



## Fuel Effects on Ignition and Their Impact on Advanced Combustion Engines

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# Fuels for Advanced Combustion Engines

- **Objective:** Develop pathway to use easily measured ignition properties as metric for characterizing fuels in advanced combustion engine research
  - IQT™ used to measure ignition delay
    - Varying  $T$ ,  $P$ , and  $[O_2]$
  - Integrated CFD model
    - To separate physical and chemical effects
  - Develop fuel sensitivity parameters
  - Apply fuel metrics to experiment or modeling
    - Correlate ignition properties with engine data or modeling

