

The characterization by chromatographic methods of petroleum fractions from thermocatalytical processes

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Abstract. Following a previous study about the characterization of crude oils and fractions by combining the chromatographic methods, the working method was extended to petroleum fractions from thermocatalytical processes. The present study is limited to fractions with final boiling point up to 300°C from the Coke unit and the Fluid Catalytic Cracking processes. The composition of the gasolines was found by GC – PIONA method; then, the list of compounds found in gasolines and middle distillates was obtained by GC-MS. The PAHs content in distillates was analyzed by HPLC method. Conclusions appeared concerning the PAHs distribution depending on the process parameters. Also, the optimum parameters for the GC-MS method were found in order to study the occurrence of aromatic compounds in petroleum fractions.

Keywords: oil fractions, GC-PIONA, GC-MS, HPLC
