

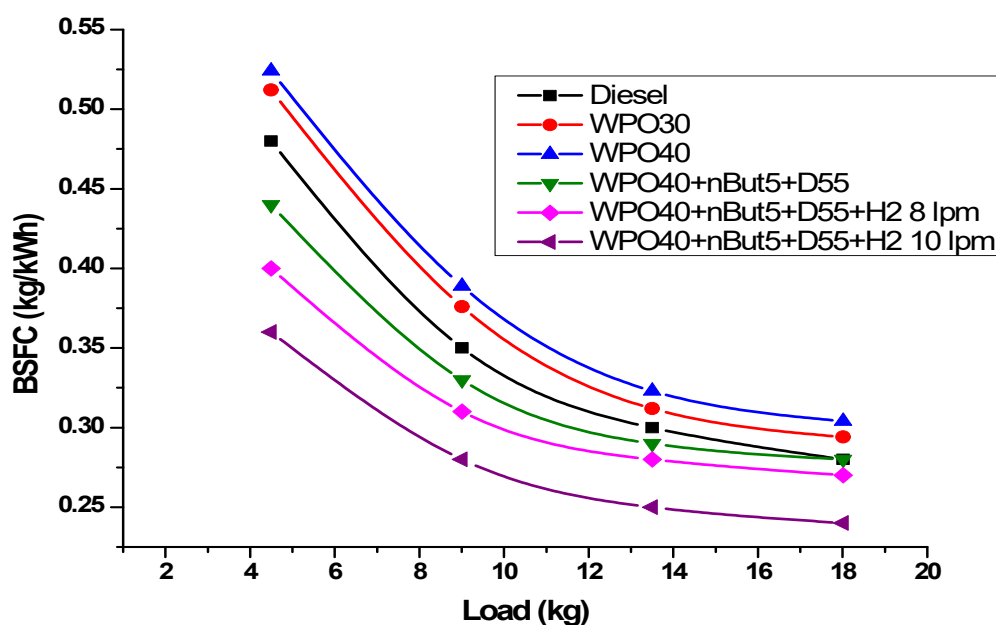
Supplementary materials of Towards Green Mobility: Investigating Hydrogen-Enriched Waste Plastic Biodiesel Blends with n-Butanol for Sustainable Diesel Engine Applications

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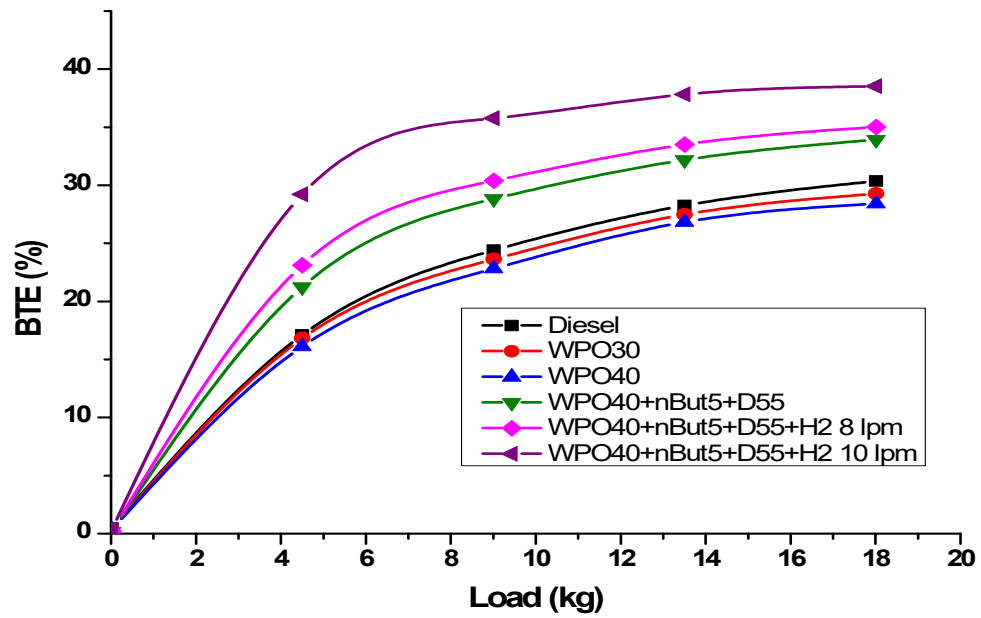
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Table 1: Properties of Tested fuels

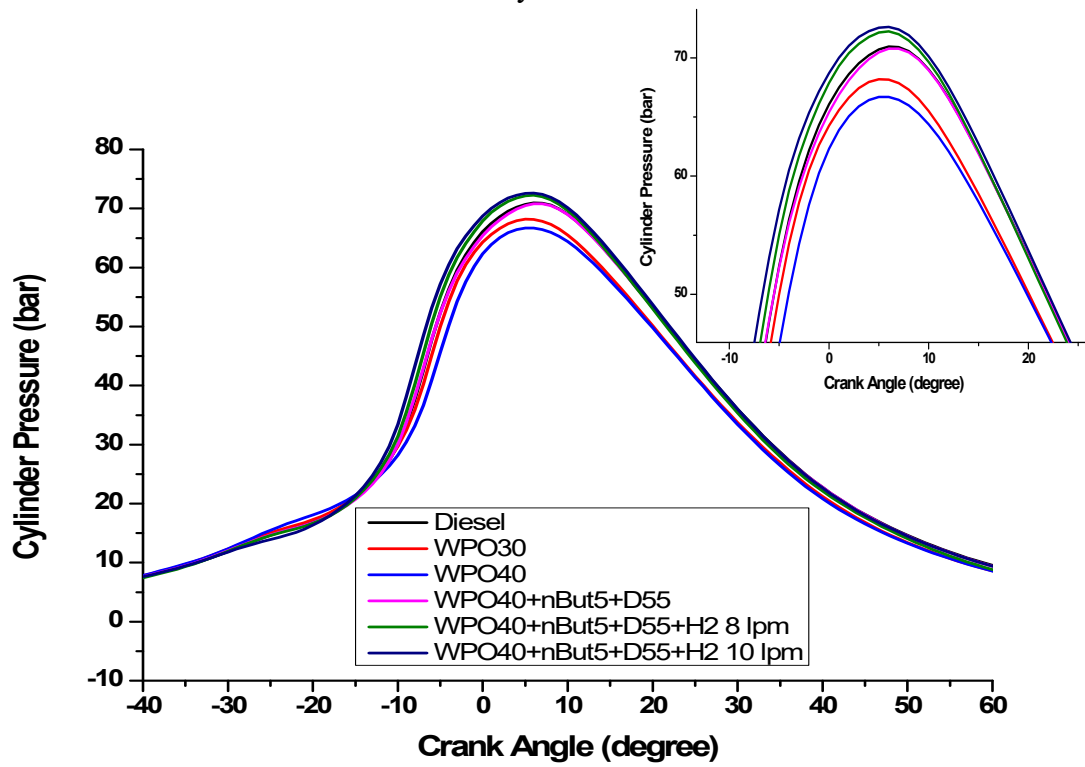
Properties	Diesel	WPO 30	WPO 40	WPO 40+ nBut5	ASTM Method
Specific gravity	0.84	0.827	0.821	0.83	D1298
Kinematic viscosity (cSt) at 40 °C	2.15	2.4	2.52	2.37	D445
Calorific value (kJ/kg)	43,500	42,834	42,501	43,167	D420
Cetane number	54	56	56	59	D613
Flash point °C	45	39	38	40	D93



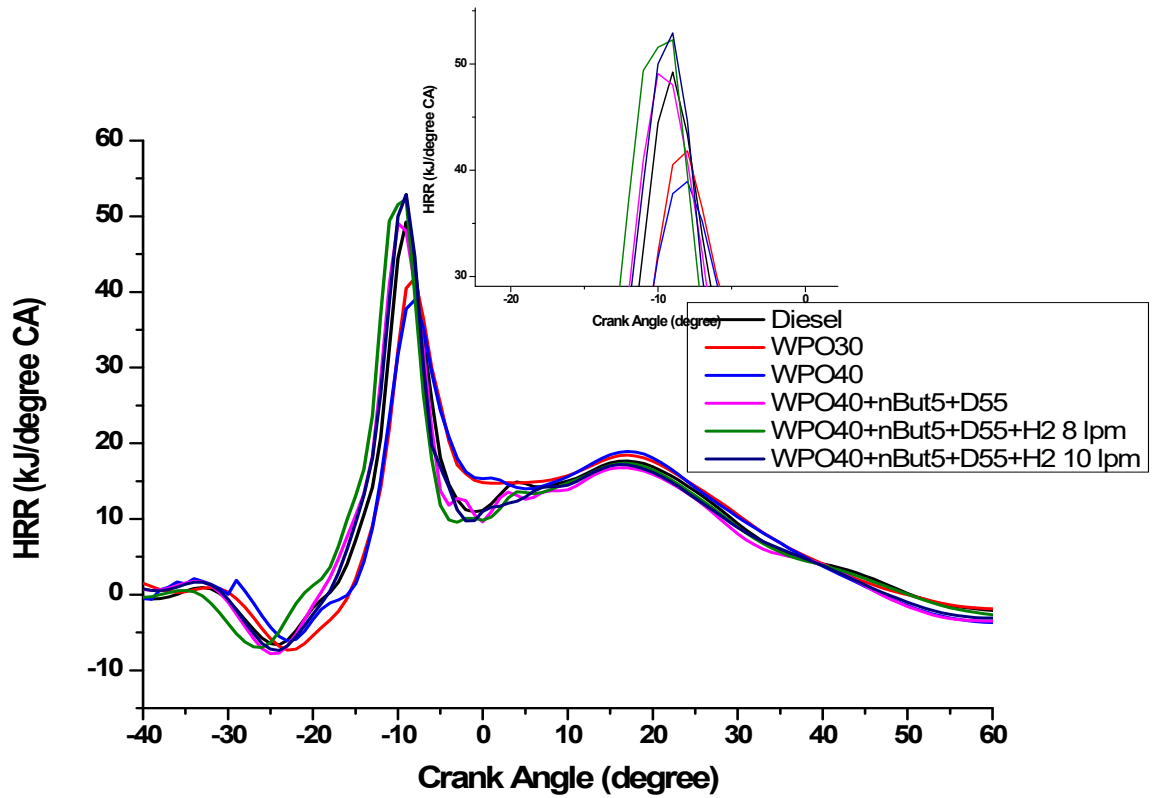
BSFC at different load conditions



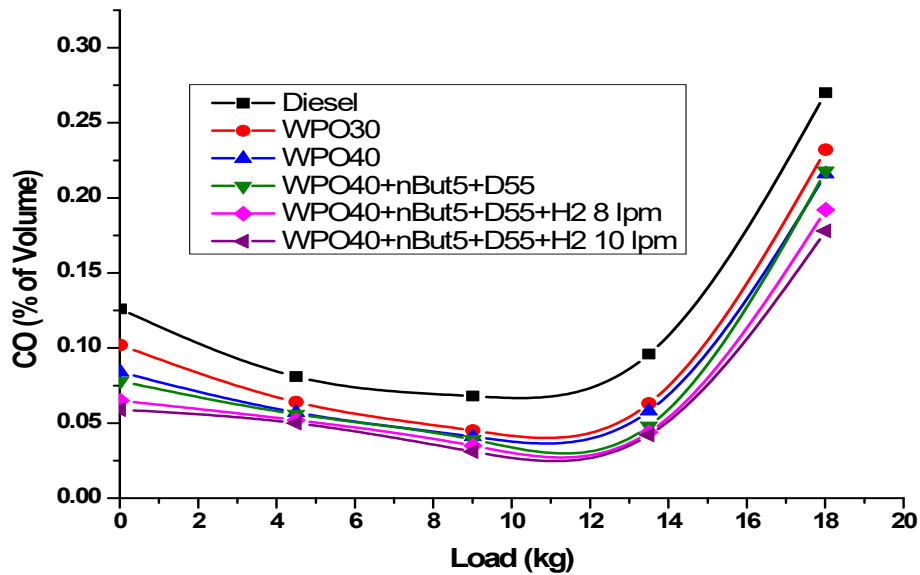
Brake Thermal Efficiency at different load conditions



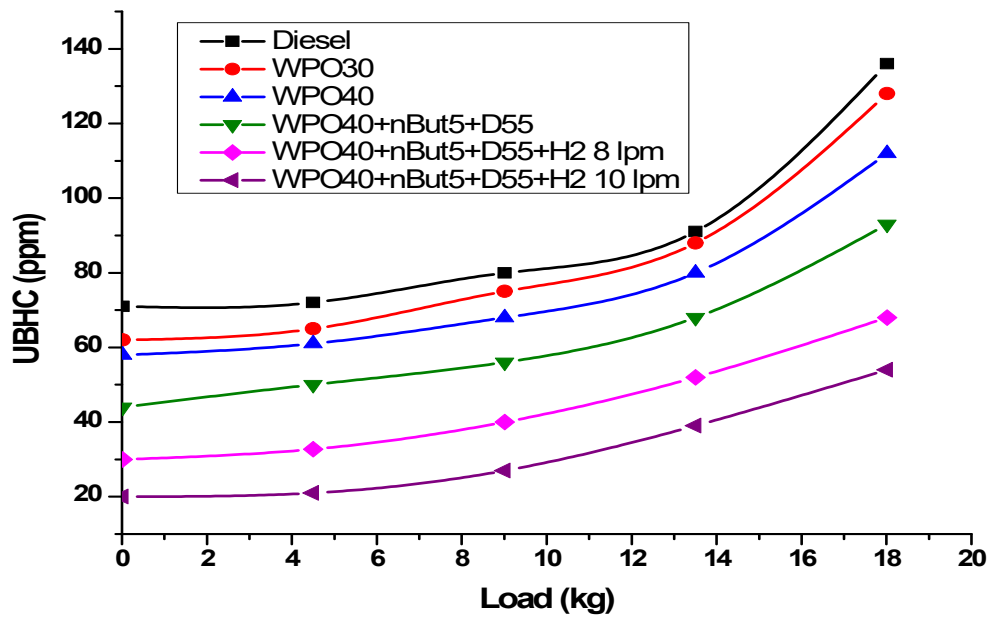
Cylinder pressure at maximum load condition



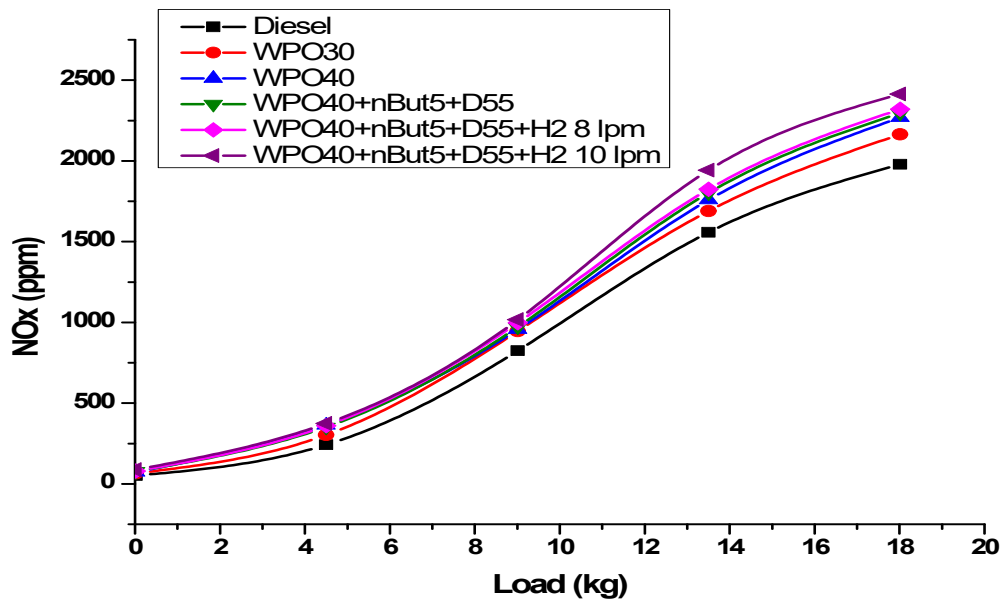
Heat release rate at maximum load condition



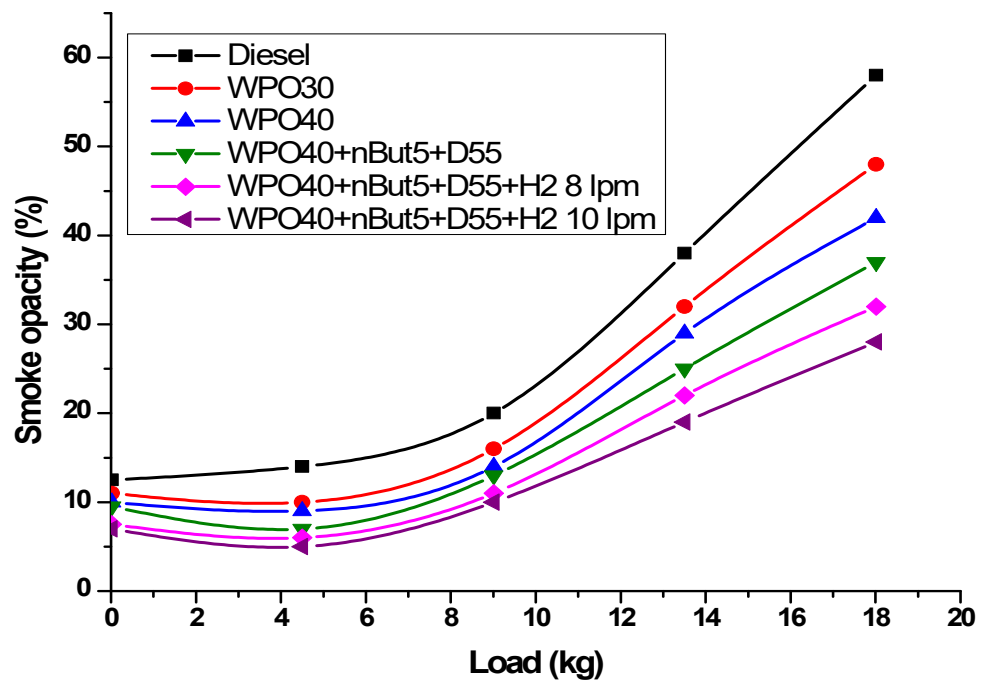
Carbon monoxide emissions at different load



Unburned hydrocarbon emissions at different load



Nitrogen Oxide emissions at different load



Smoke opacity emissions at different load