

# Special Issue

## Rotating Detonation Engines

### Message from the Guest Editor

Recent years have witnessed a notable increase in endeavors to investigate unsteady combustion processes that offer a prospective increase in stagnation pressure—and therefore fuel efficiency—due to constrained heat release. One such pressure gain combustion (PGC) concept is the rotating detonation engine (RDE). RDEs make use of one or more detonation waves that travel circumferentially about an annular or hollow combustor at kilohertz frequencies, continually combusting the supplied reactants without the need for more than one initial ignition. Due to its simplicity in design, which can be integrated into existing systems—both propulsion and power generation—and the lack of moving mechanical components, RDEs are at the forefront of PGC research. This Special Issue is oriented towards bringing to the fore the state-of-the-art in RDE research. Topics of interest for this Issue include all areas of research pertinent to RDEs, covering experimental, analytical, and numerical studies.

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### Guest Editor

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### Deadline for manuscript submissions

closed (15 April 2021)



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