

## **Summary**

This work deals with the use of Raman spectroscopy in environmental analysis focused on aerosols and slags from pyrometallurgical processes. This is a practical analysis of the publications in which the authors deal with chemical conditions and the structure of these waste products resulting from metallurgical processes in the context of their risks and the impact on the environment. Raman spectroscopy is a suitable method for identification of substances for the qualitative and quantitative structural analysis. This method can detect even very small particles and speciation or oxidation states. The advantage of this method is its nondestructivity. Also there is no chemical changes and no thermal damage of the sample while using this method. Another indisputable advantages of the mobile Raman spectrometer is the speed at which the system can detect the desired properties of materials in-situ and even in extreme conditions.