

Postdoctoral Research Positions – Behaviour and transformation of chromium species during metallurgical processing of chromite ores

Two postdoctoral research positions (Mineralogist/Materials Scientist and Metallurgist) are available at the Natural Resources Canada's CanmetMINING laboratories in Ottawa. The incumbents will work in projects investigating the behaviour and transformation of chromium and iron species during metallurgical processing of chromite ores from the Ring of Fire area of northern Ontario. The projects involve setting up and conducting bench- and lab-scale test work mimicking the metallurgical processing operations including carbothermic reductions and smelting leading to the production of ferrochrome alloys. The experiments will be supported by advanced material/mineralogical and molecular-scale characterization studies including μ XRD, SEM, TEM, EPMA, XAS, HEXRD and TGA-DSC, process simulations and thermodynamic modelling. Requirements include a PhD degree in Earth Sciences, Metallurgy or a relevant discipline obtained within the last three years and experience with three or more of the above characterization techniques. Experience in setting up and conducting high-temperature experiments, TGA-DSC measurements, thermodynamic modelling and process simulation using thermochemical software and databases such as FactSage is necessary for the metallurgist position. The positions are available immediately as term appointments for up to 3 years based on satisfactory job performance. Salary for the positions will be between \$53,000 and \$69,000 depending upon the experience and qualifications (plus Canadian government employee benefits). Priority will be given to Canadian Citizens.

Interested candidates should send a letter of interest along with their cv to the principal investigator, Dr. Dogan Paktunc at dogan.paktunc@canada.ca.