

## Table of Contents

### Japanese Studies in the History of Science

Nos. 1~7 (1962-1968)

#### No. 1 (1962)

##### Survey of the Researches in the History of Science in Japan (with Bibliography)

|  |    |
|--|----|
| Coup d'oeil sur l'histoire des sciences au Japon:<br>Suketoshi YAJIMA .....                              | 3  |
| Studies on the History of Science and Technology in China<br>by Japanese Scholors: Mitukuni YOSIDA ..... | 7  |
| Japanese Studies in the History of Astronomy:<br>Shigeru NAKAYAMA .....                                  | 14 |
| A Short Note on the History of Japanese Mathematics:<br>Shin-ichi OYA .....                              | 23 |
| Studies of History of Physics in Japan: Tetu HIROSIGE .....  | 26 |
| On the Study of the History of Biology in Japan:<br>Ryuichi YASUGI and Hisaharu TSUKUBA .....            | 35 |
| A Survey of the Interest for the History of Medicine in Japan:<br>Yonezo NAKAGAWA .....                  | 38 |
| Japan's Contributions to the Modern History of Technology:<br>Toshio YAMAZAKI .....                      | 45 |

##### Articles

|  |     |
|--|-----|
| Die Entwicklung der Theorien vom "Ki" (Chhi) als Grundproblem<br>der Naturphilosophie in Alten Japan:<br>Hiroto SAIGUSA .....                      | 51  |
| Center of Activity: its Shift from the 16th to the 20th Century:<br>Mitutomo YUASA .....   | 57  |
| Galileo and Newton's Problem of World-Formation:<br>Shigeru NAKAYAMA .....   | 76  |
| Studies of Trajectory in Japan before the Days of Dutch Learning:<br>Kiyonobu ITAKURA and Reiko ITAKURA .....                                      | 83  |
| The Dynamic Theory of Heat as Used and Developed by Joule in<br>his Investigations: Masao WATANABE .....   | 94  |
| Lorentz's Theory of Electrons and the Development of the<br>Concept of Electromagnetic Field: Tetu HIROSIGE .....                                  | 101 |
| Ein Beitrag zur Geschichte der Atomistik. Über die Rolle der<br>Chemischen Forschung beim Werdegang der Modernen<br>Atomistik: Minoru TANAKA ..... | 111 |

|   |     |
|---|-----|
| Present-day Evaluation of the Ecological Aspects of Darwin's<br>Theories in Japan: Kazuo SIBUYA .....                                 | 117 |
| Fundamental Factors in the Development of Technics as<br>Manifested in the Sequence of its Historical Stages:<br>Seikan ISHIGAI ..... | 125 |

## Abstracts

|  |     |
|--|-----|
| Studies on the History of the Japanese Traditional Arts and<br>Modern Technology: Mitukuni YOSIDA .....  | 135 |
| A Short History of Silicosis in Japan: Toyohiko MIURA .....  | 137 |
| Did Astrology Contribute to the Development of Astronomy?<br>Shigeru NAKAYAMA .....  | 137 |
| Some Perplexities of the Concepts of Industries, found in the<br>Political Opinions on the Weapon Manufacture, in the<br>Age of the Westernization Movements in China –<br>Especially on the Machine-Tool Production:<br>Tetsuo TOMITA ..... | 138 |

## No. 2 (1963)

|  |     |
|--|-----|
| The History of Research Organization in Japan:<br>Chikayoshi KAMATANI .....  | 1   |
| Social Conditions for the Researches of Nuclear Physics in<br>Pre-War Japan: Tetu HIROSIGE .....   | 80  |
| Astronomical Tables in China – From the Wutai to the Ch'ing<br>Dynasties—: K. YABUTI .....   | 94  |
| Accuracy of Pre-Modern Determinations of Tropical Year Length:<br>Shigeru NAKAYAMA .....   | 101 |
| Scientific Revolution in Nineteenth Century Japan:<br>Mitutomo YUASA .....   | 119 |
| Ein Beitrag zur Geschichte der Atomistik (II). Über die Gründe<br>der Verspätung der Anerkennung der Avogadroschen<br>Hypothese: Minoru TANAKA ..... | 127 |
| The First Ballistical Laws by a Japanese Mathematician and Its<br>Origin: Kiyonobu ITAKURA .....   | 136 |
| A Study on the <i>Rekishô Shinsho</i> : Minoru OHMORI .....  | 146 |
| De l'inertie de la pensée humaine – Ce qu'on voit à rencontre<br>des deux civilisations hétérogènes: S. YAJIMA .....                                 | 154 |
| L'Entretien nocturne avec l'ombre de Sugita Guenpaku:<br>S. YAJIMA .....   | 164 |

## No. 3 (1964)

|  |     |
|--|-----|
| Un Aspect de l'Histoire de la Diffusion des Sciences Européennes<br>au Japon: Akira KOBORI . . . . .   | 1   |
| Formation of Bohr's Theory of Atomic Constitution:<br>Tetu HIROSIGE and Sigeiko NISIO . . . . .  | 6   |
| On Nagaoka's Saturnian Atomic Model (1903): Eri YAGI . . . . .   | 29  |
| The Magic Mirror as Studied in Japan during the Meiji Period:<br>Masao WATANABE . . . . .  | 48  |
| Abhorrence of "God" in the Introduction of Copemicanism into<br>Japan: Shigeru NAKAYAMA . . . . .  | 60  |
| Cyclic Variation of Astronomical Parameters and the Revival of<br>Trepidation in Japan: Shigeru NAKAYAMA . . . . .   | 68  |
| A Study on the <i>Rekishō Shinsho</i> (II): Minoru OHMORI . . . . .  | 81  |
| Hundert Jahre der Chemie in Japan, Studien über den Prozess der<br>Verpfanzung und Selbständigung der Naturwissenschaften<br>als wesentlicher Teil des Werdegangs modernen Japans<br>(Mitteilung I): Minoru TANAKA . . . . . | 89  |
| Methodological Problems in the History of Genetics:<br>Ryuichi YASUGI . . . . .  | 108 |
| The Origin of Patent System in Japan – Around the Debation<br>of Importation Patents—: Testuo TOMITA . . . . .   | 114 |
| Development of Social Consciousness in the History of Public<br>Health in Japan: Michio HASHIMOTO . . . . .  | 127 |

## No. 4 (1965)

## Survey

|   |    |
|---|----|
| Japanese Activities in the History of Astronomy during the Early<br>Half of 1960's: Shigeru NAKAYAMA . . . . .                      | 1  |
| Activities of Japanese Historians of Mathematics during the last<br>Decade: Kazuo SHIMODAIRA . . . . .                              | 20 |
| Studies in the History of Physics by Japanese Historians during<br>the Last Few Years: Tetu HIROSIGE and<br>Sigeiko NISIO . . . . . | 28 |
| On the Studies of History of Chemistry in Japan:<br>Yojiro TSUZUKI and Aiko YAMASHITA . . . . .                                     | 41 |
| Studies of the History of Biology Recently Published in Japan:<br>Teiri NAKAMURA . . . . .  | 60 |
| A Survey of the History of Medicine in Japan, 1961-1965:<br>Yonezo NAKAGAWA . . . . .   | 76 |
| Innovation and Definition of Technics – A Review of a Recent<br>Debate in Japan –: Tetsuo TOMITA . . . . .                          | 81 |

## Articles

|  |     |
|--|-----|
| $\alpha$ -Rays and the Atomic Nucleus: Sigeiko NISIO . . . . .   | 91  |
| A Consideration concerning the Origins of the Theory of Relativity: Tetu HIROSIGE . . . . .  | 117 |
| Characteristics of Chinese Calendrical Science: Shigeru NAKAYAMA . . . . .   | 124 |
| A Simple Method for Mental Conversion of a Year expressed in Cyclical Characters to the Corresponding Year in the Western Calendar: N. SIVIN . . . . .                 | 132 |
| Milk and Milk Products in the Ancient World: Shigeaki SUZUKI . . . . .   | 135 |
| William Harvey and his Theories of Physiology: Teiri NAKAMURA . . . . .  | 143 |
| Hundert Jahren der Chemie in Japan (Mitteilung II). Die Art und Weise der Selbständigung chemischer Forschungen während der Periode 1901-1930: Minoru TANAKA . . . . . | 162 |
| The Schools of Rangaku Scholars: Kazuo KATAGIRI . . . . .  | 173 |

## No. 5 (1966)

|  |     |
|--|-----|
| Electrodynamics before the Theory of Relativity, 1890-1905: Tetu HIROSIGE . . . . .  | 1   |
| From Balmer to the Combination Principle: Sigeiko NISIO . . . . .  | 50  |
| Stephan Hales' Work in Chemistry; A Newtonian Influence on 18th Century Chemistry: Eri YAGI . . . . .  | 75  |
| Über Ursprünge skeptischer Auffassungen gegen Atomhypothese der Chemic neunzehnten Jahrhunderts. Ein Beitrag zur Geschichte der Atomistik (III): Minoru TANAKA . . . . . | 87  |
| On the Medieval Latin Translation of the <i>Data</i> of Euclid: Shuntaro ITO . . . . .   | 100 |
| On the Meaning of "Virtualité" in the History of the Set Theory: Tamotsu MURATA . . . . .  | 119 |
| John Thomas Gulick: American Evolutionist and Missionary in Japan: Masao WATANABE: . . . . .   | 140 |
| Proto-Endocrinology in Mediaeval China: Joseph Needham and Lu Gwei-Djen . . . . .  | 150 |
| Educational Institutions and the Development of Scientific Thought in China and the West: Shigeru NAKAYAMA . . . . .   | 172 |
| A Short Classification of Commodities of the "Periplus of the Erythraean Sea" and a Relation to Materials in the   |     |

|   |     |
|---|-----|
| "Septuagint" (LXX) and the "Shōsō-In" Medicinals<br>in the Present Day Japan: Shigeaki SUZUKI and<br>Reiko SUZUKI . . . . . | 180 |
| Mandrake Once Traveled in China as an Anaesthetic:<br>Saburo MIYASHITA . . . . .  | 189 |
| On the First Anatomical Chart in Japan: Goro ACHIWA . . . . .   | 193 |
| Newton's Theory of Dynamics Reexamined by E. J.<br>Dijksterhuis: Masao WATANABE . . . . .                                   | 207 |
| Between Science and Humanism – On C.C. Gillispie—:<br>Eikoh SHIMAO . . . . .  | 211 |

### No. 6 (1967)

#### Articles

|   |     |
|---|-----|
| Zeeman Effect and the Theory of Electron of H.A. Lorentz:<br>Shinji ENDO and Sachie SAITO . . . . .   | 1   |
| The Development of Nagaoka's Saturnian Atomic Model I –<br>Dispersion on Light – (1905) –: Eri YAGI . . . . .                               | 19  |
| The Role of the Chemical Considerations in the Development<br>of Bohr Atom Model: Sigeko NISHIO . . . . .                                   | 26  |
| On Indian Atomism (I): Isao OHAMI . . . . .   | 41  |
| A Few Remarks on the Atomistic Way of Thinking in<br>Mathematics: Tamotsu MURATA . . . . .  | 47  |
| On the Reconstruction of Chinese Alchemy: Nathan SIVIN . . . . .  | 60  |
| The Controversy between Liebig and Pasteur:<br>Tatsumasa DOKE . . . . .   | 87  |
| Einige Probleme der Vorgeschichte der Chemie in Japan.<br>Einführung und Aufnahme der modernen<br>Materienbegriffe: Minoru TANAKA . . . . . | 96  |
| Seishu Hanaoka "Pioneer of the General Anesthesia and the<br>Modern Surgery": Hiromu TAKEBAYASHI . . . . .                                  | 115 |
| Understanding of Science in History of Korea with Emphasis<br>on Scientists in Early 15th Century:<br>Jeon SANG-WOON . . . . .              | 124 |
| Joseph Needham, Organic Philosopher: Shigeru NAKAYAMA . . . . .   | 138 |

#### Review

|   |     |
|---|-----|
| <i>Medical Licensing in America, 1650-1965</i> by R. H. Shryock:<br>Yonezo NAKAGAWA . . . . . | 155 |
|---|-----|

No. 7 (1968)

## Survey

- History of the Chemistry of Taste in Japan:  
Yojiro TSUZUKI and Aiko YAMASHITA . . . . . 1

## Articles

- La Physique de Descartes: Eizo YAMAZAKI . . . . . 27  
 Theory of Relativity and the Ether: Tetu HIROSIGE . . . . . 37  
 On the Alleged Independent Discovery of Kepler's Third Law  
     by Asada Gōryū: Shigeru NAKAYAMA . . . . . 55  
 A Note on the Development of Chemistry in Japan:  
     Minoru TANAKA . . . . . 61  
 On the Market Milk in Japan around 1900: Shigeaki SUZUKI . . . . . 71  
 Chemical Studies on Ancient Japanese Glass Beads from the  
     Izumi Kyo-zuka (Sūtra Mound), Osaka; the Kyozuka  
     Old Tomb, Osaka; and the Monotani Old Tomb,  
     Kyoto, and Ancinet Chinese Glass Disk (Pi<sup>1</sup>), and  
     Glass Bead: Teruko MUROGA . . . . . 83  
 Rise and Fall of Various Fields of Physics at the Turn of the  
     Century: Tetu HIROSIGE and Sigeko NISIO . . . . . 93  
 Stages in the History of Contemporary Science and Technology:  
     Shin-Hui HSIEH . . . . . 115  
 General Academic Trend and the Evolution Theory in Late  
     Nineteenth Century Japan: A Statistical Analysis of  
     the Contemporary Periodicals: Masao WATANABE  
     and Yōko OSE . . . . . 129  
 Science Education in Tropical African Universities after World  
     War II: Chie FUJITA and Eri YAGI . . . . . 143

## Review

- Meiji-zen Nippon Kagakushi* (Histoire des sciences en Japon  
     avant l'ère de Meiji, en japonais), éd. Académie de  
     Japon, Tokyo, 26 volumes, 1954-1968:  
     Suketoshi YAJIMA . . . . . 159