



Title	Professor Toshio Ishikawa and List of his Publications
Citation	Journal of the Faculty of Science, Hokkaido University. Series 4, Geology and mineralogy, 15(1-2), 1-10
Issue Date	1972-03
Doc URL	http://hdl.handle.net/2115/36827
Type	bulletin (other)
File Information	15_1-2_p1-10.pdf



[Instructions for use](#)

TO
PROFESSOR TOSHIO ISHIKAWA

IN APPRECIATION OF HIS WIDESPREAD ACTIVITIES
AS SCIENTIST AND TEACHER
THIS VOLUME IS DEDICATED ON THE OCCASION
OF HIS RETIREMENT FROM THE CHAIR

1972



Professor TOSHIO ISHIKAWA

Toshio ISHIKAWA was born in Tokyo on January 3, 1909, as the third son of Kôzô and Tama SHIMOTOMAI. He spent youth in Morioka where he was educated at the primary and middle schools. In 1930, when he completed the preparatory course of the Hokkaido Imperial University (now Hokkaido University), the Department of Geology and Mineralogy was established by the rising professors who had returned from study at European universities. He entered the new Department and there studied petrology under the late Prof. Jun SUZUKI, geology and palaeontology under the late Prof. Takumi NAGAO, economic geology under Prof. Kunio UWATOKO, and mineralogy under Prof. Zyunpei HARADA .

ISHIKAWA graduated from the university in 1933, and after two year's study at the Hokkaido Industrial Research Institute, he returned to his school. In 1939 he was appointed Assistant Professor. He contributed greatly to the various scientific projects proposed by the late Prof. Jun SUZUKI, under whose stimulating guidance he gradually focused his study on volcanology. In 1946 he was awarded the Degree of Rigaku-Hakushi (Doctor of Science) on the basis of his study on the petrology of Tarumai volcano. In the next year, he was appointed Professor in the Department of Geology and Mineralogy, a position which he held until his retirement in 1972. ISHIKAWA taught mainly petrology at the university, where he trained many able geologists and petrologists.

ISHIKAWA's works cover a wide field of geological science as shown by the list of his publications. However, since his pioneer work on the Tarumai volcano and Shikotsu caldera, his lifework has been devoted to the study of volcanology and allied sciences. Many of the volcanoes in northern Japan and Kurile islands were investigated by him. He has contributed to a better understanding of many important problems such as formation of caldera, extrusion of lava domes, genesis of sulfur deposits, origin of hot springs, and so on. The whole history of the evolution of Showashinzan, a satellitic dome of Usu volcano that erupted in 1943-45, was studied by him in detail. Further, he carried out an extensive study of the petrological features of rocks within each of the volcanic zones that extend throughout the Japanese and Kurile islands. Throughout his works he has built a reputation for sound judgement. He enjoys field work and has made excursions at home and to the Kurile islands (many times during 1932-1941), Saghalien (1938), Korea (1941 and 1944), China (1942), Europe and USA (1963), and South America (1971).

ISHIKAWA has served as a member of many geological committees in Japan. In 1969 he was nominated Leader of the Working Group on the World Volcanological Map of the International Association of Volcanology and

Chemistry of the Earth's Interior (IAVCEI) as a successor of the late Prof. Hisashi KUNO. He compiled the World Volcanological Map and its Data Sheet in cooperation with volcanologists in many parts of the world. In 1970 he was elected President of the Volcanological Society of Japan.

ISHIKAWA's services have not been confined to academic circles. He has also contributed to society as a whole as an active member of various committees for cultural studies, nature conservation, disaster prevention, hot springs, and geothermal exploration.

Although his retirement from the chair of professorship at Hokkaido University approaches, ISHIKAWA is still in good health and active in scientific work.

Professor Toshio ISHIKAWA
List of Publications

- 1) SUZUKI, J. and ISHIKAWA (SHIMOTOMAI), T. (1933) *Tarumai Volcano*. Bull. Volcan. Soc. Japan, Vol. 1, no. 3, pp. 17-43. (in Japanese)
- 2) SUZUKI, J. SASA, Y. and ISHIKAWA (SHIMOTOMAI), T. (1934) *Preliminary report on the recent explosion of Tarumai Volcano*. Jour. Japanese Assoc. Petrol. Miner. Econ. Geol., Vol. 11, pp. 51-61 and 118-129. (in Japanese)
- 3) WATANABE, T. and ISHIKAWA (SHIMOTOMAI), T. (1937) *Sulphur eruption at Iwo-Dake, Shiretoko Peninsular*. Bull. Volcan. Soc. Japan, Vol. 3, pp. 213-262. (in Japanese)
- 4) WATANABE, T. and ISHIKAWA (SHIMOTOMAI), T. (1937) *The activity of Shiretoko-Iwo-zan Volcano, Hokkaido, in 1936*. Bull. Geol. Comm. Hokkaido, no. 9. pp. 1-37. (in Japanese)
- 5) ISHIKAWA, T. (1937) *Recent state of Tarumai-San*. Bull. Volcan. Soc. Japan Vol. 3, pp. 292-296. (in Japanese)
- 6) ISHIKAWA, T. (1938) *Report of the Kutcharo earthquake occurred on May 29, 1938*. Kagaku, (Tokyo), Vol. 8, pp. 409-414. (in Japanese)
- 7) ISHIKAWA, T. (1938) *Two modes of occurrence of corundum in Japan*. Jour. Japan. Assoc. Petrol. Miner. Econ. Geol., Vol. 20, pp. 141-146. (in Japanese)

- 8) ISHIKAWA, T. (1940) *On the chromite deposits near Tari, Tottori Prefecture*. Jour. Geol. Soc. Japan, Vol. 47, pp. 275-289. (in Japanese)
- 9) ISHIKAWA, T. (1940) *On xenoliths in the lavas of Volcano Tarumai*. Bull. Volcan. Soc. Japan, Vol. 4, pp. 109-140. (in Japanese)
- 10) ISHIKAWA, T. (1941) *Chromite deposits in the vicinity of Sekinomiya, Hyogo Prefecture*. Jour. Japan. Assoc. Petrol. Miner. Econ. Geol., Vol. 25, pp. 101-119, and 128-148. (in Japanese)
- 11) ISHIKAWA, T. (1941) *Chromite deposits in the prefectures of Kyoto and Fukui*. Jour. Japan. Assoc. Petrol. Miner. Econ. Geol., Vol. 26, pp. 9-32. (in Japanese)
- 12) SUZUKI, J. and ISHIKAWA, T. (1943) *Tarumai-san and Lake Shikotsu*. Geol. Guide Book of Hokkaido, no. 1, pp. 1-24. (in Japanese)
- 13) SUZUKI, J., ISHIKAWA, T. and ISHIBASHI, M. (1943) *Noboribetsu hot spring and Kuttara lake*. Geol. Guide Book of Hokkaido, no. 2, pp. 1-16. (in Japanese)
- 14) ISHIKAWA, T. and HASHIMOTO, S. (1943) *Explosion of Komagatake on November 16th, 1942*. Jour. Japan Assoc. Petrol. Miner. Econ. Geol., Vol. 29, no. 3, pp. 65-80 and 100-112. (in Japanese)
- 15) ISHIKAWA, T. (1943) *Investigation of geology and ore deposits in Enkyoku district, Shansi, China*. Rept. of Shansi Scientific Research Party, Peking. (in Japanese)
- 16) SUZUKI, J. and ISHIKAWA, T. (1943) *Cupriferous pyrite ore deposits in the eastern Shikoku district*. Japan Society of the Promotion of Science, Report of the 2nd Committee, Vol. 2, pp. 99-245. (in Japanese)
- 17) HARADA, Z. and ISHIKAWA, T. (1944) *Report of lithium mineral resources in Korea*. Japan Society of the Promotion of Science, Rept. of 58 Committee, no. 5, pp. 1-13. (in Japanese)
- 18) HARADA, Z. and ISHIKAWA, T. (1944) *Report of beryl resources in Korea*. Japan Society of the Promotion of Science, Rept. of 58 Committee,

- no. 6, pp. 1-15. (in Japanese)
- 19) FUKUTOMI, T. and ISHIKAWA, T. (1944) *Crustal movement caused on Usu Volcano in 1944*. Zisin, Bull. Seism. Soc. Japan, Vol. 16, pp. 214-224, 242-249 and 263-270. (in Japanese)
 - 20) KOZU, S., SUZUKI, J. and ISHIKAWA, T. (1944) *Report of Kamogawa-Mineoka nickel ore deposits, Chiba Prefecture*. Japan Society of the Promotion of Science, Rept. of 58 Committee, No. 37, pp. 1-10. (in Japanese)
 - 21) ISHIKAWA, T. (1946) *Report of Kamikawa nickel mine, Hokkaido*. Japan Society of the Promotion of Science Rept. of 58 Committee, no. 72, pp. 1-25. (in Japanese)
 - 22) ISHIKAWA, T. (1946) *Report of Shoei nickel mine, Hokkaido*. Japan Society of the Promotion of Science, Rept. of 58 Committee, no. 73, pp. 1-6. (in Japanese)
 - 23) ISHIKAWA, T. (1947) *On the recent activities of Volcano Usu, Hokkaido*. Kagaku to Kagaku-Kyoiku (Sci. and Scientific Education), Vol. 1, no. 1, pp. 28-38. (in Japanese)
 - 24) ISHIKAWA, T., HANAJIMA, M. ARAKAWA, J. and HIGASHI, A. (1947) *On the distribution of sand and clay by river flood*. The 1st Rept. of Flood of R. Ishikari, Agricultural Physic Research Institute, Sapporo. pp. 109-133. (in Japanese)
 - 25) ISHIKAWA, T. (1949) *Occurrence of aegirine augite from Volcano Tarumai, Hokkaido*. Bull. Geol. Comm. Hokkaido. no. 12, pp. 9-15. (in Japanese)
 - 26) ISHIKAWA, T. (1950) *New eruption of Usu Volcano, Hokkaido during 1943-1945*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 7, pp. 237-260.
 - 27) ISHIKAWA, T. (1951) *Petrological significance of large anorthite crystals included in some pyroxene andesites and basalts in Japan*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 7 pp. 339-354.

- 28) MINAKAMI, T., ISHIKAWA, T. and YAGI, K. (1951) *The 1944 eruption of Volcano Usu in Hokkaido, Japan*. Bull. Volcanologique. Ser. II, Tome 11, pp. 5-157.
- 29) ISHIKAWA, T. (1952) *The chemical characteristics of the lavas from Volcano Tarumai, Hokkaido, Japan*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 8, pp. 107-135.
- 30) ISHIKAWA, T. (1952) *Dolerite from Momijiyama, Yubari City. — Petrographical note of rocks, Hokkaido (1)*. Bull. Geol. Comm. Hokkaido, no. 20, pp. 27-28. (in Japanese)
- 31) ISHIKAWA, T. (1952) *Eclogitic rock found as a block on the River Yoshino, Shikoku*. Jour. Japan. Assoc. Petrol. Miner. Econ. Geol., Vol. 36, pp. 43-46. (in Japanese)
- 32) MINAKAMI, T., ISHIKAWA, T. and YAGI, K. (1953) *The 1944 eruption of Usu in Hokkaido, Japan*. Smithsonian Rept. for 1952, pp. 261-272.
- 33) ISHIKAWA, T. (1953) *Eruption of Usu volcano, Hokkaido, Japan, 1943-5*. Proc. 7th Pacific Science Congress, Vol. 2, pp. 368-375.
- 34) ISHIKAWA, T. (1953) *Xenoliths included in the lavas from Volcano Tarumai, Hokkaido, Japan*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 8, pp. 225-244.
- 35) SUZUKI, J. and ISHIKAWA, T. (1954) *Topography and geology of the Shiretoko peninsula, Hokkaido*. Scientific Research Report Shiretoko Peninsula and Abashiri Natural Park, Hokkaido. pp. 31-47. (in Japanese)
- 36) ISHIKAWA, T. (1954) *Chromite*. Mineral Resources of Japan, I-C, pp. 150-190. (in Japanese)
- 37) ISHIKAWA, T. and KATSUI, Y. (1955) *A memoir of the scientific investigations of the primeval forests in the headwaters of the River Ishikari, Hokkaido, Japan. Chapt. 1 Geology*. Asahikawa Regional Forestry Office, pp. 13-15. (in Japanese with English abstract)
- 38) ISHIKAWA, T. (1955) *Petrological study on the structure of some basaltic*

- bombs*. Bull. Geol. Comm. Hokkaido, no. 29, pp. 15-23. (in Japanese)
- 39) MINATO, M. and ISHIKAWA, T. (1955) *Age of the welded tuffs in northern Japan*. INQUA IV Congress, Rome-Pise (1953), pp. 1-8.
- 40) MATSUMOTO, T., ISHIKAWA, T. and MINATO, M. (1956) *Some problems of welded-lava and welded-tuff related with the sunken calderas in Japan*. Proc. 8th Pacific Science Congress, Vol. 2, pp. 130-137.
- 41) SUZUKI, J., ISHIKAWA, T., OMACHI, H. and SUZUKI, Y. (1956) *Geological study on the Tokachigawa hot spring*. Rept. of Environmental Sanitation, Hokkaido, no. 11, pp. 1-10. (in Japanese)
- 42) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y., and KATSUI, Y. (1957) *Geological study on the Tōyako hot spring*. Rept. of Environmental Sanitation, Hokkaido, no. 13, pp. 1-10. (in Japanese)
- 43) ISHIKAWA, T., MINATO, M., KUNO, H., MATSUMOTO, T. and YAGI, K. (1957) *Welded tuffs and deposits of pumice flow and nuée ardente in Japan*. XX Congreso Geológico Internacional, Section 1, pp. 137-150.
- 44) SUZUKI, J., ISHIKAWA, T., OMACHI, H. and SUZUKI, Y. (1957) *On the sulphur deposits of the Akan sulphur mine, Hokkaido, Japan*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 9, pp. 501-518.
- 45) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y. and OMACHI, H. (1957) *Geological study on the hot springs in Akan district*. Rept. of Environmental Sanitation, Hokkaido, no. 14, pp. 1-14. (in Japanese)
- 46) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y. and OMACHI, H. (1957) *Geological study of hot springs in the Kutcharo district*. Rept. of Environmental Sanitation, Hokkaido, no. 14, pp. 27-36. (in Japanese)
- 47) ISHIKAWA, T. (1958) *Volcanic rocks in Hokkaido*. Explanatory Text of the Geological Map of Hokkaido, Scale 1:200,000. Geol. Surv. Hokkaido, pp. 27-36. (in Japanese)
- 48) ISHIKAWA, T. (1958) *Daisetsu-Zan and Sounkyo*. Geol. Guide Book of

Hokkaido, pp. 1-22. (in Japanese)

- 49) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y. and KATSUI, Y. (1958) *Geological study on the Jôzankei hot spring*. Rept. of Environmental Sanitation, Hokkaido, no. 15, pp. 1-16. (in Japanese)
- 50) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y. and KATSUI, Y. (1958) *Geological study on the Noboribetsu hot spring*. Rept. of Environmental Sanitation, Hokkaido, no. 15, pp. 35-50. (in Japanese)
- 51) ISHIKAWA, T. (1958) *Petrological character of the Chôkai and Norikura volcanic zones in Japan*. Jubilee Publ. in the Commemoration of Prof. J. Suzuki, Sixtieth Birthday, pp. 263-277 (in Japanese with English abstract)
- 52) ISHIKAWA, T. and KATSUI, Y. (1959) *Some considerations on the relation between chemical character and geographical position of volcanic zones in Japan*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 10, pp. 163-182.
- 53) ISHIKAWA, T., SUZUKI, Y. and SAKAKIBARA, T. (1959) *Report of geology and ore deposits along the Mitsuishi river, Hidaka district*. Investigation Report of Underground Resources in Southern Hidaka District. Hokkaido Development Agency, pp. 7-19. (in Japanese)
- 54) ISHIKAWA, T., URASHIMA, Y. and NARITA, H. (1960) *Report of geology and ore deposits at the upper reach of R. Furuu, Shiribeshi district*. Investigation Report of Underground Resources in the Shakotan Peninsula. Hokkaido Development Agency, pp. 27-50. (in Japanese)
- 55) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y. and KATSUI, Y. (1960) *Geological study on the Sôunkyo hot spring*. Rept. of Environmental Sanitation, Hokkaido, no. 15, pp. 1-12. (in Japanese)
- 56) ISHIKAWA, T. (1960) *Some petrological considerations on the Miocene volcanic activities in green-tuff regions in Japan*. Jour. Fac. Sci., Hokkaido Univ., Ser. IV, Vol. 10, no. 3, pp. 471-480.
- 57) SUZUKI, T., ISHIKAWA, T., SUZUKI, Y., TAKAHASHI, T. and Ôishi, M. (1961) *Geological study on the Yukomambetsu and Tenninkyô hot springs*.

- Rept. of Environmental Sanitation, Hokkaido, no. 18, pp. 15-28. (in Japanese)
- 58) SUZUKI, J., ISHIKAWA, T., SUZUKI, Y., OBA, Y. and KONDO, Y. (1961) *Geological study on the hot springs in Niseko district*. Rept. of Environmental Sanitation, Hokkaido, no. 18, pp. 43-61. (in Japanese)
- 59) ISHIKAWA, T. and KATSUI, Y. (1961) *Some considerations on the relation between chemical character and geographical position of the volcanic zones in Japan*. Proc. 9th Pacific Science Congress, Vol. 12, pp. 225-235.
- 60) ISHIKAWA, T., TAKAHASHI, T. and KONDÔ, Y. (1962) *Geological study on the Onneyu hot spring*. Rept. of Environmental Sanitation, Hokkaido, no. 19, pp. 57-67. (in Japanese)
- 61) ISHIKAWA, T., ANDÔ, H. and KONDÔ, Y. (1962) *Geological study on the Yunokawa and Yachigashira hot springs*. Rept. of Environmental Sanitation, Hokkaido, no. 19, pp. 19-41. (in Japanese)
- 62) ISHIKAWA, T., KONDÔ, Y. and YOKOYAMA, S. (1963) *Geological study on the Teshikaga and Tobetsu hot springs*. Rept. of Environmental Sanitation, Hokkaido, no. 21, pp. 17-26. (in Japanese)
- 63) ISHIKAWA, T. (1963) *Formation and change of Tôya hot springs*. Butsuri-tankô (Geophy. Exploration), Vol. 16, no. 1, pp. 27-37.
- 64) ISHIKAWA, T. (1963) *Topography and geology of the Daisetsu volcano group*. Rept. of the Nature Conservation Society, Vol. 8, pp. 5-24. (in Japanese)
- 65) KUNO, H., ISHIKAWA, T., KATSUI, Y., YAGI, K., YAMASAKI, M. and TANEDA, S. (1964) *Sorting of pumice and lithic fragments as a key to eruptive and emplacement mechanism*. Japan. Jour. Geol. Geogr., Vol. 35, nos. 2-4, pp. 223-238.
- 66) ISHIKAWA, T., OBA, Y. and KOBAYASHI, T. (1964) *Geological study on the Jôzankei hot spring*. Rept. of the Survey of Jozankei hot spring, Sapporo City, pp. 25-31. (in Japanese)

- 67) ISHIKAWA, T. (1965) *Volcanic eruptions and their accompanying manifestations*. Bull. Volcan. Soc. Japan, 2nd Ser., Vol. 10, pp. 73-80. (in Japanese with English abstract)
- 68) ISHIKAWA, T. (1965) *Geological structure of Volcano Usu considered from its 1910 and 1943-1945 activities and genesis of Tōya hot springs*. Stromboli, (Italy), no. 9, pp. 13-38.
- 69) ISHIKAWA, T. (1966) *Geological study on hot springs in Noboribetsu*. Jour. Balneological Soc. Japan. Vol. 16, no. 2, pp. 29-50. (in Japanese)
- 70) ISHIKAWA, T. and UOZUMI, S. (1967) *Fossils from Shiretoko Peninsula*. Hokkaido Cultural Properties, Board of Education, Hokkaido, no. 9, pp. 43-44. (in Japanese)
- 71) ISHIKAWA, T. (1967) *Preliminary report of Geology of the Shiretoko peninsula*. Hokkaido Cultural Properties, Board of Education, Hokkaido, no. 9, pp. 45-60. (in Japanese)
- 72) ISHIKAWA, T. (1969) *Geological observations along the northern Okhotsk coast of Hokkaido*. Report of Cultural Properties along the northern Okhotsk coast of Hokkaido, Board of Education, Hokkaido, pp. 29-41. (in Japanese)
- 73) ISHIKAWA, T. (1969) *Geothermal area of the Toyoha mine, Hokkaido*. Jour. Geotherm. Energy Assoc., no. 22, pp. 17-18. (In Japanese with English abstract)
- 74) ISHIKAWA, T., KATSUI, Y., ÔBA, Y. and SATOH, H. (1969) *Some problems of the calderas in Hokkaido*. Bull. Volcan. Soc. Japan, 2nd Ser., Vol. 14, no. 2, pp. 97-108. (in Japanese with English abstract)
- 75) ISHIKAWA, T. (in press) *Geothermal fields in Japan considered from the geological and petrological view points*. United Nations Symposium on the Development and Utilization of Geothermal Resources, Pisa. (in press)