Environmental characteristics of the engine when running on methanol

A N Chuvashhev and A I Chuprakov
Figure 1. Graphic representation of the intersection of DT and methanol torches in a diesel cylinder
Figure 2. Effect of using alcohol with a pilot portion of petroleum fuel on the NO$_x$ content in diesel exhaust gases, depending on the load change at the rated speed:

--- diesel process; - - - methanol with ignited DT.
Figure 3. Effect of using alcohol with a pilot portion of petroleum fuel on the soot content in diesel exhaust gases, depending on the load change at the rated speed:

—- diesel process; - - - methanol with ignited DT.
Figure 4. Effect of using alcohol with a pilot portion of petroleum fuel on the CH\textsubscript{x} content in diesel exhaust gases, depending on the load change at the rated speed:

— — diesel process; - - - - methanol with ignited DT.
Figure 5. Effect of using alcohol with a pilot portion of petroleum fuel on the CO content in diesel exhaust gases, depending on the load change at the rated speed:

—- diesel process; - - - - methanol with ignited DT.
Figure 6. Effect of using alcohol with a pilot portion of petroleum fuel on the CO₂ content in diesel exhaust gases, depending on the load change at the rated speed:

- - - - diesel process; - - - - methanol with ignited DT.