CONSPECTUS

Grounds Takatsuki: 5.722 acres
Kyoto: 0.395 acres

Buildings

		(in floor area)
Main Building	(Takatsuki)	0.757 acres
Laboratories & Pilot Plants	(,,)	0.513 ,,
Office Rooms & Lecture Hall	(,,)	0.086 ,,
Quarters for the Personnel	(,,)	0.033 ,,
Power Distribution Place, Boiler Room, Storages, & other attached buildings	(,,)	0.154 ,,
Kodama Laboratory & Pilot Plant	(Kyoto)	0.411 ,,

Number of Personnel

Position	Full-time	Concurrent
Professor	6	33
Asst. Prof.	12	1
Instructor	7	4
Assistant	47	0
Business Official	6	0
Charged Researcher	0	5
Part-time Researcher	0	4
Employee	37	0
Laborer	19	0
Total	**134**	**47**

Visiting Researcher: 1
Authorized Researchers: 85
Authorized Experiment Probationers: 18

Laboratories

Kondo Laboratory ..... *Nutritional Chemistry and Food Chemistry*
Nozu Laboratory..... *Preparative Organic Chemistry*
Sawai Laboratory ..... *Ceramic Chemistry*
Takei Laboratory ..... *Natural and Synthetic Insecticides*
Ogiu Laboratory..... *Pharmacological Chemistry*
R. Kimura Laboratory ..... *Applied Microbiology and Immunology*
Utzino Laboratory ..... *Applied Medical Biochemistry*
Katagiri Laboratory ..... *Special Fermentation*
K. Inouye Laboratory ..... *Nutritional Medicine*
Sawamura Laboratory ..... *Metallurgy*
Sakurada Laboratory..... *Synthetic Fibers and Chemistry of High Polymers*

Kodama Laboratory ..... *Fuel Chemistry and High Pressure Chemistry*
Oda Laboratory ..... *Organic Syntheses*
Sasaki Laboratory ..... *Surface Chemistry*
Ishibashi Laboratory..... *Oceano-Chemistry*
Takagi Laboratory..... *Pharmaceutical Analysis*
Kariyone Laboratory..... *Phyto-Chemistry*
Horio Laboratory ..... *Applied Cellulose Chemistry*
Y. Inouye Laboratory ..... *Agricultural Biochemistry*
Tachi Laboratory ..... *Interfacial Chemistry*
Yukawa Laboratory ..... *Quantum Chemistry*
Abe Laboratory ..... *Electrical Engineering Materials*
Sihshido Laboratory ..... *Industrial Organic Chemistry*
Goto Laboratory ..... *Colloid Chemistry*
K. Kimura Laboratory..... *Applied Nuclear Physics*
Utzino 2nd Laboratory..... *Metal Physics*

A Short History of the Institute for Chemical Research

In August, 1915 the Special Chemical Laboratory was established at Yoshida Nihonmatsu-cho, Sakyo Ward, Kyoto, as a part of the Faculty of Science of Kyoto University, then Kyoto Imperial University. The laboratory was put under the directorship of Prof. Mitsuru Kuhara, and engaged in the study and manufacture of chemicals, e. g., "salvarsan", which were desperately needed for medical treatment but in shortage due to the interruption of importation as the result of World War I. With the death of Prof. Kuhara in November, 1919, Prof. Yukichi Osaka was appointed supervisor of the laboratory, and with Prof. Osaka's resignation in 1920 Asst. Prof. Kaoru Matsumiya succeeded him as supervisor. In 1926 a budget bill providing for the enlargement of the laboratory was passed by 51st Diet.

Upon the request of Kyoto (Imperial) University which had been asking for the establishment of a research institute of chemistry on a large scale, the Government consented to set up the present institute by promulgating in October, 1926, Imperial Ordinance No. 313, which provided for the establishment of a new institute for chemical research in Kyoto (Imperial) University. The new institute amalgamated the Special Chemical Laboratory, and has continued to grow up to the present. In addition to the study and manufacture of various chemicals taken up by the Special Chemical Laboratory the new institute started researches in theories and application of special matters of chemistry. In the following table will be seen the development of the institute:

1926

Oct. 4: In accordance with an Imperical Ordinance, the official organization of the Institute for Chemical Research was promulgated, and Prof. Masumi Chikashige of Kyoto (Imperial) University was appointed Acting Director of the Institute.
Oct. 5: The office was set up in the campus of Kyoto (Imperial) University. The Special Chemical Laboratory of the Faculty of Science, was trasferred to become the Matsumiya Laboratory of the Institute for Chemical Research.

1927

Mar. 4: Prof. Masumi Chikashige of Kyoto (Imperial) University, Acting Director of the Institute was appointed Director.

Apr. 1: The following eight laboratories were established:

Chikashige Laboratory	Horiba Laboratory
Kita ,,	Watanabe ,,
Osugi ,,	Kondo ,,
Mayeda ,,	Shikata ,,

Oct. 26: The ground of 3.676 acres was purchased at Aza-Kosobe, Iwate-mura, Mishima-gun, Osaka Prefecture.

Oct. 31: The Osugi Laboratory being abolished, and the Suzuki Laboratory was established.

1928

Mar. 30: Construction works of the main building for the laboratories were started at Aza-Kosobe, Iwate-mura, Mishima-gun, Osaka Prefecture.

1929

Mar. 31: Construction of the main building for the laboratories was completed.

May 15: To the completed main building moved the Chikashige, Mayeda, Horiba, Kondo, Shikata Laboratories and a part of the Matsumiya Laboratory.

Dec. 17: With the revision of Articles 6 and of the Official Organization Law in accordance with the Imperial Ordinance No. 353, the number of the personnel was increased by 4 assistants and 1 clerk.

1930

Apr. 1: To the main building moved the Kita, Watanabe Laboratories, and a part of the Suzuki Laboratory.

May 15: The opening ceremony was held at the Institute at Iwatemura, Mishima-gun, Osaka Prefecture.

Sept. 25: Prof. Masumi Chikashige of the Kyoto (Imperial) University was relieved of the post of Director at his own request.
Prof. Gen-itsu Kita of the Kyoto (Imperial) University was appointed Director of the Institute.

Oct. 27: With the resignation of Prof. Chikashige at his retiring age, his laboratory was abolished.

Oct. 28: Uno Laboratory was established.

1931

Jan. 1: Due to the administrative change the address of the Institute was changed from Aza-Kosobe, Iwate-mura, Mishima-gun, Osaka Prefecture to Aza-Kosobe, Takatsuki-cho, Mishima-gun, Osaka Prefecture.

June 30: A test plant was completed.

1932

June 17: Director Kita left for a trip to Europe.

Member Shinkichi Horiba was nominated Acting Director.
A building for fiber laboratories was donated.

June 30: With the death of Prof. Matsumiya, the Matsumiya Laboratory was abolished, and Utzino Laboratory was set up.

Nov. 22: The construction of a workroom was started.

Dec. 29: Director Kita returned.

1933

Mar. 25: The construction of the work room was completed.

July 7: With the revision of 6 & 7 of the Official Organization Law in accordance with the Imperial Ordinance No. 185, the number of personnel was increased by 7 assistants and 2 clerks.

Aug. 30: The ground of 1.492 acres was leased for the site of the prospected pilot plants.

Oct. 26: The construction of a test plant for colloidal chemicals was completed.

Dec. 15: The construction of a test plant for nutritive chemistry was completed.

Dec. 27: The Matsumoto Laboratory was established.

1934

July 3: Due to the revision of Art. 6 of the Official Organization Law in accordance with the Imperial Ordinance No. 215, the number of personnel was increased by 2 assistants.

Aug. 15: The construction of a laboratory for special glass was started.

1935

Mar. 15: The construction of the laboratory for special glass was completed.

June 11: The construction of a laboratory for fiber was started.

Aug. 8: The construction of the same laboratory was completed.

1936

Jan. 29: The construction of a laboratory for electric chemistry was started.

Feb. 18: The construction of a power substation was started.

Mar. 17: The construction of the laboratory for electric chemistry was completed.

Mar. 31: The construction of the power substation was completed.

June 11: The Suzuki Laboratory was abolished.

July 18: The construction of a test plant for tundra and the official buildings was started at Shiika-cho, Saghalien.

Oct. 15: The above-mentioned construction was completed.

1937

Feb. 16: Prince and Princess Chichibu visited for inspection the Takatsuki Institute.

Apr. 2: The Nozu, Sawai, and Takei Laboratories were established.

June 23: The extension of the laboratory for fiber was started.

July 17: The construction of a test plant for synthetic oil was started.

Sept. 30: The extension of the laboratory for fiber was completed.

Oct. 15: With the resignation of Prof. Watanabe at his retiring age, the Watanabe Laboratory was abolished, and the Nishimura Laboratory was established.

Nov. 13: The construction of a test plant for synthetic oil was completed.

Dec. 24: In accordance with the Imperial Ordinance No. 735, "Assistants shall be full-time 16 persons" was revised to "—— full-time 21 persons" in Art. 6 of the Official Organization Law.

"Clerks shall be full-time 4 persons" was revised to "—— full-time 5 persons".

1938

Sept. 9: The construction of a room for the manufacture and study of Saviol was started.

1939

Mar. 31: The construction of a room for the manufacture and study of Saviol was completed.

Apr. 6: The Arakatsu Laboratory was established.

Aug. 1: In accordance with the Imperial Ordinance No. 523, "Assistants shall be full-time 21 persons" was revised to "—— full-time 19 persons" in Art. 6 of the Official Organization Law, and next to "and the asst. professors who —— shall be" will be added "7 persons in all" in paragraph 2, Art. 8.

Aug. 23: The construction of a test plant for glass fiber and a test plant for synthetic rubber was started.

Oct. 7: The Ogiu and Kimura Laboratories were established.

Dec. 22: In accordance with the Imperial Ordinance No. 848, "Assistants shall be full-time 19 persons" was revised to "—— full-time 23 persons" in Art. 6; and "7 persons in all" to "9 persons in all" in Art. 8.

1940

Jan. 19: The construction of a test plant for glass fiber and of a test plant for synthetic rubber was completed.

Jan. 30: The regulations for the sub-assistants of the Institute were formulated.

May 29: The regulations for the Standing Committee of the Institute were revised.

June 11: Scientific achievements of the Horiba, Kita, Shikata, and Sawai Laboratories were presented for the Emperor's inspection at The Kyoto Detatched Palace.

June 25: In accordance with the Imperial Ordinance No. 423, "Assistants shall be full-time 23 persons" was revised to "—— full-time 22 persons" in Art. 6 of the Official Organization Law.

Dec. 16: The construction of a test plant for colloidal chemistry was started.

1941

Mar. 30: The construction of the test plant for colloidal chemistry was completed.

Nov. 28: In accordance with the Imperial Ordinance No. 1020, "full-time 22 persons" was revised to "full-time 24 persons" in Art. 6 of the Official Organization; and "9 persons" to "10 persons" in Art. 8.

1942

Mar. 14: Profs. Mayeda, Shikata, Nishimura who had been transferred to other positions, their laboratories were abolished, and the Utzino, Katagiri, K. Inouye and Sawamura Laboratories were established.

July 3: With the resignation of Prof. Kita at his retiring age, the Kita Laboratory was abolished, and the Sakurada, Kodama, Oda, Sasaki and Ishibashi Laboratories were newly established.

Sept. 25: Director Gen-itsu Kita, Prof. of Kyoto (Imperial) University, was relieved of the directorship at his own request, Prof. Shinkichi Horiba of Kyoto (Imperial) University was appointed Director.

Oct. 9: The Takagi and Kariyone Laboratories were established.

Dec. 17: The Horio Laboratory was established.

1943

Jan. 1: In accordance with the promulgation of the Municipal Organization Law, the address of the Institute was changed from Aza-Kosobe, Takatsuki-cho, Mishima-gun, Osaka Prefecture to Aza-Kosobe, Takatsuki City, Osaka Prefecture.

Jan. 8: The Tachi and Inouye (Yoshiyuki) Laboratories were established.

Jan. 13: The Yukawa Laboratory was established.

Mar. 12: With the death of Prof. Uno, Uno Laboratory was abolished, and the Horiba 2nd Laboratory was established.

May 1: The Abe Laboratory was established.

Oct. 5: In accordance with the Imperial Ordinance No. 760, "10 persons" was revised to "13 persons" in Art. 8 of the Official Organization Law.

1944

May 5: To the Experimental Forest Station was transferred the authority of using the test plant for tundra and its grounds in Saghalien.

Aug. 22: In accordance with the Imperial Ordinance No. 515, "24 persons" was revised to "28 persons" in Art. 6; and "13 persons" to "17 persons" in Art. 8.

Dec. 1: The Hirata Laboratory was established, and the Horiba 2nd Laboratory was abolished.

Dec. 18: With the resignation of Prof. Matsumoto at his retiring age, the Matsumoto Laboratory was abolished.

1945

June 15: In accordance with the Imperial Ordinance No. 372, "28 persons" was revised to "30 persons" in Art. 6; and "17 persons" to "19 persons" in Art. 8.

Aug. 15: The Pacific War came to a close.

Nov. 30: Director Shinkichi Horiba, Prof. of Kyoto (Imperial) University was relieved of the directorship at his own request. Prof. Kinsuke Kondo of Kyoto (Imperial) University was appointed Director.

1946

Apr. 1: In accordance with the Imperial Ordinance No. 207, "Director; members; Assistants; Clerks" were revised to "Director; Educational Instruction

Officials, full-time 19 persons of 1st or 2nd Grade, full-time 30 persons of 3rd Grade; Educational Administrative Officials, full-time 4 persons of 3rd Grade" in Art. 3; "be appointed by the Education Minister from among ——" was revised to "be assumed by an educational instruction official who ——" in Art. 4; and from Art. 5 to Art. 8 were rescinded.

Apr. 5: The Shishido Laboratory was established.

Dec. 1: Director Kinsuke Kondo, Prof. of Kyoto (Imperial) University was relieved of the directorship at his own request.
Prof. Ryusaburo Nozu of Kyoto (Imperial) University was appointed Director.

1947

July 4: The regulations for the Standing Committee of the Institute for Chemical Research was revised.

July 25: With the resignation of Prof. Horiba at his retiring age, the Horiba Laboratory was abolished, and the Goto LaLoratory was newly established.

Sept. 30: In accordance with the Imperial Ordinance No. 204, "Kyoto Imperial University" was renamed "Kyoto University" under the Official Organization Law.

1948

Sept. 1: The regulations for the Standing Committee of the Institute were revised.

Sept. 30: Director Ryusaburo Nozu, Prof. of Kyoto University was released of the directorship at his own request.
Prof. Senji Utzino of Kyoto University was appointed Director.

1949

May 31: In accordance with the Law No. 150 the Official Organization Law (The Imperial Ordinance No. 313, October 1926) was abolished.

1950

Apr. 30: With the resignation of Prof. Arakatsu at his retiring age, the Arakatsu Laboratory was abolished, and the Utzino 2nd Laboratory was established.

May 15: With the revision of the Rules 8-1 of the National Personnel Authority, the official grades were abolished.

June 9: The Kimura Laboratory was established, and the Utzino 2nd Laboratory was abolished.

Dec. 20: With the death of Prof. Hideki Hirata, the Hirata Laboratory was abolished, and the Utzino 2nd Laboratory was established.

General Survey of Accounts

1. Budgets & Settlements of Revenue

Year	Budget	Settlement	Year	Budget	Settlement
1926	¥ —	¥ 10,139	1939	¥ 67,747	¥ 94,924
1927	50,487	23,159	1940	94,003	112,795
1928	50,487	31,674	1941	89,603	102,505
1929	50,487	23,947	1942	89,603	142,148
1930	48,467	27,801	1943	87,562	120,878
1931	47,747	27,221	1944	87,562	108,418
1932	51,377	33,799	1945	87,562	106,639
1933	84,297	76,146	1946	87,562	121,092
1934	67,747	81,296	1947	282,022	218,906
1935	67,747	86,223	1948	—	328,740
1936	67,747	62,054	1949	300,000	300,000
1937	67,747	114,801	1950	400,000	595,800
1938	67,747	77,237			

2. Budgets & Settlements of Expenditure

Year	Ordinary Expenses		Extraordinary Expenses	
	Budget	Settlement	Budget	Settlement
1926	¥ 59,244	¥ 54,257	¥ —	¥ —
1927	50,798	50,796	20,000	11,538
1928	59,244	58,954	29,406	29,406
1929	69,855	69,854	—	—
1930	69,605	69,603	—	—
1931	67,849	67,849	—	—
1932	75,550	75,550	4,327	4,325
1933	134,944	134,944	—	—
1934	127,452	127,452	5,000	4,999
1935	127,741	127,741	23,852	23,852
1936	102,671	102,671	—	—
1937	138,507	138,506	106,427	106,426
1938	149,194	149,193	6,792	6,792
1939	181,204	181,203	188,000	187,998
1940	214,859	214,858	137,778	137,776
1941	196,917	196,916	6,996	6,986
1942	203,824	203,823	6,760	6,759
1943	251,227	251,226	16,781	16,781
1944	218,885	218,884	130,875	130,865
1945	234,140	234,139	87,330	87,328
1946	388,386	388,385	585,214	585,213
1947	3,656,204	3,656,200	—	—
1948	8,631,890	8,628,997	—	—
1949	18,438,114	18,437,389	—	—
1950	22,249,122	22,246,527	—	—

3. Grants for Scientific Reserches

Year	Yearly Amount	Item
1939	¥ 63,550	9
1940	63,550	12
1941	107,700	17
1942	100,150	17
1943	123,785	26
1944	190,000	38
1945	91,500	23
1946	139,300	45
1947	165,200	41
1948	1,073,500	52
1949	1,294,000	50
1950	1,723,000	48
1951	495,000	9

4. Scholarship

Year	Yearly Amount	Donator
1929	¥ 600	Mr. Y. Takagi.
1932	800	Nippon Rayon Co. Ltd & others (5 persons)
1933	3,000	Dainippon Jinzo Hiryo Co. Ltd. & others (8 persons)
1934	12,500	Mr. G. Inoue & others (6 persons)
1935	3,500	Mitsubishi Kogyo Co. Ltd. & others (2 persons)
1936	7,500	Mr. S. Horiba & others (3 persons)
1937	108,100	Sumitomo Honsha Co. Ltd. & others (6 persons)
1938	11,000	Nippon Butsuri Kagaku Kenkyukai & others (9 persons)
1939	53,500	Sumitomo Kagaku Kogyo Co. Ltd. & others (3 persons)
1940	202,359	Sumitomo Honsha Co. Ltd. & others (7 persons)
1941	324,700	Nippon Senryo Co. Ltd. & others (5 persons)
1942	198,000	Taniguchi Kogyo Shoreikai & others (7 persons)
1943	21,000	Sumitomo Kagaku Kogyo Co. Ltd. & others (3 persons)
1946	69,000	Dainippon Jyochugiku Co. Ltd. & others (11 persons)
1947	15,000	Dainippon Jyochugiku Co. Ltd. & others (2 persons)
1948	71,500	Tsubakimoto Seisakusho Co. Ltd. & others (5 persons)
1949	60,000	Tsubakimoto Seisakusho Co. Ltd. & others (3 persons)
1950	65,000	Wakodo Kenkyusho & others (3 persons)

5. Grants for Assigned Researches

Year	Yearly Amount	Item	Year	Yearly Amount	Item
1933	¥ 4,500	1	1943	¥ 99,600	9
1935	1,000	1	1944	74,670	8
1936	2,835	2	1945	69,900	5
1937	21,536	4	1946	107,100	8
1938	23,450	5	1947	149,000	9
1939	30,783	5	1948	150,000	6
1940	53,800	8	1949	300,000	7
1941	50,700	6	1950	410,000	7
1942	76,700	6			

6. Papers

The Reports of the Institute for Chemical Research, Kyoto University	Vol. 1	Published Jan. 1929
Scientific Reports of the Institute for Chemical Research, Kyoto University	Vol. 1	Nov. 1929
The Reports of the Institute for Chemical Research Kyoto University	Vol. 2	June 1931
	Vol. 3	Mar. 1933
	Vol. 4	June 1934
	Vol. 5	Aug. 1935
	Vol. 6	June 1936
	Vol. 7	Aug. 1937
10 Jahre Institut für Chemische Forschung an der Kaiserlichen Universität zu Kyoto, 1925-1935		Apr. 1938
The Reports of the Institute for Chemical Research, Kyoto University	Vol. 8	July 1938
	Vol. 9	May 1939
	Vol. 10	Nov. 1939
	Vol. 11	Apr. 1941
	Vol. 12	Mar. 1944
	Vol. 13	Mar. 1947
	Vol. 14	Dec. 1941
	Vol. 15	Nov. 1946
	Vol. 16	Dec. 1947
	Vol. 17	Mar. 1949
	Vol. 18	July 1949
	Vol. 19	Dec. 1949
Bulletin of the Institute for Chemical Research, Kyoto University (Re-titling "The Reports of the Institute for Chemical Research, Kyoto University")	Vol. 20	Mar. 1950
	Vol. 21	June 1950
	Vol. 22	Sept. 1950
	Vol. 23	Dec. 1950
	Vol. 24	Mar. 1951

7. Patent

The Institute has acquired about eighty patent-rights since its establishment, of which following patents are still valid.

Pat. No. 105102: The method of preparation of certain substances which are insoluble in water and organic solvent.
Pat. No. 111701: Temper-hardened cobalt-bronze
Pat. No. 111702: The treatment of tungusten ore.
Pat. No. 112362: Temper-hardenable cobalt-bronze.
Pat. No. 115096: The treatment of tungusten ore.
Pat. No. 116066: The method to improve the aroma of tea.
Pat. No. 116610: The treatment of molybdenum or tungusten compounds.
Pat. No. 116611: ditto.
Pat. No. 116778: Manufacture of diaphragm for dialysis or filtration.
Pat. No. 116908: Temper-hardened cobalt-alloy.
Pat. No. 116937: Manufacturing method of material for plastics from tundra.
Pat. No. 121064: The treatment of vanadium ore or molybdeuum ore.
Pat. No. 121645: Manufacturing method of plastics from vegetable protein.
Pat. No. 122810: Condensing and hardening method of animal and vegetable protein.
Pat. No. 123194: Improvement of the method to improve the aroma of tea.
Pat. No. 123430: Manufacturing method of vegetable protein.
Pat. No. 124203: Manufacturing method of the active charcoal from the by-products of soy-bean-application-industry.
Pat. No 126845: Steam generator utilizing of chemical reaction.
Pat. No. 127559: Viscose fibers with minute bubbles (hollow fibers of emulsion type).
Pat. No. 130323: Method of preparation of white pulp for paper-making.
Pat. No. 132993: A method of producing glass fibers.
Pat. No. 134068: A method of producing glass wool.
Pat. No. 134827: Preparation of arylized higher fatty alcohols from arylized unsaturated fatty acids by catalytic reduction under high pressure.
Pat. No. 137298: A method of producing glass wool.
Pat No. 137789: An apparatus for the spinning of glass fibers.
Pat. No. 139554: Removal of sulphur from gases.
Pat. No. 141026: A new method for preparation of iso-butyl-alcohol.
Pat. No. 142908: Reaction chamber for oil synthesis.
Pat. No. 142939: Manufacture of synthetic liquid fuel.
Pat. No. 143889: Preparation of colloidal solutions with artificially induced radioactivity.
Pat. No. 144921: Reaction chamber for oil synthesis.
Pat. No. 149354: A new synthesis of indol-3-acetic acid.
Pat. No. 150952: Manufacture of liquid hydrocarbon.
Pat. No. 153925: A new method for preparing pure polyvalent alcohols.
Pat. No. 154836: A method of manufacturing grinding wheel.
Pat. No. 156434: A new method for preparation of pyridine bases by condensation of acetylene with ammonia.
Pat. No. 156987: Hydrocarbon synthesis from Co and H_2.
Pat. No. 160788: Improved synthetic method of the α-chlor-methyl-naphthalene.
Pat. No. 160920: Retting of fiber plants by fermentation.
Pat. No. 163023: Removal of sulfur from gases.
Pat. No. 164012: A method for producing synthetic fibers with structure of super high polymer.
Pat. No. 169527: Preparation of stable complex salts of arylstibinic acids.

Pat. No. 171219: Powdered plant growing agent.
Pat. No. 172230: A method of the activation of papain enzyme.
Pat. No. 173900: The method of manufacturing ship's bottom paint.
Pat. No. 175971: Isomerization of olefinic hydrocarbons.
Pat. No. 176510: A method to manufacture branched olefines from alcohols with normal carbon chains.
Pat. No. 183526: Process of conversion of phenols or phenols-containing tars into fuel for internal-combustion-engine by destructive hydrogenation at ordinary pressure.
Pat. No. 186712: A method to manufacture alkylresorcinols.