



*gases*

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## Alternative Fuels, Energy and Environment

Guest Editor:

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Deadline for manuscript  
submissions:

**closed (31 March 2022)**

### **Message from the Guest Editor**

Climate change and the generation of solid wastes are among the most pressing challenges of the 21st century. Concerns about the environmental impact of greenhouse gas emissions from fossil-based fuels have promoted the use of alternative sources of energy. These include renewable biomass and organic wastes (both agricultural and post-consumer) which are readily available. The development of the utilization of alternative resources has raised a number of other tasks and constraints linked to the nature of renewable resources, including treatment, processing, conversion, and applied technologies, and, thus, a large number of critical views on this issue.

This Special Issue mainly covers original research and studies related to the abovementioned topics, including but not limited to:

1. Thermochemical conversion (combustion, pyrolysis, gasification);
2. Physical conversion (pelletizing, densification, extraction);
3. Solid biofuels like biochar;
4. Liquid biofuels like biodiesel, bioethanol, and bio-oils;
5. Gas biofuels like syngas, biogas, biomethane, and biohydrogen;
6. Life-cycle analysis of the conversion process;
7. Policies on biofuel utilization.



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**Special** Issue