Kovalov, O., Taraduda, D., Sobyna, V., & Neklonskyi, I. (2024). Prospects for the of Use Ash and Slag Waste of Thermal Power Plants as Raw Materials for the Extraction of Vanadium and Nickel Compounds. In Key Engineering Materials (Vol. 1002, pp. 73–89). Trans Tech Publications, Ltd. <https://doi.org/10.4028/p-ji8dah>

[**https://doi.org/10.4028/p-JI8dAh**](https://doi.org/10.4028/p-JI8dAh)

**Abstract:**

The scope of generation, accumulation and use of ash and slag waste of thermal power plants in different countries has been analyzed. The results of the study of the phase, mineralogical and chemical composition of ash and slag waste obtained with the dominance of solid and liquid fuel in the energy balance have been presented. It has been shown that the newly formed and previously accumulated ashes and slags of thermal power plants, with their correct and effective use, are a powerful source of expansion of raw materials in various industries. The existing methods of using ash and slag waste, which have been developed based on their mineral composition and the content of trace elements and impurities in them, have been considered. The most effective application of these wastes is in the construction industry, as well as when used as a raw material for obtaining compounds of rare metals, for example, vanadium.