



Modification Methods for the Enhancement of Adsorption Capacity of Adsorbents: A Review

Mehmet Emin ARGUN*

*Selcuk University, Engineering & Architecture Faculty, Department of Environmental Engineering, 42003
Konya, TURKEY*

Received April 05, 2010; Accepted June 28 2010

Abstract: In this article, modification methods and its enhancement affect on the adsorption capability of various adsorbents for treatment process has been reviewed. Instead of using commercial activated carbon, researchers have studied on the modification of low cost and locally available materials such as agricultural by-products, clays, zeolites, and other adsorbents to have more active surfaces and adsorption capacity. Modifications in literature focused on the four basic methods such as physical, physiochemical, chemical and biological activation. Adsorption capacities of adsorbent have increased quietly as a result of modification.

Keywords: *Modification, adsorbent, activation, adsorption capacity*

* Corresponding: E-mail: argun@selcuk.edu.tr, Tel.: +90-3322-2232058 Fax: +90-332-2410635