THE TAKAGI LABORATORY

Head: Prof. Dr. Seishi Takagi

In October 1942, the laboratory was established for the investigation of pharmaceutical chemistry under the guidance of Professor Seishi Takagi, Doctor of pharmacy. Principal achievements as follows:

1. Studies on the Preparation of Organomercurisulfides By Seishi Takagi, Hiroaki Tsukatani and Hisashi Tanaka¹⁾

Part 1. Water soluble compounds. Sodium salts of the following new compounds were synthesised.

p-Ethyl mercapto-mercuri-benzoic acid, p- $(\beta$ -hydroxy ethyl mercapto-mercuribenzoic acid, p-carboxy-p-phenyl mercuri-thiosalicylic acid, o- $(\beta$ -hydroxyethylmercapto-mercuri-benzoic acid, 4- $(\beta$ -hydroxyethyl-mercapto-mercuri)-2-chloro-benzoic acid, 3-chloro-4-carboxyl phenyl-mercuri-thiosalicylic acid, 2-chlorotolyl-4-mercurithiosalicylic acid, 2-chlorotolyl-4-mercuri-pseudo-thiourea chlorohydrate.

Part 2. Watey insoluble compounds. The following new compounds were synthesised.

Phenyl-mercuri-phenylsulfide, phenyl-mercuri-o-tolylsulfide, phenyl-mercuri-p-tolylsulfide, phenyl-mercuri-p-chlorophenylsulfide, phenyl-mercuri-a-naphtylsulfide, phenylmercuri-benzylsulfide, p-chlorophenyl-mercuri-o-tolysulfide, p-chlorophenyl-mercuri-pchlorophenylsulfide, p-chlorophenyl-mercuribenzylsulfide, m-nitrophenyl-mercurip-tolylsulfide.

2. Studies on the Synthesis of Alkyl Sulfonium Compounds By Seishi Takagi and Michiyasu Sugii²)

Various new sulfonium compounds with alkyl groups, from methyl to dodecyl, except hexyl, nonyl, decyl and undecyl, and naphthyl or benzylphenyl group were synthesized.

3. Analytical Studies on Furacine

By Seishi Takagi and Toyozo Uno³

The following color reactions were found.

a. The red coloration produced in strong alkaline solution of furacine is about three times deepened by addition of acetone.

b. Red massive precipitate is formed by silver nitrate reagent in the presence of sodium acetate added in furacine solution.

- 1) H. Tanaka and H. Tsukatani: To be published; read before the general meeting of the Society of Pharmacist, Japan (1950).
- M. Sugii . To be published; read before the general meeting of the Society of Pharmacist, Japan (1951).
- 3) T. Uno: Kokin Busshitsu Kenkyu, 2, 155; Yakugaku Kenkyu, 20, 28 (1948).