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*Tsugio Shuto*

## Professor Tsugio SHUTO

Like two wheels of a cart, geological and biological way of research of fossils are indispensable with each other for the progress of palaeontology. This basic idea has long been kept in the instruction of palaeontology of our Department. In 1974 Professor Tsugio SHUTO succeeded Professor Emeritus Ryuzo TORIYAMA, and since then he has made every effort to promote the research activities in palaeontology and also to make his utmost exertions in teaching and training of students. His works on the Cenozoic molluscus not only have greatly influenced upon Japanese palaeontologists but also have aroused high international interest. On the occasion of Professor SHUTO's retirement in March of 1985, this biographical introduction is dedicated to this volume in his honour.

Professor SHUTO was born on August 18, 1921 in Oita, an old city with scenic beauty along the northeastern coast of Kyushu. After finishing his middle school education he entered into the Preparatory Course of the Ryojun College of Engineering in 1940. In 1943 he completed his studies at the Preparatory Course, and promoted to the Department of Mining. However, unfortunately very severe social situation in war time did not allow him to enjoy his campus life any more. Thus he made up his mind to join the Japanese Navy as a reserved students for officer. Thereafter he worked at some naval airbases in Japan as an officer of ground crews of fighters until peace came back. In 1945 he demobilized with the visitation of peace, but he could not return again to his *alma mater*, because the Ryojun College of Engineering was not in the territory of Japan any longer, but in Northeastern China after the war. Since Professor SHUTO found it difficult to refuse his feelings to study natural science, he decided to enter at the Department of Geology, the Faculty of Science, Kyushu Imperial University in 1946. Relating with his decision of geology as the major for his course in life, the publications written by the late Professor Yanosuke OTSUKA of the Imperial University of Tokyo and Professor Jiro MAKIYAMA of Kyoto Imperial University, which he read in his campus life in China, strongly attracted him to this field of natural science.

The Department of Geology of Kyushu Imperial University in 1946 was quite new with its history of seven years after the establishment. At that time the staffs and students were very few in number, but all of them were full of pioneer's spirit and establishment of the foundation of the later development of the department was much indebted to these predecessors. It was also true in this time that every facilities and equipments for research works were very poor because of severe social and economic situation after the war. Under these circumstance Professor SHUTO was engaged in stratigraphical study of the Neogene Tertiary of southern Miyazaki as his main theme for graduation thesis supervised by Professor Tatsuro MATSUMOTO. The study of the Miyazaki Group made him invincible in devoting himself to research of the history and the palaeontology of the Neogene Tertiary of Japan.

Excellent result along with the preceding theme first appeared by a publication in 1952 under the title of stratigraphical study of the Miyazaki Group. After that palaeontological works on molluscs of the Miyazaki Group, including taxonomical, palaeoecological and sedimentological studies supported by the detailed investigation in the field appeared one after another. In a decade from 1955 Professor SHUTO published ten excellent papers mostly under the subtitle of palaeontological study of the Tertiary Miyazaki Group. He also tried palaeontological approach to the speciation process and variation of species in discussing molluscan fossils in relation with lithofacies. In 1961 the Palaeontological Society of Japan awarded the Society Prize to him for his excellent contributions shown in a series of publications above stated.

Concurrently with these palaeontological works Professor SHUTO accomplished two important achievements of studies of the Younger Cenozoic history of the Oita district, Kyushu in 1953. He established the Neogene Tertiary standard in middle Kyushu, and it was a remarkable contribution to the Cenozoic geology of Kyushu together with that of southern Kyushu by the search of the Miyazaki Group.

After the 1960's Professor SHUTO added new project in his research, heading for the early development of gastropods in relation with geographic distribution and classification. Some results of this research were internationally highly appreciated, being cited by foreign papers.

In 1962 a big project on geological and palaeontological reconnaissance in Southeast Asia started under the supervision of Dr. Teiichi KOBAYASHI, Professor Emeritus of the University of Tokyo. It has been carried out by many Japanese palaeontologists and by those in Southeast Asian countries. Professor SHUTO joined the survey teams four times during eleven years from 1964 to 1975 to study the Neogene Tertiary areas of the Philippines and the Borneo region of Malaysia.

In 1965 he got the Overseas Research Fellowship of the Japanese Government for one year and had a chance of visiting the Marine Biological Laboratory of Denmark to study early development of molluscs, and the University of Amsterdam and National Museum of Geology and Mineralogy of Leiden of the Netherlands, respectively to study the Recent Turridae from Southeast Asia and its neighboring seas collected by the SIBOGA Expedition, and the MARTIN's Collections. These valuable studies and experiences in Europe strongly helped him in his later works of the Neogene molluscs of Southeast Asia.

Palaeontological contributions of Professor SHUTO to Southeast Asia were especially focused on the Neogene molluscs of the Philippines. He published big monographs of the Neogene gastropods and bivalves from Panay Island in 1969 and 1970, respectively. In 1982 he also published a descriptive work on the Miocene molluscs from Negros Island. In 1976 he presented a correlation of the Neogene formations of Southeast Asia at the First International Congress of Pacific Neogene Stratigraphy held in Tokyo. In 1977 he attended at the second working group meeting on biostratigraphic datum-planes of the Pacific Neogene held in Bandung, Indonesia, and presented a paper titled molluscan biohorizons in the Indo-West Pacific Neogene. In 1980 he achieved

descriptive work of the Eocene turrids of Indonesia, and he also summarized molluscan materials of Southeast Asia and tried the faunal correlation between South Asia and Southwest Japan based on the Tertiary molluscs.

During his tenure at Kyushu University Professor SHUTO taught palaeontology, historical geology, oil geology and general geology to students. Outside Kyushu University he made lectures in eight universities as listed in the following article. In addition to academic achievements Professor SHUTO vigorously carried out services and duties of various posts at Kyushu University, the academic society of the Palaeontological and Geological Sciences and the expert committee of the Ministry of International Trade and Industry and that of Fukuoka City as listed in the separate article.

Professor SHUTO is very sincere for science and generous to students. Many peoples who studied geology under the supervision of Professor SHUTO are now very active in the educational world and also in the industrial and business world.

I have heard no more of beautiful German Lieds by Professor SHUTO through the wall of his laboratory early in the morning, but he is still very young enough to play baseball with students. The publications of Professor SHUTO in Palaeontology and other fields are now more than eighty in number. His energies for study are supported by his good health. His students and our colleagues of the Department of Geology sincerely wish that Professor SHUTO will enjoy his long life with health, and his contributions to the progress of the Cenozoic geology and palaeontology will increase in number.

September 25, 1984

Ryohei TAKAHASHI  
Department of Geology,  
Faculty of Science,  
Kyushu University.

## A Brief Personal Record of Professor Tsugio SHUTO

Date and place of birth: August 18, 1921, in Ōita

### Academic career

- September, 1943 : Completed the Preparatory Course of the Ryojun College of Engineering
- September, 1944 : Stayed away from the Department of Mining, the same college, for serving the Navy of Japan
- August, 1945 : Changed college to the home land by abolition of the Ryojun College of Engineering
- March, 1949 : Graduated from the Department of Geology, Faculty of Science, Kyushu Imperial University
- March, 1961 : Doctor of Science. Thesis: Palaeontological study of the Miyazaki Group

### Work record

- May, 1949 : Assistant, Faculty of Science, Kyushu Imperial University
- June, 1957 : Lecturer, Kyushu University
- July, 1959 : Associate Professor, Kyushu University
- April, 1964 : Lecturer (concurrent post for a term of five months), Faculty of Science, Hiroshima University
- April, 1969 : Lecturer (concurrent post for a term of one year), Faculty of Liberal Arts, Kyushu University
- May, 1974 : Professor, Kyushu University; Chair of the Fourth Course (Palaeontology) in the Department of Geology, Faculty of Science and also Advisor of the Post-Graduate Division
- June, 1975 : Professor (concurrent post for a term of ten months), Institute of Tropical Agriculture, Kyushu University
- April, 1976 : Professor (concurrent post for a term of one year), Institute of Tropical Agriculture, Kyushu University
- April, 1976 : Lecturer (concurrent post for a term of six months), Faculty of Science, Kyoto University
- April, 1978 : Professor (concurrent post for a term of two years), Institute of Tropical Agriculture, Kyushu University
- October, 1979 : Lecturer (concurrent post for a term of six months), Faculty of Pedagogy, Miyazaki University
- April, 1980 : Professor (concurrent post for a term of two years), Institute of Tropical Agriculture, Kyushu University
- April, 1980 : Lecturer (concurrent post for a term of six months), Faculty of Science, Tohoku University
- July, 1980 : Director of the Shimabara volcano Observatory (concurrent post for a term of two years), Faculty of Science, Kyushu University

- October, 1980 : Lecturer (concurrent post for a term of six months),  
Faculty of Science, Hiroshima University
- April, 1982 : Professor (concurrent post for a term of two years), Insti-  
tute of Tropical Agriculture, Kyushu University
- April, 1982 : Lecturer (concurrent post for a term of one year), Faculty  
of Pedagogy, Kyushu University
- October, 1982 : Lecturer (concurrent post for a term of six months),  
Faculty of Science, Chiba University
- December, 1983 : Lecturer (concurrent post for a term of four months),  
Faculty of Science, Ryukyu University
- April, 1984 : Lecturer (concurrent post for a term of one year), Tsukuba  
University
- May, 1984 : Lecturer (concurrent post for a term of ten months),  
Faculty of Science, Niigata University

### Committees

- 1969- : Member of the Investigation Committee of the Ministry of Inter-  
national Trade and Industry on Evil Effects by Mines
- 1977- : Member of the Technical Committee of the Bureau of Internation-  
al Trade and Industry of Fukuoka Prefecture on National Gas
- 1977- : Member of the Establishment Preparatory Committee of Univer-  
sity Museum
- 1977- : A Managing Director of the University Press of Kyushu
- 1978- : Member, National Committee for Palaeontology, Science Council  
of Japan
- 1982- : Member of the Expert Advisor Committee on Earthquake Disas-  
ter of Fukuoka City Council for Protection against Disaster

### Officials of Academic Societies

- 1973- Council of the Palaeontological Society of Japan
- 1975- : Council of the Malacological Society of Japan
- 1977-1978 : Council of the Geological Society of Japan
- 1982- : Council of Tokyo Geographical Society
- 1982-1984 : President of the West Japan Branch of the Geological Society of  
Japan

### Catalogue of works of Professor Tsugio SHUTO

#### Original paper

1. 1952 : Stratigraphical study of the Miyazaki Group. *Sci. Rep., Fac. Sci., Kyushu Univ.*, (Geol.) (in Japanese), Vol. 4, No. 1, p. 1-40.
2. 1953 : A study of the foraminiferal assemblage of Omura Bay, Nagasaki Prefecture, Kyushu. *Japan. Jour. Geol. Geogr.*, Vol. 23, p. 127-138.

3. 1953 : Younger Cenozoic history of the Ōita District, Kyushu (I). *Jour. Geol. Soc. Japan* (in Japanese with English abstract), Vol. 59, No. 693, p. 225–240.
4. 1953 : Younger Cenozoic history of the Ōita District, Kyushu (II). *Ibid.* (in Japanese with English abstract), Vol. 59, No. 695, p. 372–384.
5. 1955 : *Amussiopecten* from the Miyazaki Group, Miyazaki Prefecture, Japan. (Palaeontological Study of the Tertiary Miyazaki Group). *Trans. Proc. Palaeont. Soc. Japan*, N. S., No. 20, p. 101–110.
6. 1956 : Umboniinae from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—1). *Japan Jour. Geol. Geogr.*, Vol. 27. No. 1, p. 47–66.
7. 1957 : *Crassatellites* and *Venericardia* from the Miyazaki Group (Palaeontological Study of the Miyazaki Group—IV). *Mem. Fac. Sci., Kyushu Univ.*, Ser. D, Geol., Vol. 6, No. 2, p. 69–89.
8. 1957 : Fossil *Paphia* from the Miyazaki Group (Palaeontological Study of the Miyazaki Group—III). *Japan. Jour. Geol. Geogr.*, Vol. 28, Nos. 1–3, p. 139–160.
9. 1957 : Polymorphism in mollusks and facies differentiation. *Jour. Geol. Soc. Japan* (in Japanese with English abstract), Vol. 63, No. 745, p. 565–585.
10. 1957 : Palaeontological aspects of speciation. *Ibid.* (in Japanese with English abstract), Vol. 63, No. 746, p. 636–647.
11. 1958 : *Granulifusus* from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—V). *Trans. Proc. Palaeont. Soc. Japan*, N. S., No. 31, p. 253–264.
12. 1958 : Tectonic and stratigraphic frame-works of the Middle and Upper Cenozoic in Kyushu. *Shinseidai-no-kenkyu* (in Japanese), No. 18, p. 8–18.
13. 1959 : Olivid gastropods from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—VI). *Japan. Jour. Geol. Geogr.*, Vol. 30, p. 169–182.
14. 1959 : On the palaeontological approach to the speciation process of marine Mollusca. *Earth Sci.* (in Japanese with English abstract), No. 45, p. 29–36.
15. 1960 : On some pectinids and venerids from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—VII). *Mem. Fac. Sci., Kyushu Univ.*, Ser. D, Geol., Vol. 9, No. 3, p. 9–149.
16. 1960 : Cardiids from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—VII). *Trans. Proc. Palaeont. Soc. Japan*, N. S., No. 37, p. 209–222.
17. 1961 : Palaeontological Study of the Miyazaki Group: a general account of the fauna. *Mem. Fac. Sci., Kyushu Univ.*, Ser. D, Geol., Vol. 10, No. 2, p. 73–206.
18. 1961 : Conacean gastropods from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—IX). *ibid.*, Vol. 11, No. 2, p. 71–150.
19. 1962 : Paleogene? Dōmon Formation. *Jour. Geol. Soc. Japan* (in Japanese),

Vol. 68, No. 798, p. 176.

20. 1962 : Buccinacean and Volutacean gastropods from the Miyazaki Group (Palaeontological Study of the Miyazaki Group—X). *Ibid.*, Vol. 12, No. 1, p. 27–85.
21. 1962 : Pleistocene formations in the western part of Wakamatsu City, North Kyushu. *Jour. Geol. Soc. Japan* (in Japanese with English abstract), Vol. 68, No. 800, p. 269–281.
22. 1962 : A revision of the Pleistocene stratigraphy in Kyushu—for the Basis of interprovincial correlation—*Ibid.* (in Japanese with English abstract), Vol. 68, No. 801, p. 301–312.
23. 1962 : Pleistocene formations in Kyushu and their correlation. *Ibid.* (in Japanese with English abstract), Vol. 68, No. 803, p. 481–486.
24. 1962 : Some problems on marine paleoecology. *Fossils Palaeont. Soc. Japan* (in Japanese), No. 3, p. 46–50.
25. 1962 : On the problems of the Pleistocene history in Kyushu. *Jour. Geol. Soc. Japan* (in Japanese with English abstract), Vol. 68, No. 804, p. 522–536.
26. 1962 : Paleogene/Neogene boundary in South Kyushu. *Fossils* (in Japanese), *Palaeont. Soc. Japan*, No. 4, p. 11–16.
27. 1963 : Geology of the Nichinan area with special reference to the Takachiho disturbance. *Sci. Rep., Fac. Sci., Kyushu Univ.*, (Geol.) (in Japanese with English abstract), Vol. 6, No. 2, p. 135–166.
28. 1963 : New Oligocene turrids from North Kyushu. *Japan. Jour. Geol. Geogr.*, Vol. 34, No. 1, p. 1–17.
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32. 1964 : Naticid gastropods from the Miyazaki Group. (Palaeontological Study of the Miyazaki Group—XI). *Trans. Proc. Palaeont. Soc. Japan*, N. S., No. 55, p. 281–293.
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- research —On the aspect of synecology based on molluscan data—  
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38. 1969 : Neogene gastropods from Panay Island, the Philippines. (Contributions to the Geology and Palaeontology of Southeast Asia, LXVIII). *Mem. Fac. Sci., Kyushu Univ.*, Ser. D, Geol., Vol. 19, No. 1, p. 1–250.
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- specimens in the British Museum (N. H.) *Venus* (*Japan. Jour. Malac.*), Vol. 33, No. 4, p. 161–175.
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54. 1976 : (in MATSUMOTO et al. edit.) Fossil Molluscs. *Trans. Proc. Palaeont. Soc. Japan* N. S. (100s), p. 38–44.
55. 1977 : (with T. TAKAYASU et al.) Stratigraphic relation of the Shibikawa, Anden and Katanishi formations in the Oga Peninsula, North Honshu, Japan. *Sci. Rep., Fac. Sci., Kyushu Univ.*, (Geol.) (in Japanese with English abstract), Vol. 12, No. 3, p. 215–227.
56. 1977 : A perspective of paleosynecologic studies on marine benthos. *Fossils, Palaeont. Soc. Japan* (in Japanese), No. 27, p. 15–25.
57. 1977 : *Crassatella-Venericardia* “community” and *Astarte-Venericardia* “community” — The significance of parallel communities in the paleoecological study. *Benthos Research* (in Japanese), Nos. 13/14, p. 32–38.
58. 1977 : Correlation of Neogene formations of Southeast and South Asia by means of molluscan faunas. *Proc. Ist. Intern. Congr. Pacific Neogene Stratigraphy*. p. 133–144.
59. 1978 : Notes on Indonesian Tertiary and Quaternary Gastropods mainly described by the Late Professor K. Martin II. Potamididae and Cerithiidae. (Contr. GPSEA. CXCIX) *Geol. Palaenot. Southeast Asia*, Vol. 19, p. 113–160.
60. 1978 : Fossil benthic communities. *Marine Sci. Monthly* (in Japanese with English abstract), Vol. 10, No. 1 (Symp. No. 99), p. 7–13.
61. 1978 : *Crassatella-Venericardia* “community” and *Astarte-Venericardia* “community” — The significance of parallel communities in the paleoecological study. *Ibid.* (in Japanese with English abstract), Vol. 10, No. 1, (Symp. No. 99), p. 26–31.
62. 1978 : Paleogene/Neogene boundary in Southwest Japan: a molluscan biostratigrapher’s view. *Cenozoic Geology of Japan*. Memorial Volume of Professor N. IKEBE (in Japanese with English abstract), p. 61–72.
63. 1978 : On the genera *Siphonofusus* and *Euthria* of the Indo-West Pacific. *Trans. Proc. Palaeont. Soc. Japan*, N. S., No. 111, p. 358–369.
64. 1978 : (with S. SHIMOYAMA) Quaternary molluscan fossil assemblages from Arato, Fukuoka City. *Sci. Rep., Fac. Sci., Kyushu Univ.*, (Geol.) (in Japanese with English abstract), Vol. 13, No. 1, p. 47–59.
65. 1978 : Molluscan biohorizons in the Indo-West Pacific Neogene. *Proc. 2nd Working Group Meeting Biostratigraphic Datum-Planes of the Pacific Neogene IGCP Project 114*. p. 99–110.
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No. 4, p. 65–78.

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68. 1980 : (with T. KAMEYAMA) A sedimentological study of the Miyako-jima Limestone *Sci. Rep., Fac. Sci., Kyushu Univ.*, (Geol.) (in Japanese with English abstract), Vol. 13, No. 2, p. 341–351.
69. 1980 : A note on the Eocene turrids of the Nangulan Formation, Java. Professor Saburo KANNO Memorial Volume, p. 25–52.
70. 1981 : Middle Miocene paleo-oceanographic problem in northern Kyushu. *Fossils, Palaeont. Soc. Japan* (in Japanese), No. 30, p. 55–58.
71. 1981 : (with T. MIKI and R. TAKAHASHI) Distribution and correlation of the Coal-bearing formations in Japan. *Rept. IGCP Project 166 "Correlation of Coal-bearing Formations"* No. 3, p. 16–23.
72. 1981 : Biogeography and correlation of Late Neogene gastropod faunas of Southeast and East Asia, *Proc. IGCP 114 Intern. Workshop on Pacific Neog. Biostrigr.*, p. 141–142.
73. 1982 : Miocene molluscs from the Macasilao and Paghumayan Formations, Negros Island, the Philippines. *Geol. Palaeont. Southeast Asia*. Vol. 23, p. 163–189.
74. 1983 : (with T. HARA) Biostratigraphy of the Ashiya Group in Kita-Kyushu, Japan. *Origin and Migration of Japanese Cenozoic molluscs* (T. KOTAKA and K. OGASAWARA, eds.) (in Japanese), p. 57–59.
75. 1983 : Geologic history and faunal similarity of the Pliocene-Pleistocene molluscs in Southwest Japan. *Ibid.* (in Japanese), p. 77–79.
76. 1983 : Larval development and geographical distribution of the Indo-West Pacific *Murex*. *Bull. Mar. Sci.*, Vol. 33, No. 3, p. 536–544.
77. 1983 : New turrid taxa from the Australian waters. *Mem. Fac. Sci., Kyushu Univ.*, Ser. D, Geol., Vol. 25, No. 1, p. 1–26.
78. 1983 : Two new species of Turridae from Australia (Gastropoda, Prosobranchia). *Venus (Japan. Jour. Malacol.)*, Vol. 42, No. 3.
79. 1984 : (with S. KANNO) Tertiary and Pleistocene Mollusca and trace fossils. *Geol. Palaeont. Southeast Asia*, Vol. 25, p. 253–261.
80. 1984 : Revisions of the Burmese Tertiary turrids. *Mem. Fac. Sci., Kyushu Univ.*, Ser. D, Geol., Vol. 25, No. 2, p. 1–43.

#### Survey Report (All in Japanese)

1. 1958 : Gas field in southeast Miyazaki Prefecture. Miyazaki Prefecture Government. p. 1–17.
2. 1961 : Nakatsu District. Rep. Exploit. Utiliz. Natural Gas in Kyushu, Assoc. Nat. Gas Miners, p. 35–41.
3. 1961 : Oita-Tsurusaki District. *Ibid.*, p. 47–70.
4. 1963 : Report of the geology of the Tonogori district, Saito City, Miyazaki Prefecture. Miyazaki Prefectural Government. p. 1–7.

5. 1964 : Geology of the Fukuoka Higher Court. In Preliminary Report of the Excavation at Fukuoka Castle, p. 18-19.
6. 1969 : (with N. NASU et al.) Report on submarine geology around the Goto-Danjo Islands. Nagasaki Prefectural Government. p. 104.
7. 1970 : (with T. KAMEYAMA) Surface geology and map. Nakatsu sheet. *Basic Survey of Land Classification*. p. 14-20.
8. 1970 : (with T. KAMEYAMA) Surface geology and map. Minoshima sheet. *Ibid.*
9. 1972 : Topography and geology in the environs of the ruins of Hara and Babayama. in *Ruins of Babayama*, p. 34-38.
10. 1973 : Review of "Biostratigraphy and Isotope chronology of the Neogene of Japan". (N. IKEBE et al. eds) *Jour. Geol. Soc. Japan*, Vol. 79, No. 10, p. 711-712.
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12. 1984 : (with S. SHIMOYAMA et al.) Surface geology and map. Fukuoka sheet. *Basic Survey of Land Classification*. p. 33-36.
13. 1984 : (with T. KAMEYAMA et al.) Surface geology and map. Tsuyazaki and Kōnominato sheets. *Ibid.* p. 48-50.

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