

AN ABSTRACT OF A THESIS

AN EXPERIMENTAL STUDY OF THE EFFECT OF IODINE ON THE
DRYING CAPACITY OF MOLECULAR SIEVE TYPE 3A

Ree-Chung Shen

Master of Science in Chemical Engineering

The purpose of this investigation was to find the effect of iodine vapor on the water adsorption capacity of the Linde Type 3A molecular sieves. Experimental data were obtained from a drying system consisting of a 2-inch diameter x 30.75-inch long packed adsorption column. Mass balances were made on 14 adsorption and regeneration runs. The results demonstrate that the iodine has little influence on bed performance.

AN EXPERIMENTAL STUDY OF THE EFFECT OF IODINE ON THE
DRYING CAPACITY OF MOLECULAR SIEVE TYPE 3A

A Thesis

Presented to

the Faculty of the Graduate School

Tennessee Technological University

by

Ree-Chung Shen

In Partial Fulfillment
of the Requirements for the Degree
MASTER OF SCIENCE
Chemical Engineering

June 1979

CERTIFICATE OF APPROVAL OF THESIS

AN EXPERIMENTAL STUDY OF THE EFFECT OF IODINE ON THE
DRYING CAPACITY OF MOLECULAR SIEVE TYPE 3A

by

Ree-Chung Shen

Graduate Advisory Committee:

William D. Hulland May 18, 1979
Chairman date

David W. Garbrough May 18, 1979
Member date

John C. Mason May 18, 1979
Member date

Approved for the Faculty:

W. Martin Peters
Dean, Graduate School

May 24, 1979
Date