

1930

NOF's story

1937 - 1969

## Expanding our business areas to include petrochemicals, centered on oils and fats Supporting rapid economic growth with products ahead of their time

Japan's oils and fats industry began with the export of hardened oil as a raw material for soap and margarine. As exports surged during the Showa period, Nippon Food Industries, Kokusan Industry Fuji Paint Works, Velvet Soap, and Associated Oil and Fats, which were under the Nippon Sangyo Group, merged to form the first Nippon Oil and Fats in June 1937. The company began operations as a general oleochemical company aiming for integrated production of cosmetic soap and detergent.

After the end of World War II, there was a period of turmoil that included financial difficulties for obtaining basic necessities and soaring commodity prices. In July 1949, the company once again took the name "Nippon Oil and Fats" as a chemical manufacturer with four divisions: oils and fats, coatings, explosives, and welding rods. Fish oil replaced beef tallow and coconut oil as the raw material for fats and oils, and uses of derivatives of simple fatty acids, developed through innovations in refining technology, expanded to include use as disinfectants and emulsifiers. The company also expanded into the field of processed edible oils such as margarine and shortening.

In the 1950s, as the petrochemical industry took off, the leading materials shifted from natural rubber to synthetic rubber, and from wood, metal, and glass to synthetic resin. The company focused on expanding sales channels to a wide range of industrial fields in response to the trend of rapid growth of large assembled products such as the "3Cs" (color TVs, cars, and coolers) due to high economic growth. The company developed derivatives along with various simple fatty acids to enhance its non-ionic surfactant product line. Applications as emulsifiers, modifiers, and stabilizers were also developed, and gained customers in a wide range of fields, including pharmaceuticals, cosmetics, toiletries, paper and pulp, and civil engineering and construction. Furthermore, efforts were made to mass produce organic peroxides, which are indispensable for the manufacture of synthetic rubber and synthetic resins, and production of processed edible oils increased rapidly due to the expanding market for western-style confections and baked sweets. In addition, the company diversified its business with efforts such as developing solid propellants for artificial satellite launch plans of the National Space Development Agency of Japan.





1970 - 2006

## Focusing on the pharmaceutical industry, centered on biotechnology Focusing on R&D of new materials to expand our product lineup

In 1968, Japan's gross national product (GNP), which was soaring due to the Izanagi Boom, surpassed that of West Germany to become the second highest in the world However, the first oil crisis in 1973 caused a sharp rise in the price of imported crude oil and a major downturn in Japan's economy. In order to secure stable supplies of raw materials, the company accelerated its overseas expansion, including by investing in Malaysia, a palm oil producing country. At the same time, the company focused on fine chemicals as high value-added products. The BLEMMER series of world-class polymer modifiers expanded its sales channels in fields such as coatings, adhesives, and resist materials, and the company also advanced the development of finer organic peroxides. In 1983, the Tsukuba Research Laboratory was established for R&D of new materials. The Laboratory became a stepping stone for offering high value-added products by linking lipids to promising biotechnology, focusing on the pharmaceutical industry, developing high-purity unsaturated fatty acids, and other means.

After the Japanese economy reached its peak in the 1980s, the bubble economy collapsed in the early 1990s, ushering in an era in which product development

capabilities would determine the future of the company. When the Life Science Products Division was established in 1999, the company expanded its manufacturing capacity in anticipation of increased demand for cleaning and storage solutions for contact lenses as well as cosmetic ingredients. In 2001, the DDS Business Development Department was established, after the company had established a track record in the development of high-purity activated PEG, phospholipids, and other products. In 2004, in addition to the establishment of a local subsidiary in China to supply organic peroxides to synthetic resin manufacturers, the Daishi Plant was completed as a new production base for processed edible oil, with the basic principle of "food safety and security" to ensure traceability of the raw materials used. Furthermore, in 2006, although the company established a new division to oversee the anti-corrosion business that had been operating in Japan, the United States, and Europe, it also made selections and concentrated its businesses, including discontinuing the welding and coating business and transferring it to another company.

1980 Div New Business Development Dept Chemicals Div. 1990 Oleo & Specialty Chemicals Div. Life Science **Chemicals & Polymers Div** 2000

GRI

2-6

1970

010

## Global expansion with five forms of business that generate the NOF brand Promoting innovation toward a sustainable society

In October 2007, the 70th anniversary of our founding, the company name was changed from Nippon Oil and Fats to Nichiyu (NOF in English) with the aim of further expanding our business areas. In addition to the four core businesses of oleo & specialty chemicals, functional chemicals & polymers, explosives & propulsion systems, and functional foods, the company's organizational structure now also includes life science products, DDS development, and anti-corrosion. Under the slogan "From the Biosphere to Outer Space," we have taken the first step toward becoming a global general chemical manufacturer equipped with cutting-edge technologies.

As environmental and social issues continue to mount on a global scale, expectations are increasing for innovation toward a sustainable society. Therefore, in our Mid-term Management Plan for the 2010s and beyond, we identified three fields where future demand is expected to grow: Environment/Energy, Life/Healthcare, and Electronics/IT. In the Life/Healthcare field, for example, we are working on the development of new materials through co-creation in industry-government-academia collaboration, with a focus on advanced medical technique and regenerative medicine, which are attract-

ing worldwide attention.

In the DDS business, which was created by integrating NOF's technologies, such as high purification and cutting-edge molecular design technologies, we provide a wide range of materials to the biopharmaceuticals field, which is expected to grow significantly in the future. Among these, the main product, activated PEG, is used in many biopharmaceuticals, including protein drugs and peptide drugs, and holds the largest share in the global market. In addition, functional lipids such as ionic lipids and PEG lipids are being developed for use in nucleic acid drugs, including expected applications in gene medicine. In response to the increase in the number of pharmaceuticals which use NOF's materials, our plan is to expand the manufacturing facilities at our Kawasaki Works in 2021 and make a facility investment of ¥10 billion in our Aichi Works by 2025.

In 2023, we renewed our Corporate Philosophy structure and reorganized our business units. We will develop our global business with 13 consolidated subsidiaries in Japan as well as 12 bases in nine countries overseas toward achieving NOF VISION 2030.

**GRI** 2-6 **Functional Films Div.** 2010 Display Materials Div. 2020 Explosives & Propulsion **Functional Materials Functional Foods Metal Coatings** Life Science

Appendix

011