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## ANALYTICAL INVESTIGATIONS OF VANADYL PORPHYRIN FROM CARPATHIAN ROCKS

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### Abstract

The petroleum porphyrins (petroporphyrins) were first discovered in 1934 by Alfred Treibs, who also found tetrapyrroles in a wide range of organic matter, asphalt, oil shale and coal. Vanadyl porphyrin distribution of Carpathian petroleogenetic rocks from Pitesti petroleum (Romania) offshore field is analyzed in this paper by ultraviolet and visible spectrophotometry, Fourier-transformed infrared spectroscopy, inductively coupled plasma atomic emission spectrometry, X-ray fluorescence spectroscopy and electron spin resonance. Results show that vanadyl porphyrins are present in the total Carpathian petroleogenetic rocks from various crude oil deposits.

*Key words:* crude oil, EDXRF, ESR, ICP-AES, UV-VIS

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