



---

## **Usage of steel industry slags in different fields and lowering of environmental effects**

**F. Joulazadeh<sup>1</sup> and M.H. Joulazadeh<sup>2</sup>**

1. M.Sc. Student of Urmia University

2. M.Sc. of R & D Manager of ESCo

At the beginning of this century steel industry faces great challenges. These challenges in the steel production are not only due to shortage of energy and raw materials or competition at production but also to the essence of solving environmental problems. So protection of environment by reusing and waste products is a very important subject in terms of steel industry economical success. On average, in integrated steel plants 500 Kgs of slags per ton steel are extracted (BF and BOF slag) Although chemical composition of slags are well known but so far optimum and high value added usage of slag are not applicable in Iran. In the current research efforts have been made to reduce harmful heavy metals of slags by phytoremediation. In addition potential of slags usage in agriculture, water treatment, manufacturing of anti wear and acid tiles and cement production have been studied.

**Keywords:** Slag, steel, Recycle, Phytoremediation

---

<sup>1</sup> Corresponding author

Email: sema\_asean@yahoo.com