NGHIÊN CỨU THỰC NGHIỆM XỬ LÝ NO_2 TRONG KHÓI THẢI DO ĐỐT NHIÊN LIỆU

CHUYÊN NGÀNH: KỸ THUẬT MÔI TRƯỜNG

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ABSTRACT

During industrial-modernization of Viet Nam, using fuel for burning process will produce many kind of polluted gas in which NO_2 is one of the most pollutants with high load.

Using treating equipment before emission to the environment is one of the necessary and suitable with conditions of Viet Nam. However, the study of design and manufacture NO_2 treatment equipment with high effect is depended on kinds of elements and treatment methods.

Therefore the thesis **"Study Experimental Modeling for NO_2 treatment from emission of fuel burning"** is very necessary and helpful. In this thesis, the author already combined theory study and experimental practice of NO_2 treatment.

Methods for NO_2 including adsorption, absorption, catalysis and thermal improve burning conditions. In which, absorption method is one of the application of NO_2 treatment with high effect and easy operation.

Experimental process is done in 2 level absorption equipment, combined between absorption equipment with buffer layer and bubble gas cleaning tower by reversed flow, liquid for absorption is sprayed from upper of the tower; emission goes from bottom of the tower. Experimental results show that equipment productivity is higher than 50% with absorption solution is NaOH and Na_2CO_3, water spray coefficient is 3 l/m^3.

This equipment is compact with high economic effect, easy operation and has ability to concurrently treat many kind of toxic gas, absorption liquid may be change according to kind of absorbed gas.

The results of this study is also the basic for easy, quickly and convenience calculation and design NO_2 treatment equipment with high economic effect.