

# LASER OPTICO-ACOUSTICAL OCTANE METER IN SYSTEMS OF OPTIMIZING THE PROCESS OF COMMERCIAL PETROL COMPOUND-FILLING

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The paper presents a methodology of constructing systems of optimal commercial petrol compound-filling. A mathematical model of the “octane number” and a method of identification of the octane numbers of the components being mixed using a laser optico-acoustical octane meter are given. For this purpose the inverse problem of petroleum mixture analysis using a genetic algorithm is solved.

*Laser optico-acoustical octane meter, optimization, compound-filling, commercial petroleum, identification, mathematical model, spectral channels of measurement, calibration.*

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