

Summary:

The sulfates are secondary minerals, that are occurring in the different terrestrial conditions. Their study is useful for understanding of the processes, that are leading to occurrence the acid mine drainage. Next sphere of research is out of our globe (it means Mars). The Raman spectroscopy is nondestructive analytical method, that it is advantage of this method. It has occurred great development on the field of miniaturisation in a few last years. It is opportunity for application out of laboratory and it is possible to make a study in field conditions. At the introduction, this work is occupied with instrumentations, advantages and disadvantages of the use mobile Raman spectrometers. You find there summarises publications, that are occupied with mineralogy, origin of sulfates and opportunities of application mobile Raman spectrometers for their study. At the end of the recherche, it shows some particular localities, where it could be applicable for study sulfates by Raman spectroscopy and where mobile Raman spectrometers were used for identification of sulfate minerals.