A Survey on Intelligent Techniques Based Modelling of Size Enlargement Process for Fine Materials

Authors : Mohammad Nadeem, Haider Banka, R. Venugopal

Abstract : Granulation or agglomeration is a size enlargement process to transform the fine particulates into larger aggregates since the fine size of available materials and minerals poses difficulty in their utilization. Though a long list of methods is available in the literature for the modeling of granulation process to facilitate the in-depth understanding and interpretation of the system, there is still scope of improvements using novel tools and techniques. Intelligent techniques, such as artificial neural network, fuzzy logic, self-organizing map, support vector machine and others, have emerged as compelling alternatives for dealing with imprecision and complex non-linearity of the systems. The present study tries to review the applications of intelligent techniques in the modeling of size enlargement process for fine materials.