



## **Experimental study of the effect of colourants on the quality of feldspar raw material**

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Hydrothermally altered granitic rocks from the Krásno ore district (western part of the Bohemian Massif,) represent major source of feldspar raw material in the Czech Republic. Due to the requirements of principal end users – the ceramic and glass industries – the presence of colourants (Fe-, Mn-, and Ti-rich phases) represents critical issue of this raw material. Newly proposed processing by electromagnetic separation allows for removal of substantial part of these colourants; however, due to their complex mineralogy, some additional accessories such as Li-micas, apatite, and Nb-Ta phases are removed as well. As the role of later phases in ceramic raw bodies was not studied, we have conducted series of experimental firings (temperature range of 1000-1200°C) with beneficiated and back-blended material (i.e. raw material which was first separated from colourants and then blended with precisely know amount of separate of known composition). The effect of above mentioned treatments was then evaluated by spectrophotometric measurement and by the study of physical properties and of composition.