



Studiul solurilor degradate utilizand spectroscopia in infrarosu

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The study of the soil quality involve a lot of aspects such: physical, chemical, (micro) biological, all of them being integrated in the final hypothesis.

Over the last decades, the infrared spectroscopy has developed quickly, due to the advantages of this method (low cost, fast and robust).

The infrared radiation is absorbed by different chemical bonds, such: C-O, O-H, C-H, N-H, etc of the organic compounds from the soil samples. The obtained IR spectrum could be considered as a "finger – print" of the soil sample, particularly in the relation to the organic compounds.

Soil samples were obtained from different areas of Iasi the nature of the contaminant compounds through mid-IR spectroscopy. city, were soil is contaminated with organic compounds or heavy metals, from the surface horizons: 0-40 cm. Have been determined some parameters using classical method such: pH, conductivity, organic matter, cation exchange capacity, available nutrients, a.s.o., as well as

Have been noticed some changes in the IR spectra, specially in the field of 3400-3600 cm⁻¹, 2300-2500 cm⁻¹, 1600-1800 cm⁻¹, 1000-1500cm⁻¹, 870-900 cm⁻¹, 450-470cm⁻¹, which confirm the presence of the organic contaminants.