Dear Editors:

We would like to submit the enclosed manuscript entitled “Smelting separation behaviors and mechanisms of high-alumina rich-manganese ore obtained from metallic reduction followed by magnetic separation”, which we wish to be considered for publication in “Journal of Mining and Metallurgy, Section B: Metallurgy”. No conflict of interest exits in the submission of this manuscript, and manuscript is approved by all authors for publication. I would like to declare on behalf of my co-authors that the work described was original research that has not been published previously, and not under consideration for publication elsewhere. All the authors listed have approved the manuscript that is enclosed. In this study, the authors have proposed an innovative process to smelt high quality high carbon ferromanganese alloy from high-alumina rich-manganese ore. The high-alumina rich-manganese ore is obtained from the low-grade manganese ore by reduction roasting followed by magnetic separation. The effects of smelting parameters on the recovery of manganese and the relevant mechanisms were discussed at the process smelting separation of high-alumina rich-manganese ore. The smelting separation of high-alumina rich-manganese ore prepared with selective reduction and magnetic separation was proposed to produce high carbon ferromanganese alloy (FeMn78C8). The content of Si P and S in the HCFeMn alloy is far below the standard value. Then the characterization of smelting slag was carried out to reveal the smelting and separation mechanisms of high-alumina rich-manganese ore in this paper. We hope this paper is suitable for “Journal of Mining and Metallurgy, Section B: Metallurgy”.

We deeply appreciate your consideration of our manuscript, and we look forward to receiving comments from the reviewers. If you have any queries, please don’t hesitate to contact me at the address below.

Thank you and best regards.

Yours sincerely,

Li-hua Gao, Zheng-gen Liu, Man-sheng Chu,

Corresponding author: Zheng-gen Liu E-mail: liuzg@smm.neu.edu.cn.