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## Effects of SCR system on NO<sub>x</sub> reduction in heavy duty diesel engine fuelled with diesel and alcohol blends

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The aim of this study was to investigate the effects of SCR system on NO<sub>x</sub> reduction in heavy duty diesel engine fuelled with diesel and alcohol blends. The experimental tests were conducted in a 6-cylinder, turbo charged heavy duty diesel engine at full load. In the tests diesel, ethanol, methanol and butanol were used as fuel. The alcohol fuel blends were prepared by mixing low sulfur diesel at volumetric rates of between 5 to 15%. The test results showed that SCR system reduce the NO<sub>x</sub> emissions 42.6% for diesel fuel. The maximum reduction of NO<sub>x</sub> (43.43%) was achieved with 15% methanol-85% diesel fuel (D85M15) blend.

### Biography

Ceyla Ozgur is a PhD student and has been working as a specialist at the Automotive Engineering Department of Çukurova University since 2015.

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