

## Chapter 4

# Ohmsha, its Birth and History

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### **The Age of Beginning 1914–1929 (World War I and Birth of Ohmsha)**

*Half the Life of Seiichi Hirota, the founder of Tokyo University of Electrics and Electronics and Ohmsha, and the Influence of Europe on it*

Established on November 1, 1914, Ohmsha celebrated its 86<sup>th</sup> anniversary in 2000. The company name Ohmsha comes from the title of its first magazine *Ohm*. It also coincides with the initials of the founders of Tokyo Electrical Engineering School (currently Tokyo Denki University), Shinkichi Oogimoto, Seiichi Hirota and Ryoza Maruyama.

Seiichi Hirota was born in 1871. He graduated from the Electrical Engineering Department, Engineering College of Tokyo Imperial University and joined Takada & Co., an importer of electrical equipment. He was sent to Siemens company in Germany to do research into electricity. While there and on his way back home, he visited other European countries and the United States. Many of his later activities were influenced by what he saw and learned during those days.

Steam engines were essentially the only industrial power source. Hirota and Oogimoto met around this time and formed a close friendship. They believed that “Engineers with university or college backgrounds were not sufficient to support future development of the Japanese electric industry. A great number of technicians are needed and must be trained as soon as possible”. This led to the foundation of Tokyo Electrical Engineering (EE) School. It was just after the Russian-Japanese War ended and future growth of Japan’s electric industry was expected. In reality, however, kerosene lamps were still used in most middle class Japanese households, and gaslights rather than electric lights.

Although they established the school, its financial base was weak because private schools received virtually no financial support from the government at that time. So they started a publishing business as a means of ensuring the school’s survival. Most of the books on engineering were imported and those written in Japanese were inferior in terms of content. They felt that the publishing business would contribute much to the study of electrical engineering in Japan and, at the

same time, provide much needed income.

Ohmsha was formally established in 1910 as the publishing department of the school and started publishing textbooks for correspondence courses and transcribing lectures delivered at the school. Hirota published the *Ohm* magazine on November 1, 1914, intending it to be an educational and training tool for young engineers around the country. The publishing house was named Ohmsha. He wrote in the first issue of the magazine that “The word Ohm reminds me of the many obstacles I expect to encounter in my path of duty. Nevertheless, I hate to tread on the paved path of conventional ideas. So I am determined to cultivate a new road leading to the development of sciences unique to Japan”. When World War I broke out, it found Japan opposing Hirota’s beloved Germany. His strong desire to see Japan’s own electrical technologies develop was behind his address.

The first issue of the *Ohm* magazine ran the answers to the 1914 national qualification test for electrical engineers. This test started in 1911 and comprised Class 1 through Class 5 tests (currently Class 1 to Class 3). The *Ohm* magazine was the first to publish all the test answers.

The 1091<sup>st</sup> issue of *Ohm* magazine (fifth issue of volume 87) came out in May, 2000 without missing a single issue, even during such historical events as the Great Kanto Earthquake of 1923 and World War II.

In September 1922, Ohmsha was incorporated and made independent of the EE School with a capital of ¥ 30,000 (¥ 20 per share, 1,500 shares, all paid-up). Forty-three of the 44 shareholders were employees of the Electrical Engineering School (including seven Ohmsha employees). The remaining one was Tomoo Namioka who was invited by Hirota to be the chief editor of *Ohm*. All shares were transferred to them free of charge. A general meeting of the Ohm society was held on August 27 at the EE School. The first board of directors comprised Senior Managing Director Namioka (later to become the second representative director of the company), Directors Oogimoto and Kato, and Auditor Sakuma. The office of president was left vacant. The senior managing director served as the representative director.

When the capital was increased by ¥ 20,000 to a total of ¥ 50,000 in 1924, the management of related electrical companies and college professors as well as a certain number of *Ohm* subscribers were invited to become shareholders (a rare practice even now). The only time Ohmsha was forced to miss a dividend payment was in the aftermath of the Great Kanto Earthquake of 1923.

The Japanese electrical industry was burgeoning then. The Schottky effect was invented in Germany in 1918 and Hull fabricated the dynatron electronic tube in the USA. The age of the vacuum tube had begun.

Ohmsha published its first book, entitled *Hyaku Koshou Shissaku* (Hundred Failures and Errors), in 1918. Interestingly enough, Ohmsha at that time was engaged not only in publishing but also in retailing such products as slide rules and nichrome wires. Ohmsha installed its printing plant in the company yard the same year and started printing *Ohm* magazine from the November issue. Typefaces were gradually increased to support English words and numerical expressions. The point system was also employed for characters used in the plant. Ohmsha in this period created and published original books and magazines.

The Osaka office was opened in 1919 as the base of operations in the Kansai area.

1920: *Denki Kosakubutsu Kitei* (Electrical Work Procedure), still a best-seller today, was published.

1921: *Denki-ka Nikki* (Electrical Engineers' Diary — its revised edition is published every year to this day) was published.

1922: The publishing rights to *Denki Shinpo* (Electric News, later the *Denki Shinbun*), were transferred to Ohmsha. The *Denki Shinpo* became independent in 1926, but close relations were maintained between the two companies.

1923: Ohmsha's Tokyo office was burnt down during the Great Kanto Earthquake of 1923. So, the company was forced to publish the *Ohm* magazine from the Osaka office.

The following is a description of the day of the disaster obtained from old records. "It was 11:58 on September 1, 1923 when a strong earthquake struck Tokyo. Koji Koga, the third representative then, saw the concrete school building sway to the north and south. He prepared for the worst, as the wooden Ohmsha building would be crushed under the school building at any moment. The school building, however, withstood the earthquake as well as the fire that broke out as evening came. The wooden office was engulfed in flames and burnt down during the night. During severe quakes, an emergency stack of documents was transferred to the adjacent school building. Since flames were approaching the school building, a boy named Miyata who was staying there that night wrapped them in a piece of cloth and carried them out, thus escaping from the fire. These documents included the subscriber cards for the *Ohm* magazine and *Electrical Industry News*. This was very fortunate for future sales activities because most of *Ohm's* readers were subscribers.

Since the Ohm printing plant was also burnt down, Namioka set about printing the magazine in Osaka where he had many friends. On September 4, he sent Horii (later to become the second president of Ohm bookstore) to Osaka giving him full powers to secure a printing firm for the *Ohm* magazine and *Electrical Industry News*. Horii, then aged 20, was a salesman.

On the following day, editors of the *Ohm* magazine went into town and found embers still smoldering on the streets, and a smell of death engulfed the town.

Since the Tokaido Line was suspended, it took 30 hours for Horii to arrive at Osaka after a long detour using the Shin-etsu, Chuo and Tokaido Lines. Through the efforts of Horii, the Chuo-Do printing house agreed to do the printing.

The October issue of the *Ohm* magazine was titled “Special Disaster Issue”, and it featured articles on and pictures of seriously damaged electrical facilities, traffic facilities and electrical plants. This issue also listed the new addresses of large companies, stores and plants that were forced to relocate, along with detailed information on how they were recovering from the damage.

The *Ohm* magazine thus responded to reader needs without missing a single issue. Since the subscriber cards were safe, Ohmsha could send this issue to every subscriber without delay, thereby ensuring their confidence in the company. Horii said later that “All employees had nothing but the clothes on their backs. We experienced a kind of socialist society, with no one claiming ownership of property or money. These things were shared equally among us. Publication of the *Ohm* magazine was only possible as the result of such efforts”. Since the *Electrical Industry News* was a weekly paper, its publication was interrupted but printing was restarted on October 2, only a month later, thanks to the cooperation of Osaka Kon-nichi Shinbunsha (Osaka Daily News Inc.). This first issue was unique among competitive trade papers in that it was printed on a rotary press, rather than the lithograph used by competitors.

The burnt down company office was rebuilt in 1924 along with a new printing plant. Books published there included *Denki To Sono Machigai* (Misconception on Electricity) and *Saikin No Hosu Musen Denwa* (Recent Developments in Wireless Telephones).

1926: Ohmsha erected a gravestone for Donsai Matsumoto (1763–1836) at the Nenbutsuji Temple in Osaka Tennoji. He lived in the Edo period and wrote the first Japanese book on electricity, entitled *Oranda Shisei Erekiteru Kyurigen* (Principles of Electricity Developed in Holland). In 1935, a meeting was held at the Nenbutsuji Temple to commemorate the centennial of his death, initiated by Namioka and others. Memorial publication of Donsai’s writings successfully ended in 1940. When the Donsai’s book was reproduced in 1983 as an appendix to *Gendai Denki Koji Taikei* (Complete Works on Contemporary Electrical Work) consisting of 46 volumes, it was highly valued as a precious historical document.

Taking the opportunity afforded by the visit of Chinese electrical engineers to Japan, the *Ohm* magazine added columns written in both the Chinese and English. The foreign languages used in the column were increased to include German,

Esperanto, French and Russian. The foreign language columns continued until 1938 when the situation leading to World War II turned critical.

1927: Commemorating Seiichi Hirota's first visit abroad, Ohmsha held its first Ohm lecture meeting at the Denki Club in Tokyo. For the benefit of the magazine readers, Ohmsha conducted a practice examination of the national qualification test for electrical engineers. It was the first of many events to be offered to readers. The *Ohm* magazine held the first ever prize contest for reader's essays on electricity. Ohmsha increased its capital to ¥70,000 this year, at which time the total number of shareholders increased to 138 because the company encouraged employees to hold company stock if they wished to do so. That year, Ohmsha published *Denki No Gainen To Roden No Yobo* (Concept of Electricity and Leakage Prevention), *Hatsuden Suiryoku No Keizaiteki Riyo* (Economical Application of Water for Hydraulic Power Generation) and *Zenkoku Dai Hatsudensho Ichiran* (List of Big Power Plants in Japan).

1929: Dr. Ryoichiro Isono, Dr. Matsujiro Oyama, Dr. Sadatoshi Betsugu, Dr. Yasujiro Niwa and Shigeru Mori, who was a technical officer of the Ministry of Posts and Telecommunications, joined *Ohm* as advisors. Chief editor Koga introduced a special section in the *Ohm* magazine called Footlight and invited five young elite electrical engineers to contribute essays each month for it. The column continued for five years, running 83 essays in all, and enhanced the reputation of *Ohm* magazine in government, industry and academic circles.

### 1930–1950 (Trial Installation of Automatic Public Telephone in Tokyo, Osaka and Yokohama)

*World War II and Restructuring of Publishing Industry (From Integration of Magazines to Integration of Publishing Firms) due to Wartime Control*

Hirota was a bright, resolute and challenging person as well as being affectionate, but he was not blessed with good health. His history of striving for the company was also the history of his struggle against illness. After appointing Namioka as the second representative of the company, he offered his services to the administration of Tokyo Denki University and in the establishment of Kobe Technical College (currently Kobe University).

In 1930, he wrote *Hirota Seiichi Bunsho* (Selected Essays of Seiichi Hirota) while he was hospitalized. In November of the same year, he was bestowed with the Third Order of Merit. He died aged 61 on January 25, 1931.

Ohmsha's operations so far had mainly involved the *Ohm* magazine. In the 1930's, however, it began to publish a series of electrical-related academic books focusing on technical innovations in this field. Such publications included *Wa Ei*

*Doku Denkiyutsugo Daijiten* (Encyclopedia of Electrical Terms in Japanese, English and German) in 1932 and *Denkikogaku Hanron* (Introduction to Electrical Engineering), consisting of 3 volumes, in 1934.

A bestseller in 1935 was *Denki Koji Dokuhon* (in 3 volumes) (Electrical Work Reader). It was published immediately after regulations governing electrical engineers and technicians were enacted, selling tens of thousands of copies within a very short time, thanks to the publication timing. This book contributed greatly to the building of a new office in 1937.

In 1939, in celebration of its 25<sup>th</sup> anniversary, Ohmsha awarded the first Ohmsha scholarship to those who successfully passed Class 1 of the national qualification test for electrical engineers. This scholarship continues to this day. The following year, 1940 (2600 according to the Japanese calendar) was also the year of a munitions boom sprung from the Sino-Japanese War. People were seen all over the country praying for victory.

This was the year that the Metropolitan Police Headquarters introduced magazine controls and, as a result, Ohmsha and Denki No Tomosha were specified as surviving electricity-related publishing firms. There was a growing trend toward prohibiting the use of enemies' languages. The name of the magazine *Denki Zasshi Ohm* (Electrical Industry Magazine Ohm) was changed to *Denki Zasshi Omu* (the word Ohm being replaced by the Japanese equivalent), then forced to employ the name *Denki Nihon* (Electrical Science in Japan) in 1942. In 1943, the regulations governing publishing firms were enacted. Ohmsha changed its name to Denki Nihon Sha (Electrics Japan Co., Ltd.). Its articles of incorporation were modified accordingly and the company employed its first president instead of a representative director.

The first president was Koji Koga. He was born in 1888 and graduated from the Electrical Engineering Department of Tokyo Imperial University. He guided the company superbly through difficult times, during and after the war. He was gentle, sincere, punctual, and above all, patient, as well as affectionate. After retiring to take responsibility for a conflict which occurred at Daido Printing Inc., he was re-elected president without the right of representation. In 1965, Koga, who was a counselor then, was bestowed with the Fourth Order of Merit, and died at the age of 85 in 1973.

According to the second set of regulations governing publishing firms, the government drafted the facilities and materials of printing plants with 200 or less employees. Ohmsha's printing department was also merged with six other small to mid-size printing companies in the Kanda area into Daido Printing Co., Ltd. (with about 250 employees). That year Ohmsha's printing department ended its 20-odd-year history.

Daido Printing went bankrupt in 1957, but Ohmsha still maintained close relations with the six printing firms as affiliates after they became independent from Daido soon after the war.

The tide of the war was turning against Japan and Tokyo came under frequent air attacks. Kanda Nishikicho, where Ohmsha was situated, and its vicinity were almost totally destroyed but fortunately our office buildings survived, though part of the wooden building was burnt. Our paper molds, printing paper and office supplies, which had been removed to the countryside during the war, were brought back afterwards.

Although the war had ended, the country was devastated. People were forced to stand in a long line for books in front of the Kyoto sales office (later Kyoto branch office) every day. Books were sold on the spot until stocks ran out. Employees and directors worked day and night. Sales of the Kyoto office contributed to the company's financial state at a time when the headquarters were having difficulty securing materials for publishing magazines and books.

The following were some of topical events at that time.

In 1945, Ohmsha's Osaka office was burnt down during an air raid.

In 1946, Ohmsha opened its Kyoto office. New magazines *Gijutsu Shinron* (New Technological Review), *Kokumin Keizai* (National Economy) and *Onkyo* (Sound) were issued. Ohmsha joined the newly organized "Shizen Kagakusho Kyokai" (Natural Science Publishers' Association of Japan).

In 1947, the company name Ohmsha was restored. A new magazine *Shin Denki* (New Electrical Science) was issued targeted at people preparing for Class 3 of the national qualification test for electrical engineers.

In 1948, the sales department became independent as Ohm Bookstore. Ohmsha's Sunaga proposed and organized "Kogakusho Kyokai" (Technology and Engineering Publishers' Association of Japan), inviting 25 publishers of engineering-related books.

### **The Age of Reconstruction 1950–1970 (The Electrical Laboratory developed the ETL Mark 1 relay system computer in 1952)**

#### *Publishing activities benefit from high economic growth*

In the late 1950's, the petrochemical industry began full-fledged production, the electronics industry was burgeoning and industrial machines were becoming increasingly more sophisticated accompanying Japan's economic growth. Against this background, Ohmsha and Ohm Bookstore expanded their operations rapidly. Ohmsha successively published new magazines titled *Electronics*, *Denki To Koji* (Electricity and Electrical Work), *MOL* and *Setsubi To Kanri* (Facilities and

Control). The first issues of some of these magazines were reprinted, thanks to positive requests from readers.

To satisfy increased public interest in nuclear energy, Ohmsha published *Genshiro Note* (Reactor Note), *Genshikaku Kogaku Sokutei Gijutu* (Measurement Technologies in Nuclear Engineering) and *Genshikaku Kogaku Nyumon* (Introduction to Nuclear Engineering) in 1955. This same year Gozaburo Tanaka (born in 1908) became the sixth president succeeding Koga. After graduating from a junior high school in Taiwan, Tanaka studied electrical engineering at the Electrical Engineering School attached to the current Tokyo Denki University. He passed the Class 2 test of the national qualification test for electrical engineers on his own.

The following lists major publications and topics during this period.

1950: *Musen Kogaku Pocket Book* (Radio Engineering Pocket Book) and *Denki Kogaku Pocket Book — Junior Edition* (Electrical Engineering Pocket Book) were issued.

1951: *Sokuryo Gijutsu Koza* (in 8 volumes) (Survey Engineering Course) was the first Ohmsha publication in the field of civil engineering.

1952: The Japan Publishers Confederation was formed by the nine representative publishing bodies (currently, the Japan Book Publishers' Association). Publication of Ohm paperbacks began with *Atarashii Zetsuen Zairyo* (New Insulating Material).

1953: The Publisher's Association for Asian Cultural Exchange (currently, the Publishers Association for Cultural Exchange) was founded. A ceremony was held to mark presentation of the first Ohm engineering prize. This prize was established to commemorate the signing of the San Francisco Peace Treaty.

1954: Ohmsha held the centennial of G.S. Ohm's death at the Yamaha Hall in Ginza. This year Ohmsha published *Georg Simon Ohm — Sono Shogai To Gyoseki* (Georg Simon Ohm — His Life and Achievements), *Denki Gijutsusha No Tameno Jidoseigyo* (Automatic Control Technology for Electrical Engineers), *Sokuryo Gijutsu Binran* (Surveying Techniques Handbook) and *Musen Kogaku Handbook* (Radio Engineering Handbook) as well as the bestselling Ohm paperback, *Jidoseigyo Nyumon* (Introduction to Automatic Control).

1955: The Japan Society of Electrical Engineers was established and its secretariat located in the Ohmsha office.

1956: Ohmsha published the *Electronics* magazine, a new magazine specializing in electronics.

1960: The first issue of *Denki To Koji* (Electricity and Electrical Work) was published and sold so well as to require reprinting. In the same year, the first issue of *Joho Shori* (Information Processing) edited by Information Processing Society of



Japan was published.

1961: Ohmsha started publication of *Gendai Denki Kogaku Koza* (Electrical Engineering Today), consisting of 50 volumes.

1963: The first issue of the chemical technology magazine *MOL* was published, and *Introduction to Automatic Control* was published in English by Elsevier Publishing Co. of Holland, becoming the first Ohmsha book to be published abroad.

1964: Commemorating the 50<sup>th</sup> anniversary of Ohmsha, a variety of events were held including a memorial lecture and publication of *Ten Great Handbooks*. These comprised *Shinpan Musen Kogaku Handbook* (Revised Radio Engineering Handbook), *Hakumaku Kogaku Handbook* (Thin Film Engineering Handbook), *Jikayo Denki Shunin Gijutsusha Handbook* (Handbook for Qualified Engineers at Non-Utility Facilities), *Sequence Jido Seigyo Binran* (Automatic Sequence Control Handbook), *Handy Book Denki* (Handy Book on Electricity) and *Kenchiku Study Book* (Architecture Study Book). An extra memorial dividend was paid to shareholders to reward their support.

1967: The first issue of *Setsubi To Kanri* (Facilities and Control). It was targeted at the building and plant maintenance market. This same year, the government issued the Basic Law on Environmental Pollution Control. Ohmsha's capital was increased by ¥ 14 million to ¥ 30 million.

1968: Masamitsu Mitsui (currently an Executive Advisor) was elected as the seventh president to succeed Tanaka. Tanaka became chairman after serving 12 years as president. A long-awaited warehouse was built adjacent to the headquarters building. Ohmsha achieved record high production, sales and ordinary profit, thanks to internally promoted Ohm Move, aimed at achieving Originality, Humanity and Motivation, its three main goals. The house organ was published in May as a tool for training employees as well as for establishing better communications with them. The first seminar for those taking the national qualification test for electrical engineers was held in Tokyo and Osaka. This seminar is still being held to this day.

1969: Ohmsha published 13 computer and information related books to meet reader needs in the age of computers and information. *Nyumon FORTRAN* (Introduction to FORTRAN) and *Nyumon COBOL* (Introduction to COBOL) were super bestsellers, cultivating a strong readership among businessmen.

**The Age of Information Technology 1970–1990 (New Tokyo International Airport (Narita Airport) was opened)**

*The age of major change: oil crisis and threat from copying machines*

The age of computers was here. It was also the time when government con-

trol over environmental pollution became increasingly more severe. The Osaka International Exposition was held in 1970. The size of Ohmsha's magazines was enlarged to meet the needs of the times.

Focusing on trends in factory automation, Ohmsha published the *Syoryoku To Jidouka* (Energy Saving and Automation magazine).

1971: Japan shifted from the fixed exchange rates to a floating system following the so-called "dollar shock". Measures to prevent environmental pollution were promoted more than ever through the newly established Environment Agency. Anticipating introduction of the first national qualification test for environmental pollution control engineers, Ohmsha published such bestsellers as *Kogai Gairon* (Introduction to Environmental Pollution) and *Kogai Boushi Kanrisha Mondai Kaitou 600* (600 Selected Exercises for Those Taking the Environmental Pollution Control Engineer Test).

1972: This was the year that large-scale general strikes began. Labor disputes arose all over the country. In the publishing industry, the so-called "net problem" became more serious than ever among publishers, distributors and retail stores. Publishers made big compromises in order to settle the boycott by retail stores. Ohmsha published *Audio Hyakka* (Complete Book on Audio), consisting of four volumes.

1973: The Vietnam War ended at the beginning of this year. Japan experienced the so-called "oil crisis" due to economic problems both at home and abroad. The Japanese economy, in general, suffered not only as a result of the oil crisis but also from a shortage of electric power and a scant supply of paper. The publishing industry was no exception. Economic conditions were changing rapidly as the result of four successive hikes in the official bank rate following four successive reductions the previous year. The government budget saw a 124.6% year-on-year increase. Publishers had trouble setting prices because of soaring production costs and a labor shortage.

1976: Ohmsha's *Hikari Fiber Tsushin Nyumon* (Introduction to Optical Fiber Communications) was awarded the authorship prize by the Institute of Electronics and Communication Engineers of Japan and translation rights were sold to American and French publishers. Ohmsha published *Microcomputer Nyumon* (Introduction to Microcomputers) and *Microcomputer Kokoroe Cho* (Microcomputer Guide), forerunners of the microcomputer boom in Japan. This was followed by publication of the first issue of the long-selling *Zukai Computer Series* (Illustrated Computer Series). Ohmsha's *Gendai System Kogaku* (System Engineering Today) was awarded the authorship prize by The Institute of Electrical Engineers of Japan.

1978: The current headquarters building (1 floor below ground and 8 above with a total floor space of 4,907.08 m<sup>2</sup>) was erected in Kanda Nishiki-cho. Ohmsha's *Denjiha Kairo* (Electromagnetic Wave Circuits) was awarded the authorship prize by The Institute of Television Engineers of Japan.

1979: Ohmsha opened a booth at the world's largest book fair in Frankfurt. This same year, Ohmsha published *Denshi Tsushin Handbook* (Electronic Communication Handbook) and *Sougou Energy Koza* (General Energy Course). Copyrights to *Digital Audio Nyumon* (Introduction to Digital Audio) were granted to the USA and Italy.

1980: Ohmsha published some large handbooks, including *Shinpan Johoshori Handbook* (Revised Information Processing Handbook), *Antenna Kogaku Handbook* (Antenna Engineering Handbook) and *Television Gazo Kogaku Handbook* (Television and Image Electronics Handbook).

1981: Ohmsha, jointly with Elsevier/North-Holland, started publication of the *JARECT Series* (Japan Annual Reviews on Electronics, Computers and Telecommunications), to introduce state-of-the-art Japanese technologies to foreign countries. It also published *Cho LSI Gijutsu* (Basic VLSI Technology), *Seidenki Handbook* (Electrostatics Handbook) and *Kuki Seijo Handbook* (Environmental Clean Air Technology Handbook). *Onsei Joho Shori No Kiso* (Fundamentals of Speech Signal Processing) was awarded the authorship prize by the Institute of Television Engineers of Japan.

1982: Ohmsha published *Zukai Wordprocessor Dokuhon* (Illustrated Word processor Reader), the first electronic publication in Japan based on FD-saved manuscripts.

1983: Ohmsha published the first issue of *Computer & Network LAN* magazine. The company also began participating in business and data shows to exhibit its publications. Ohmsha started publication of the English academic journal, *New Generation Computing*, which focused on fifth-generation computers. This journal is distributed worldwide by Springer-Verlag. Our largest project began this year: the publication of *Gendai Denki Koji Taikei* (Complete Works on Today's Electrical Engineering) consisting of 46 volumes to be marketed through door-to-door sales.

*Hikari Fiber* (Optical Fiber) was awarded the authorship prize by the Institute of Electronics and Communication Engineers of Japan. Publication of *Zukai Mekatoronikusu Nyumon Series* (Illustrated Introduction to Mechatronics Series) was started. Ohmsha and Elsevier/North-Holland mutually exchanged staff for training.

This year Norikazu Taneda was elected as the tenth president, succeeding Mitsui who served as president twice for a total of 12 years. Taneda was an engineer who worked with the company as chief editor of the magazines and manager of the general affairs and accounting departments.

1984: Ohmsha held the second seminar for those taking the Class 2 national qualification test for information administrators in Tokyo. It published *Data Tsushin Handbook* (Data Communication Handbook), *LSI Handbook* (LSI Handbook), *Shin Kenchikugaku Pocket Book* (New Architecture Pocket Book) and *Sougou Zairyo Kyoudogaku Kouza* (General Course on Material Strength).

This year Ohmsha celebrated its 70<sup>th</sup> anniversary. All Ohmsha magazines invited readers to enter essay contests titled *Development of Technology*, *Education* and *International Cooperation*. The number of essays contributed far exceeded expectations. In June this year, ex-president Gozaburo Tanaka died after 60 years of service at Ohmsha.

1985: Ohmsha started publication of *Shin Ohm Bunko* (New Ohm Library). Our *Chishiki Kogaku Nyumon* (Introduction to Knowledge Engineering) received the first engineering and science book prize awarded by the Nikkan Kogyo Shinbunsha (Daily Industrial News). The Tsukuba International Exhibition of Science was held in Tsukuba University Town. Ohmsha fully supported the operations and exhibitions. We participated in the Exhibition, holding a book fair for 184 days at Papyrus Plaza pavilion. Mitsui was the executive chairman of the book fair. This same year, he was bestowed with the Fourth Order of Merit. After graduating from Tokyo Denki University, he worked for some time at the Naval Technology Laboratory before joining Ohmsha. When Japan lost the war, he returned to Ohmsha after having been detained in Siberia. He played an active part both in Ohmsha and the trade. Currently, he holds the post of executive advisor of the company. He was my tutor in the management of Ohmsha.

One of our subsidiaries, NPS, was inaugurated the same year. As part of our creative team, NPS is currently playing an active part in production of Ohmsha publications.

1986: Ohmsha started publication of *New Diamond* and *Jinkouchinou Gakkaishi* (Journal of Artificial Intelligence Society) as well as *Chishiki Kogaku Koza* (Knowledge Engineering Series) consisting of 10 volumes.

1987: Ohmsha published *Denki Kogaku Pocket Book* (Electrical Engineering Pocket Book) and *Kenchiku Setsubi Shusei* (Complete Book on Architectural Facilities). *Fuzzy System Nyumon* (Introduction to Fuzzy Systems) was a bestseller.

1988: Ohmsha exhibited its electronics publications at data shows. It started trial operation of the Ohm-net, a PC communication system. *Denshi Joho Tsushin Handbook* (Handbook for Electronics, Information and Communication Engineers), *Kagaku Gijutsu Waei Daijiten* (Japanese-English Science and Engineering Dictionary), *COM Series* (COM Series) and *Keiei Johogaku Koza* (Management Information Course) were also published.

**The Age of Energy and Environment 1990 — Today (Kyoto Meeting for Prevention of Global Warming was held in 1999)**

*User-friendly technology and knowledge: expanding the computer market*

1991: Ohmsha introduced the *Super Beginner Series* targeted at beginners in personal computing. *Chikyu Kankyo Kogaku Handbook* (Earth Science & Engineering Handbook) was awarded the technology and science book culture prize.

1992: *Minna No Chikyu* (Green Earth, Our Planet) and *SE Crisis* were bestsellers.

1993: The total number of issues of the general electric magazine *Ohm* reached 1,000. Ohmsha published *Kagaku Gijutsu Eiwa Daijiten* (English-Japanese Science and Engineering Dictionary), *Chodenndo Teion Kogaku Handbook* (Super Conduction and Low Temperature Engineering Handbook), *Sentan Device Material Handbook* (Advanced Device Material Handbook) and *Digital Shingo Shori Handbook* (Digital Signal Processing Handbook). It also published *Chikyu Kankyo Seminar* (Global Environment Seminar) consisting of 8 volumes, and publication of *Shin Computer Koza* (New Computer Course) was also started.

1994: Ohmsha held a lecture at the Ashahi Hall in Yurakucho to commemorate its 80<sup>th</sup> anniversary. It also held a seminar for those taking the national qualification test for data processing system administrators. Publication was started of *Techno Life Sensho* (Techno-Life Series) planned to commemorate the 100<sup>th</sup> anniversary of the Japan Society of Mechanical Engineers.

Translation from the German of *Denshi Bussei No Kiso* (Basics of Physical Properties of Electronics) was awarded the 31<sup>st</sup> Japan Translation Prize.

1995: *Shinpan Jouhoushori Handbook* (Revised Information Processing Handbook), *Kagaku Gijutsu Eigo Hyougen Jiten* (Dictionary of English Scientific and Technological Expression), *Zukai Denki No Daihyakka* (Illustrated Encyclopedia of Electrical Technologies) and *Zukai Computer Daihyakka* (Illustrated Encyclopedia of Computers) were published.

1996: Opened Ohmsha homepage on the Internet. *Haikibutsu Handbook* (Waste Management Handbook) and *Energy Shigen Handbook* (Energy Resource Handbook) were published. Ohmsha started publication of *Denken Sanshu Kanzen Koryaku* (How to Successfully Pass the Class 3 National Qualification Test for Electrical Engineers).

1997: Ohmsha published textbooks titled *Inter-University Series* to be used with the semester system. *Zukai Kisho No Daihyakka* (Illustrated Encyclopedia of Meteorology) and *Kankyo Yogo Jiten* (Dictionary of Environmental Terminology) were also published.

1998: The first issue of the Ohm Mook *Robocon Magazine* (Robot Contest Magazine) was issued. Ohmsha also published *Encyclopedia Denshi Jouhou Tsushin*

*Handbook* (Handbook for Electronics, Information and Communication Engineers), *Ouyo Butsuri Yogo Daijiten* (Dictionary of Applied Physics Terminology), *Shinpan Seidenki Handbook* (Revised Handbook of Electrostatics) and the *Journal of Visualization*. Ohmsha established Beijing Oriental Kelong Computer Typesetting and Production Co., Ltd. as a joint venture with IOS Press and Science Press of the Chinese Academy of Sciences.

1999: The first volume of the information magazine *Techno-Info* was published. Commemorating its 85<sup>th</sup> anniversary, Ohmsha published *Tokusoban Techno-Life Series Gijutsuya No Fukken* (Techno-Life Series — Reinstatement of Engineers), *Tatakau Dokuso No Yu Junichi Nishizawa* (Junichi Nishizawa, The Seeds of Creative Talent) and *Robokon Hakase No Monozukuri Yuron* (Dr. Robokon's Introduction to Handcrafting Robots for Competitions). The Ohmsha anniversary book fair was held in various cities throughout Japan.

2000: Ohmsha published a translation of IEEE's *Engineering Tomorrow*.

### The next century

We believe that the mission of publishers is to publish good books. A good book is one that optimally meets the needs of the readers of the age. Now in the year 2000, the net business is rapidly growing and the number of ECs is also steadily increasing despite warnings issued regarding the computer networks.

Living in such an age, I celebrated my 50<sup>th</sup> anniversary at Ohmsha in 1999. Ohmsha grew in step with the development of science and technology in support of Japanese industry. Ohmsha has been managed democratically since its foundation as a non-hereditary company, which is exceptional among Japanese publishing houses. I celebrated my 10<sup>th</sup> anniversary (from February 1990) as the 11<sup>th</sup> president, observing the ambitions of the founders despite the severe environment surrounding the publishing industry. Since joining the company, I have not confined myself to the fields of electrics and electronics, but launched into other fields, including information, communication, machines, architecture, civil engineering and environmental facilities, chemical and science in general. I believe that I was appointed president because the books I planned and marketed sold best.

Now, 55 years after the war, parts of the Japanese social system are beginning to show signs of fatigue. We must realize that we are living the age of cohabitation of man and machine. It is not technology or computers that make careless mistakes. The problem lies in the interface that connects man and machine. I believe, however, that man will be able to live peacefully with machines as typified by the robot contests frequently held these days, where mismatching of the two is eliminated in fine style.