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Effect of cylinder head temperature on performance and emissions of a spark ignition engine operating on different fuels

Oras Khudhayer Obayes ; Mohanad Aldhaidhawi; Muneer Najee

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A numerical study was created and developed to evaluate the engine performance, combustion characteristics and exhaust gas emissions of a spark-ignition engine by using gasoline, liquefied petroleum gas (LPG) and ethanol fuels at different cylinder head temperature (150, 200, 250, 300 and 350 °C) at engine speed 2500 rpm (revolution per mint) and constant engine load. Four-cylinder four-stroke, water cooling system spark ignition engine was used in this study. The results were