical application of organic carriers in the form of a bed in "ex-situ" and "in-situ" conditions results in a more favorable use of substrates for the production of agricultural biogas in the context of renewable energy. The hydrodynamic conditions resulting from the permeability of porous materials are knowledge based not only on the assessment of gas flow through these materials, but also the related losses to the energy in this flow. The analysis of hydrodynamic phenomena occurring in a porous material with a skeleton structure allows to confront experimental research with numerical CFD calculations.

This Special Issue focuses on unconventional techniques, methods and technologies for the production of biogas, biomethane, biohydrogen from biomass, bio-waste, sewage sludge and coal. For the successful production of "green gas" with ecological calorific value, it is necessary to develop new models or concepts from an environmental, economic and innovative aspect.

Dr. Grzegorz Wałowski Prof. Dr. Adam Smoliński

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## Message from the Editor-in-Chief

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