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Sommario/riassunto	The National Renewable Energy Laboratory upgraded its ReFUEL engine and vehicle testing facility to speciate unregulated gas-phase emissions. To complement this capability, the laboratory contracted with the Colorado School of Mines (CSM) to study the effects of soy biodiesel fuel and a diesel particle filter (DPF) on emissions of polycyclic aromatic hydrocarbons (PAH) and nitro-polycyclic aromatic hydrocarbons (NPAH). CSM developed procedures to sample diesel particulate matter (PM) emissions from raw and diluted exhaust, with and without a DPF. They also developed improved procedures for extracting PAH and NPAH from the PM and quantifying them with a gas chromatograph-electron monochromator mass spectrometer. The study found the DPF generally reduced PAH emissions by 1 to 3 orders of magnitude. PAH conversion was lowest for B100, suggesting that PAHs were forming in the DPF. Orders of magnitude reductions were also found for NPAH emissions exiting the DPF.