ANWAR HUSSAIN. Ph.D.

Professor
Pharmaceutical Sciences

Research Interests

Dr. Anwar Hussain's research interests are broad. Some of his research activities are in the following areas:

1. Mechanisms of diffusion of drugs through biological and synthetic membranes. His current research is in the area of nasal and transdermal absorption.

2. The utilization of physical-organic chemistry to enhance the therapeutic activity of drugs. This involves preparation of prodrugs intended for oral, nasal and transdermal administration.

3. Studies of the mechanism of degradation of drug molecules and mechanism of reaction in solution.

4. Studies of the chemistry of chlorine and organic chloramines and approaches to the design of biodegradable chlorine containing disinfectants.

Research Publications/Presentations

A. Hussain, K. Iseki, M. Kagoshima and L. Dittert, "Absorption of Acetylsalicylic Acid from the Rat Nasal Cavity," J. Pharm. Sci., 81:348-349 (1992).

H. Dannan, P. Crooks, L. Dittert and A. Hussain, "Kinetics and Mechanism of Chlorine Exchange Between Chloramine-T and Secondary Amines," J. Pharm. Sci., 81:652-656 (1992).

A. Hussain, L. Diamond, D. Thompson, J. Lantta and L. Dittert, "Intranasal Administration of Beta-Adrenergic Amine: An Alternative to Metered-Dose Inhalers," Ann. Allergy, 69:26-29 (1992).

S. Milosovich, A. Hussain, L. Dittert, B. Aungst and M. Hussain, "Testosteronyl-4-Dimethylaminobutyrate-HCl: A Prodrug with Improved Skin Penetration Rate," J. Pharm. Sci., 82:227-228 (1993).