

Special Issue

Advances in Wood Particle and Ignition Processes

Message from the Guest Editors

The study of the processes of ignition and combustion of woody biomass particles is a very important direction for the theory of combustion. The latter is dictated by modern trends in the development of the energy sector, with the aim of the large-scale introduction of woody biomass into the overall balance of heat and power generation. Additionally, a deep understanding of the processes of ignition of wood will make it possible to predict forest fires with a high level of reliability and, accordingly, help to prevent them. However, despite extensive efforts in the development of this area of combustion theory, there are still many unsolved problems in the field of ignition and combustion of wood particles (for example, a unified theory of biomass pyrolysis and the combustion of thermal decomposition products has not yet been developed). This Special Issue is intended to provide an overview of the latest advances in thermal preparation, ignition and combustion of woody biomass under various thermal conditions. This Special Issue intends to provide selected materials that present advances in the science of woody biomass ignition.

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