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Frontiers on Energetic Materials: Pouring, Cure, Storage, Combustion

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Message from the Guest Editors

Dear Colleagues,

Energetic materials are the energy sources for rocket motors, missile, and cannon, etc. In recent decades, astronautics has developed so fast and many innovations on energetic materials have bloomed.

Energetic materials must be capable of maintaining structural integrity over a demanding range of operating and storage conditions. Significant mechanical loads are introduced in the conditions, especially for case bonded grains. Additionally, the solid propellants must possess enough toughness to resist fracture or fragmentation upon failure under high stress or strain rates.

Modern techniques, such as non-destructive inspections, mechanical tests in laboratory, analytical solutions, and multi-scale numerical simulations have been excessively employed onto exploring the properties of energetic materials during pouring, curing, storage, and combustion recently.

In this topic, there is a focus on the fundamental problems of energetic materials during its pouring, curing, storage, and combustion. Both theoretical and experimental contributions can be submitted.



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Special Issue



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Message from the Editor-in-Chief

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