

LIST OF RESEARCH SUBJECTS
OF
THE BALNEOLOGICAL LABORATORY
OKAYAMA UNIVERSITY

Directed by

PROF. DR. YOSHIO OSHIMA

1946～1953

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I. Lectures Delivered by Prof. Y. Oshima

Catalytic Activity of the Thermal Waters of Misasa.

The 11th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1946.

Changes in the Chemical Composition of the Thermal Waters of Misasa.

The 12th Annual Meeting of the Japan. Balneo-Climatol. Assoc. Apr., 1947.

Radioactive Springs and Misasa Hot Springs.

Annual Meeting of the Okayama Medical Assoc., June, 1947.

On the Internal and External Uses of the Radon Springs.

The 13th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1948.

Radon Contents of the River- and Ground-Waters in Misasa Spa.

Meeting of the Balneological Society of Japan, May, 1948.

Medical Studies on Thoron Springs.

(1) Effect of Thoron Spring Bath on the Vital Staining of Subcutaneous Connective Tissue of the Bathed Mice.

The 14th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1949.

Radioactivity of the Skin after Radon Spring Bath.

The 14th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1949.

On the Radioactive Springs of Thorium Series.

Annual Meeting of the Okayama Medical Assoc, June, 1949.

Radioactivity of Kurinodake Hot Springs.

Meeting of the Balneological Society of Japan., Apr., 1950.

Medical Studies on Thoron Springs.

(2) Blood Picture after Thoron Spring Bath.

The 15th Annual Meeting of the Japan. Balneo-Climatol. Assoc., June, 1950.

Studies on Vitriol Springs.

(5) Acid Alum Vitriol Waters and Membrane Potential of the Skin.

The 15th Annul Meeting of the Japan. Balneo-Climatol. Assoc., June, 1950.

Studies on Vitriol Springs.

(7) Effect of the Vitriol Waters upon Oxido-Reductase Activity.

The 16 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1951.

Catalytic Activities of the Vitriol Waters and their Biological Significance.

Meeting of the Balneological Society of Japan. Apr., 1951.

Mechanism of the Action of Thermal Baths.

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1951.

Changes in the Sensitivity to Histamine during a Series of Thermal Baths.

The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1952.

Balneological Studies Using Radioactive Isotopes.

(1) On Sodium Sulfate Spring Bath.

The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1952.

"Indice de Nutrition" of Thermal Waters.

Annual Meeting of the Okayama Medical Assoc., June, 1952.

Effects of pH and Sodium Chloride Content on the Biological Action of Sulfated Waters.

Meeting of the Balneological Society of Japan, July, 1952.

Effects of the Internal Use of Misasa, Hamamura, and Tottori Spring Waters upon Alimentary Hyperglycemia in Rabbits.

The 18 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., April, 1953.

Medical Study on Trace Elements.

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1949.

Annual Meeting of the Japan. Society of Internal Medicine, Apr., 1950.

A Study on the Incidence of Struma in the Central District of Tottori Prefecture.

(2 nd Report).

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1950.

Medical Studies on Chondroitin Sulfate (1st Report).

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1950.

Medical Studies on Chondroitin Sulfate (2 nd Report).

Annual Meeting of the Japan. Society of Internal Medicine, Apr., 1951.

Medical Studies on Chondroitin Sulfate (3rd Report).

- Annual Meeting of the Japan. Society of Internal Medicine, Apr., 1952.
Medical Studies on the Chemical Constituents of Connective Tissue (4th Report).
Annual Meeting of the Japan. Society of Internal Medicine, Apr., 1953.

II. Contributions by Prof. Y. Oshima

A Filter Paper Reaction of Thermal Waters.

Medicine & Biol. 9 (6), 1946.

Catalytic Activity of the Thermal Waters of Misasa.

J. Japan. Balneo-Climatol. Assoc., 12 (2), 1946.

Effect of Radioactive Waters on the Resistance of Tadpoles against Acid.

Medicine & Biol., 10 (1), 1947.

Effect of Radioactive Thermals on Phagocytosis.

Medicine & Biol., 10 (1), 1947.

A Supplementary Report on the Filter Paper Reaction of Thermal Waters.

Medicine & Biol., 10 (3), 1947.

Balneotherapy of Rheumatic Diseases.

Rinsho Naika Shonika, 2 (3), 1948.

Body Conditions that favor the Occurrence of Thermal Crisis.

Medicine & Biol., 13 (3), 1948.

Studies of Radioactive Springs (1-8).

Bull. Okayama Med. College, 1 (1), 1949.

On the Internal Use of Radon Springs.

The Tokyo Medical Journal, 66 (8), 1949.

On the Internal and External uses of Radon Springs.

J. Japan. Balneo- Climatol. Assoc., 14 (4), 1949.

What is the Use of Thermal Springs ?.

Okayama I. Z., 61 (6-7), 1949.

Clinical Effects of Radioactive Springs.

Onsen Bunka, (12), 1949.

Studies of the Radioactive Springs. (9-19).

(9) Radioactivity of Misasa Hot Springs.

- (10) Radon Contents of the Ground- and River-Waters in Misasa Hot Springs.
- (11) Radon Contents of Ikeda, Hamamura, and Sekigane Hot Springs.
- (12) Effect of the Internal Use of the Radioactive Waters upon Blood Catalase Activity.
- (13) Resorption and Elimination of Radon by Radioactive Thermal Bath.
- (14) Blood Picture after Radioactive Thermal Bath.
- (15) Effect of Radioactive Thermal Bath on Prothrombin Clotting Time.
- (16) Takata Reaction and Radioactive Thermal Bath.
- (17) Blood Sedimentation Rate and Radioactive Thermal Bath.
- (18) Complement Content in Serum and Radioactive Thermal Bath.
- (19) Radon Spring and Phagocytosis

Rep. Balneol. Lab. Okayama Univ. (2), 1949.

Studies of the Radioactive Spring. (22—23).

- (22) Thoron Spring and its Stimulating Effect on Subcutaneous Connective Tissue.
- (23) Radioactivity of the Skin after the Radioactive Thermal Bath.

Rep. Balneol. Lab. Okayama Univ., (3), July, 1950.

Studies of the Radioactive Springs.

- (24) The Effect of Thoron-Spring Bath on Rotter's Reaction.

Rep. Balneol. Lab. Okayama Univ., (3), July, 1950.

Studies of the Radioactive Springs. (25—27).

- (25) Radioactivity of Kurinodake Hot Springs.
- (26) The Effect of Thoron Spring Bath on Leucocyte Picture.
- (27) Medical Effects of the External Application of Monazite.

Rep. Balneol. Lab. Okayama Univ., (4), Mar., 1951.

The Membrane Potential of the Living Human Skin and the Mineral Waters.

Rep. Balneol. Lab. Okayama Univ., (4), Mar., 1951.

Catalytic Activity and Biological Effects of Acid Vitriol Waters.

J. Bal. Soc. Japan, 4 (3—4), 1951.

Studies on Vitriol Springs.

- (7) In-Vitro Effect of Vitriol Waters on Oxido—Reductase.

Rep. Balneol. Lab. Okayama Univ., (5), Aug., 1951.

Studies on Vitriol Springs.

(8) Blood Catalase Level after the Internal Use of Vitriol Waters.

Rep. Balneol. Lab. Okayama Univ., (5), Aug., 1951.

A New Explanation to the Mechanism of the Action of Sulfated Spring Bath,
Especially of Sodium Sulfate Spring Bath.

J. Bal. Soc. Japan, 5 (1), 1952.

Mechanism of the Action of Thermal Baths.

Shibukawa Igaku, 2. 1951.

Seasonal Difference in the Effect of Thermal Bath on Blood Catalase.

Rep. Balneol. Lab. Okayama Univ., (6), Mar., 1952.

Sensitivity to Histamine during a Series of Thermal Baths.

Rep. Balneol. Lab. Okayama Univ., (6), Mar., 1952.

Balneological Studies Using Radioactive Isotopes.

(1) An Explanation to the Mechanism of the Action of Sulfated Spring Bath.

Rep. Balneol. Lab. Okayama Univ., (7), Aug., 1952.

Balneotherapy.

Igakushoin, 1951.

Effect of the Internal Use of Misasa (Radon Spring), Hamamura (Sulfated Muriated Calcium Spring), and Tottori (Sulfated Muriated Spring) Spring Waters upon the Alimentary Hyperglycemia in Rabbits.

Rep. Balneol. Lab. Okayama Univ., (10), Mar., 1953.

On the Whitish Turbidity of Sulfur Spring.

J. Japan. Balneo-Climatol. Assoc., 16 (3), Apr., 1952.

Studies on Vitriol Springs.

(3) On the Copper, Zinc, Nickel, and Cobalt Contents of Blood after the Internal Use of Vitriol Water "Fujino".

Rep. Balneol. Lab. Okayama Univ., (13), Dec., 1953.

Indice de Nutrition and Oxidation-Reduction Potential of Mineral Waters.

Rep. Balneol. Lab. Okayama Univ., (12), Sept., 1953.

Medical Studies on Chondroitin Sulfate (1st Report).

Rep. Balneol. Lab. Okayama Univ., (6), Mar, 1952.

Medical Studies on Chondroitin Sulfate (2nd Report).

Rep. Balneol. Lab. Okayama Univ., (7), Aug., 1952.

A Guide to the Medical Treatments of Neuralgia.

Shindan to Chiryo, 40 (9), Sept., 1952.

Studies on Serum Mucoprotein. (1st Report).

Serum Mucoprotein Level in Normal and Pathological States of Japanese.

Rep. Balneol. Lab. Okayama Univ., (8), Nov., 1952.

Medical Studies on Chondroitin Sufate (4th Report).

Rep. Balneol. Lab. Okayama Univ., (13), Dec., 1953.

Effect of Atmospheric Temperature on Takata Reaction in Serum.

Medicine & Biol., 14 (2), 1949.

Spa Treatment of Neuralgia.

Konnichi-no-Rinsho, 1 (5), 1953.

III. Lectures Directed by Prof. Y. Oshima

1. Balneological Chemistry

T. Ashizawa : Fluoride Content of Mineral Waters and Well Waters in Tottori Prefecture.

Meeting of the Balneological Society of Japan, Apr., 1950.

T. Ashizawa : On the Formation of Boric Waters.

Meeting of the Balneological Society of Japan, Apr., 1950.

T. Ashizawa : On Analytical Methods of Mineral Waters (I).

Meeting of the Balneological Society of Japan, Apr., 1950.

T. Ashizawa : Medical and Chemical Study on Acid Vitriol Water.

Meeting of the Balneological Society of Japan, Apr., 1950.

M. Mifune : Effects of Pumping-up of Hot Spring on Surrounding Hot Springs.

Annual Meeting of the Okayama Medical Assoc., June, 1950.

T. Ashizawa : Chromatographic Analysis of Metals by Organic Reagents.

Symposium of Geochemistry and Analytical Chemistry, Oct., 1950.

N. Saito : Studies on Radioactive Sinter Deposits of Misasa Hot Springs. (I)

T. Ashizawa : Chemical Composition of Deposits.

Symposium of Geochemistry and Analytical Chemistry, Oct., 1950.

N. Saito Studies on Radioactive Sinter Deposits of Misasa Hot Springs. (III)

T. Ashizawa : Relations Between Country Rock, Mineral Waters and Sinters.

Symposium of Geochemistry and Analytical Chemistry, Oct., 1950.

T. Ashizawa : Colorimetric and Volumetric Determination of Calcium by a New Reagent.

Symposium of Geochemistry and Analytical Chemistry, Oct., 1950.

T. Ashizawa : A New Method for Determination of Radium B by Organic Reagent and its Application.

The 4th Annual Meeting of the Chemical Society of Japan, Apr., 1951.

T. Ashizawa : Concentration of Radioactive Elements in Thermal Waters by Ion Exchange Resin and its Application to Chemical Analysis.

The 4th Annual Meeting of the Chemical Society of Japan, Apr., 1951.

M. Mifune : On Turbidity of Sulfur Spring.

Meeting of the Balneological Society of Japan, Apr., 1951.

T. Ashizawa : On the Boric Acid and Fluoride Content of Hot Springs in Tottori Prefecture and on a New Colorimetric Method of Calcium.

Symposium of Geochemistry, July, 1951.

S. Umemoto : Geochemical Studies of Misasa Hot Springs. (I)

Variation of Chemical Composition and Others in "Hisui-no-Yu". (1)

Congress of Chugoku and Shikoku Branch of the Chemical Society of Japan, Oct., 1951.

S. Umemoto : Studies on the Effects by Pumping Suction of Hot Springs.

Congress of Chugoku and Shikoku Branch of the Chemical Society of Japan, Oct., 1951.

S. Umemoto : Geochemical Studies of Misasa Hot Springs. (II-IV)

Variation of Chemical Composition and Others in "Hisui-no-Yu". (2-4)

The 5th Annual Meeting of the Chemical Society of Japan, Apr., 1952.

M. Mifune : Chemical Composition of Misasa, Sekigane and Kaire Hot Springs, Tottori Prefecture.

Meeting of the Balneological Society of Japan, July, 1952.

S. Umemoto : Simple Method for Determination of Sulfate.

The 1st Annual Meeting of the Japan Society for Analytical Chemistry,
Oct., 1952.

T. Sugihara (et al.) : On Chloride Content of Ground Waters in Island of Setonaikai.
Symposium of Geochemistry, Nov., 1952.

S. Umemoto : Determination of Radium B in Radioactive Mineral Water.

Ordinary Meeting of the Japan Society for Analytical Chemistry,
Feb., 1953.

S. Umemoto : Geochemical Studies of Misasa Hot Springs. (VI-VIII)
On the Relations between Several Radioactive Elements.
The 6th Annual Meeting of the Chemical Society of Japan, Apr., 1953.

T. Sugihara : Studies of the Aging of Mineral Waters. (I)

Changes in Radon Content of Thermal Waters of Misasa after Flowing
Out.

The 6th Annual Meeting of the Chemical Society of Japan, Apr., 1953.

S. Umemoto : Studies on the Chloride and Sulfate Content of Well Waters and the
Amounts of Chloride and Sulfate Fixed to the Soil in the Mineral
Spring Districts. (7)

Possibility of Chemical Prospecting of Mineral Spring.

Ordinary Meeting of Chugoku and Shikoku Branch of the Chemical
Society of Japan, May, 1953.

T. Sugihara : Studies of the Aging of Mineral Waters. (II)

Changes in the Silicate Content of Thermal Waters of Misasa after
Flowing Out.

Ordinary Meeting of Chugoku and Shikoku Branch of the Chemical
Society of Japan, May, 1953.

S. Umemoto : Chemical Studies on Thermal Algae. (I)

M. Mifune : Ordinary Meeting of Chugoku and Shikoku Branch of the Chemical
Society of Japan, May, 1953.

K. Kimura
S. Umemoto : Studies on the Chloride and Sulfate Content of Well Waters and
the Amounts of Chloride and Sulfate Fixed to the Soil in the Mineral
Spring Districts. (8)

Matsuzaki, Togo and Asozu Hot Springs, Tottori Prefecture, Japan.

Symposium of Geochemistry, Oct., 1953.

2. Balneological Medicine

H. Morinaga : Effect of Internal Use of Misasa Hot Springs on Diuresis.

The 11th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1946.

H. Morinaga : Studies on the Internal Use of the Radioactive Springs.

Conference of the Chugoku-Shikoku Branch of the Japan. Society of
Internal Medicine, Dec., 1946.

H. Morinaga Radioactive Thermal Bath and Oxydation-Reduction System in the
M. Sotozono : Human and Animal Bodies.

The 12th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1947.

H. Morinaga : Radioactive Springs and Permeability of Erythrocytes.

The 12th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1947.

M. Sotozono : Studies on the Internal Use of the Acid Vitriol Water (Fujino Spring).

Conference of the Chugoku-Shikoku Branch of the Japan. Society of
Internal Medicine, Oct., 1947.

M. Sotozono : Studies on Vitriol Springs in Chugoku District (1st Report).

H. Morinaga : The Internal Use of Fujino Spring and Hemopoietic Action.

The 57th Annual Meeting of Okayama Medical Assoc., June 1947.

H. Morinaga : Radioactive Springs and Blood Sugar.

The 58th Annual Meeting of the Okayama Medical Assoc., June, 1948.

M. Sotozono : The Internal Use of Mineral Waters and Recovery Curve of Anemia.

The 58th Annual Meeting of the Okayama Medical Assoc., June, 1948.

H. Morinaga : Radioactive Springs and Uric Acid Metabolism.

Meeting of the Balneological Society of Japan, May, 1948.

H. Morinaga : Frequent Thermal Baths and Blood Catalase.

The 14th Annual Meeting of Japan Balneo-Climatol. Assoc.,
Apr., 1949.

H. Morinaga Studies on Vitriol Springs in Chugoku District (2nd Report).

M. Sotozono : Studies on the Internal Use of Toyokawa and Mitsuishi Spring Waters.

The 14th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1949.

- S. Onda : An Experimental Study on the Effect of Mineral Waters upon the Movement of Isolated Rabbit Intestine.
The 59 th Annual Meeting of the Okayama Medical Assoc., June, 1949.
- H. Morinaga : Effect of the Internal Use of the Radioactive Waters on Alimentary Hyperglycemia. (2 nd Report).
Meeting of the Balneological Society of Japan, Aug., 1949.
- H. Morinaga : The Internal Use of Shirahama Hot Springs (Wakayama Prefecture) and Alimentary Hyperglycemia.
Meeting of the Balneological Society of Japan, Apr., 1950.
- S. Onoda : Radioactive Thermal Bath and Skin Temperature.
The 15 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., June, 1950.
- S. Onda T. Ashizawa : Relation between the Mottled Tooth, Struma and Fluorine Content of Mineral Water.
The 15 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., June, 1950.
- H. Morinaga : Studies on Vitriol Springs in Chugoku District. (3 rd Report).
The Internal Use of Fujino Spring Water and Gastric Acidity.
The 15th Annual Meeting of Japan. Balneo-Climatol. Assoc., June, 1950.
- S. Onda : Studies on Vitriol Springs in Chugoku District. (4 th Report).
Effect of Acid Vitriol Waters upon the Movement of Isolated Rabbit Intestine.
The 15 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., June, 1950.
- M. Sotozono : Radioactive Thermal Bath and Oxydation-Reduction System. (2nd Report).
Effect of Radioactive Thermal Bath on Blood Glutathion.
The 60 th Annual Meeting of the Okayama Medical Assoc., June, 1950.
- Y. Tanaka T. Tange : A Statistical Investigation on the Menstruation in Women Living in Misasa Spa and its Vicinity.
The 60 th Annual Meeting of the Okayama Medical Assoc., June, 1950.
- S. Onoda : Seasonal Difference in the Effects of Thermal Bath on Blood Catalase and Serum Choline-Esterase.

The 16 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr. 1951.

- M. Sotozono: Studies on Vitriol Springs in Chugoku District. (8-9 th Report).
- (8) Internal Use of Vitriol Water and Blood Catalase.
 - (9) Effects of Internal Use of Yanahara Spring Water on Gastric Acidity and Recovery of Anemia.
- The 16th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1951.

- M. Sotozono: Radioactive Thermal Bath and Vitamine C Metabolism.
- The 16th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1951.

- Y. Tanaka : Effects of Thermal Baths on the Sexual Circle of Rats.
- The 16th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1951.

- Y. Tanaka
T. Tange: A Statistical Investigation on the Menstruation and Conception in Women Living in Spas and their Vicinities.
- The 16 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1951.

- S. Onoda : Protective Effect of Thermal Baths Against Total Body X-Irradiation.
- The 61 th Annual Meeting of the Okayama Medical Assoc., June, 1951.

- S. Onda : Relation between the Mottled Tooth, Struma and Fluorine Content of Drinking Water. (2 nd Report).
- Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1951.

- M. Sotozono: Thermal Bath and Vitamine C Metabolism.
- The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1952.

- Y. Tanaka : Effects of Thermal Bath on the Sexual Circle of Rats. (2 nd Report).
Inquiry into the Mode of the Action.
- The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1952.

- S. Onoda : Effects of the Radioactive Thermal Bath on Circulation System.
(2 nd Report).
- The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc., Apr., 1952.

- Y. Tanaka : Balneotherapeutic Experiences in Gynecology.
T. Takatori : The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1952.
- Y. Tanaka : The Effects of Thermal Bath upon the Motility of the Living Rabbit's
Fallopian Tube and Uterus.
The 17 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1952.
- T. Yokota : Balneological Studies Using Radioactive Isotopes.
(2) Influence of Physico-Chemical Properties of Bath Water on the
Transition of Sulfate Ion into the Body Across the Skin.
The 62th Annual Meeting of the Okayama Medical Assoc., June, 1952.
- Y. Tanaka : Balneotherapy of Adnexitis and Colpitis.
T. Takatori : The Tottori District Conference of the Japan. Obstetrical and Gynecological Society, Oct., 1952.
- Y. Tanaka : Thermal Bath and Sexual Function of Women.
The Chugoku-Shikoku District Conference of the Japan. Obstetrical and Gynecological Society, Oct., 1952.
- Y. Ueda
T. Yokota : Effect of the Internal Use of Radioactive, and Sulfate Waters upon
the Bile Excretion.
The 18 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1953.
- S. Onoda : Effects of Thermal Baths Against Total Body X-Irradiation.
The 18 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1953.
- Y. Tanaka : Effect of Thermal Bath on the Sexual Circle of Rats. (3 rd Report).
The 18 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1953.
- T. Okada : Studies on the Prevention of Cancer by Thermal Springs.
(1) A Comparative and Statistical Study on the Death by Cancer in
Spas and their Surrounding Villages in Tottori Prefecture, Japan.
The 18 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1953.
- S. Onda : Studies of the Radioactive Springs.
(33) Effect of Radioactive Thermal Bath on Potassium, Calcium,
Sodium, Chloride and Protein Levels in Serum.
The 18 th Annual Meeting of the Japan. Balneo-Climatol. Assoc.,
Apr., 1953.

- T. Yokota : Balneological Studies Using Radioactive Isotopes. (3rd Report).
 The 63 th Annual Meeting of the Okayama Medical Assoc., June, 1953.
- S. Kishida & H. Morinaga : Effect of Thermal Bath on Alimentary Hyperglycemia.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1953.
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- M. Sotozono : Cutaneous Reaction and Body Temperature in the Tuberculous Chest Patients.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1947.
- S. Onda : A Case of Familial Hemolytic Anemia.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Nov., 1948.
- H. Morinaga : Ulcer Points in Peptic Ulcer.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Nov., 1948.
- S. Onda : A Study on the Incidence of Struma in the Central District of Tottori Prefecture, Japan.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Nov., 1948.
- S. Onoda : Seasonal Changes in the Average Erythrocytes Sedimentation Rate in Misasa, Tottori Prefecture.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1949.
- H. Morinaga : Seasonal Changes in the Gastric Acidity.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1949.
- M. Sotozono : Backache and Sawada's Pyruvic Acid Reaction in the Urine.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1950.
- S. Onoda : A Case of Lung Cyst.
 Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1951.
- S. Onda : A Study on the Incidence of Struma in the Central District of Tottori Prefecture. (2 nd Report).
- T. Ashizawa Y. Oshima : Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1951.

T. Yokogata : A Statistical Observation on Cholecystopathia.

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1952.

M. Sotozono : A Clinical Study on Heart-Burn.

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine. Oct., 1952.

S. Onda : A Study on the Incidence of Struma in the Central District of Tottori Prefecture. (3rd Report).

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1952.

S. Onda : A Case of Familial Hemolytic Anemia. (2).

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1953.

H. Morinaga : A Statistical Observation on Hook-worm Anemia.

The 60 th Annual Meeting of the Okayama Medical Assoc., June, 1950.

H. Morinaga : A Study on the Incidence of Struma in Western District of Okayama Prefecture.

Conference of the Chugoku-Shikoku Branch of the Japan. Society of Internal Medicine, Oct., 1950.

S. Kishida : Distribution of Chondroitin Sulfate Labeled with S³⁵ in Animal Body.

The 63 th Annual Meeting of the Okayama Medical Assoc., June, 1953.

IV. Contributions Directed by Prof. Y. Oshima

1. Balneological Chemistry

T. Ashizawa : Chemical Studies on Misasa Hot Springs. (1-8).

(1) Natural Common Salt Discovered in Misasa Hot Springs.

(2) Composition of a Deposit by Boiling of a Thermal Water of Misasa Hot Springs.

(3) Distribution of Radon in Thermal Waters and Thermal Gases.

(4) Composition of Thermal Gas.

(5) Composition of Sinter Deposit.

(6) Chemical Composition of Granite of Misasa.

(7) Changes in the Chemical Composition of "Kawara-no-Yu", Misasa Hot Springs.

(8) On Heavy Metals and B pH.

Rep. Balneol. Lab. Okayama Univ., (3), July, 1950.

T. Ashizawa : Studies on Vitriol Springs. (5)

Polynuclear Complex Iron Salt in Vitriol Waters.

Rep. Balneol. Lab. Okayama Univ., (3), July, 1950.

T. Ashizawa : Colorimetric and Volumetric Determination of Calcium by a New Reagent.

Rep. Balneol. Lab. Okayama Univ., (3), July, 1950.

T. Ashizawa : Chemical Studies on Misasa Hot Springs. (9-15).

(9) On the Hydrogen Sulfide, Sulfite and Thiosulfite Contents.

(10) Arsenic Content.

(11) Nitrite Ion Content of the Thermal Bath Waters.

(12) Radium E Content.

(13) Thorium B and Radium B Content.

(14) Resorption of Thoron through the Skin and the Thoron Content of the Air of Bath Room.

(15) Application of Radioactive Elements in Thermal Waters as Tracer in Chemical Research and Radio-Thorium Content of a Sinter Deposit.

Rep. Balneol. Lab. Okayama Univ., (4), Mar., 1951.

T. Ashizawa : Chromatographic Analysis of Metals by Organic Reagents.

Rep. Balneol. Lab. Okayama Univ., (5), Aug., 1951.

T. Ashizawa : Colorimetric Determination of Magnesium in Natural Waters.

Rep. Balneol. Lab. Okayama Univ., (5), Aug., 1951.

T. Ashizawa : Colorimetric Determination of Magnesium in Blood.

Rep. Balneol. Lab. Okayama Univ., (5), Aug., 1951.

T. Ashizawa : Studies on Vitriol Springs. (6)

Colorimetric Determination of Antimony, Determination of Free Mineral Acid, Detection of Sulfides of the Second Group.

Rep. Balneol. Lab. Okayama Univ., (5), Aug., 1951.

S. Umemoto : A Study on Phosphor Content in Misasa Spa.

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