

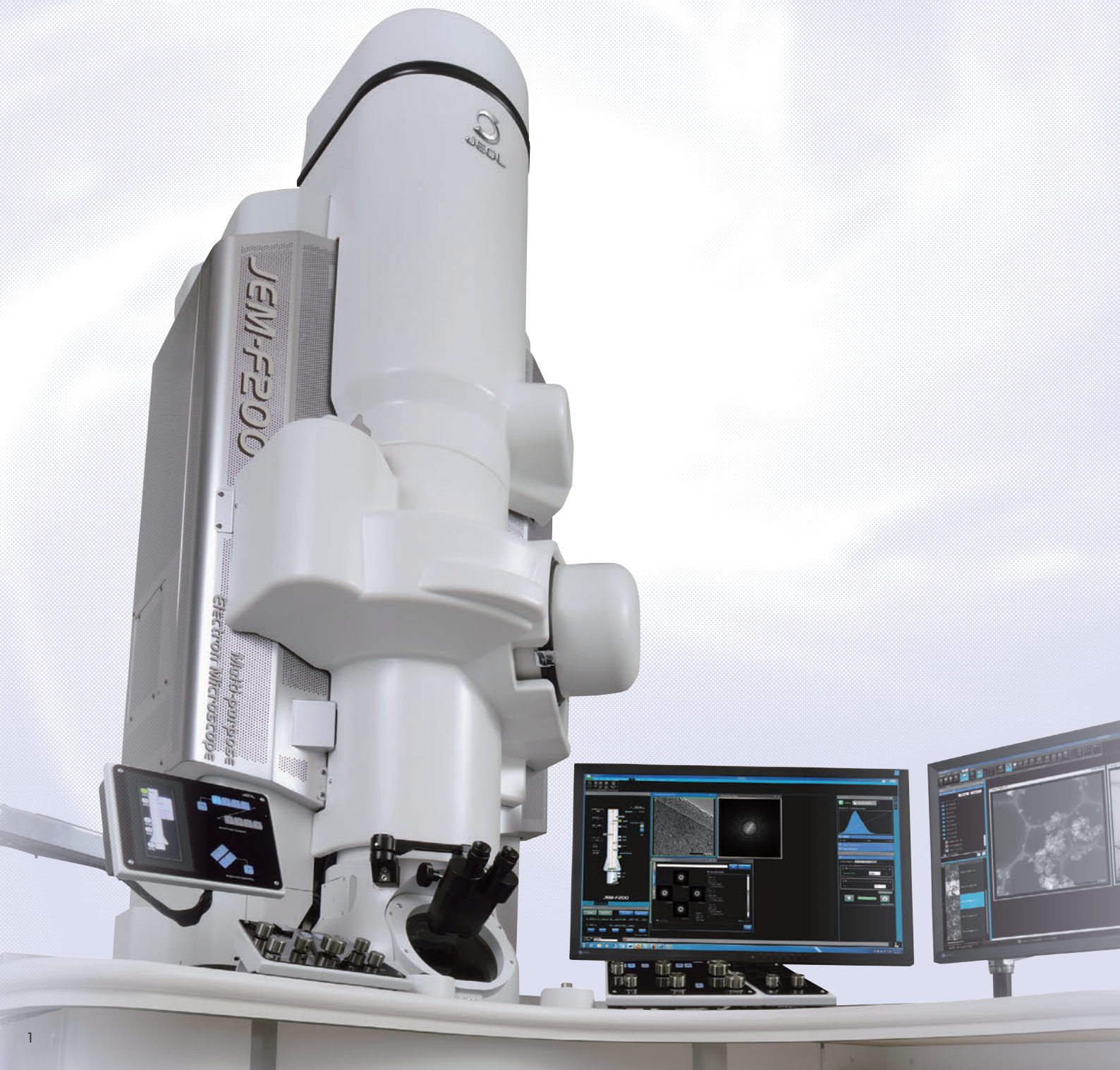
JEOL Ltd. INTEGRATED REPORT

2022

Fiscal year ended March 31, 2022

● Corporate Message

Seventy-three years supporting scientific technology around the world.
Carrying on the founding principles of “Creativity” and “Research and Development,” we will continue to contribute to scientific progress and societal development.



Company Philosophy

On the basis of “Creativity” and “Research and Development,” JEOL positively challenges the world’s highest technology, thus forever contributing to the progress in both science and human society through its products.

Guiding Principles for JEOL Staff

On the basis of our company philosophy emphasizing “Creativity” and “Research and Development,” we will act up to the following guiding principles, with pride as JEOL staff and realize our responsibilities as members of the society.

1. We will take pride in our work and endeavor to reform our present situation with challenging spirits.
2. We will be grateful to our customers for their support and do our best to offer the best products and service to them.
3. We will keep ourselves in good physical and mental health and create a nice and rewarding working environment.
4. We will understand other’s positions and fulfill our responsibilities through good teamwork.
5. We will be constantly cost-minded and utilize time and goods to their best advantage.
6. We will absorb a wide range of knowledge and put it in practice for our own growth.

Period Covered:
April 1, 2021 through March 31, 2022,
fiscal year 2021 (FY 2021)
Please note that some matters that fall
outside this period are also included.
Fiscal years referred to in this report cover
the period from April 1 to March 31.

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Creating a Culture for Revealing Microstructures

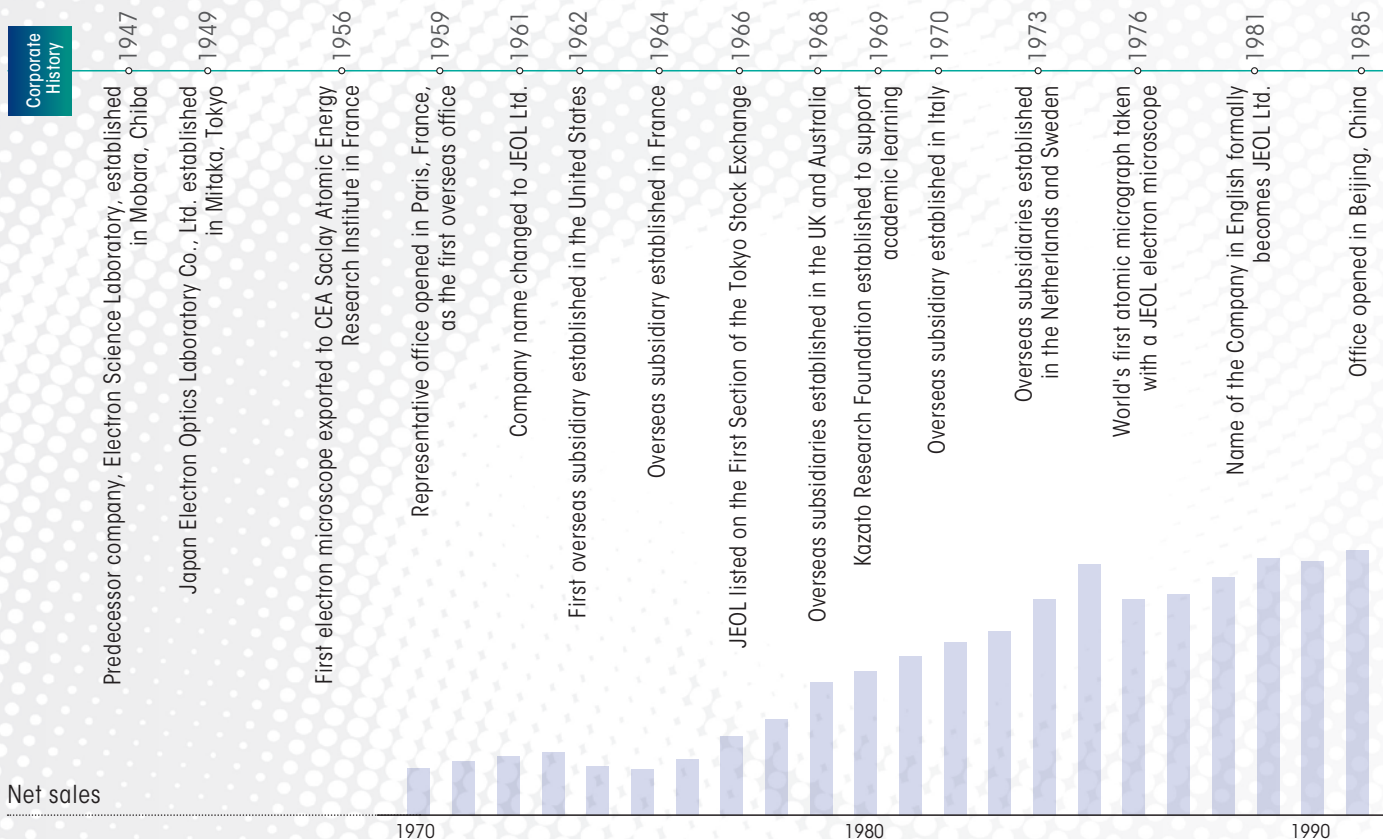
Kenji Kazato
Founder

Kenji Kazato worked as a researcher at the Japanese Navy Technical Research Center and believed that the promotion of scientific technology would be essential for Japan's reconstruction following World War II. It was against this backdrop that he was captivated by a specialized book on electron microscopes.

Although he had never seen or touched an electron microscope, he sensed that their ability to allow people to see the microworld, normally invisible to the eye, held enormous potential for scientific advancement.

Recognizing the promise of nanotechnology at an early stage, Kenji Kazato saw that “creating a culture for revealing microstructures” was essential for scientific progress and set out on the path to develop electron microscopes.

In 1947, researchers who shared Kenji Kazato's belief came together and formed JEOL's predecessor company, Electron Science Laboratory, with the goal of producing electron microscopes.



1972



Dr. Shinichiro Tomonaga
(Physics, Japan)

1980



Dr. Linus Pauling
(Chemistry and Peace, USA)

1980



Dr. Alexander Prokhorov
(Physics, Soviet Union)

1987



Dr. Klaus von Klitzing
(Physics, Germany)

1988



Dr. Kai Siegbahn
(Physics, Sweden)

Visits
by Nobel
Prize
winners

The name JEOL is an acronym for the name of the Company at our founding:
Japan Electron Optics Laboratory.
JEOL is now a brand that is known worldwide.

1947 DA-1 magnetic field electron microscope

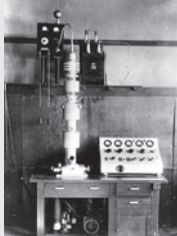
This was the first successful electron microscope developed by our predecessor, Electron Science Laboratory.

Based on the belief that there could be no post-war reconstruction in Japan without progress in science and technology, our founder, Kenji Kazato, and young associates began the development of electron microscopes.

This was a challenge that was almost a shot in the dark in the period of upheaval that directly followed the war. However, the team members were motivated by their spirit to rebuild Japan, so their combined hard work enabled them to complete this development in a short year and a half.

The completion of the DA-1 made national news; Emperor Showa and the Crown Prince (now Emperor Emeritus) came to see the microscope.

In 2010, a milestone in the development of electron microscopes, the National Museum of Nature and Science recognized the DA-1 as an Essential Historical Material for Science and Technology.

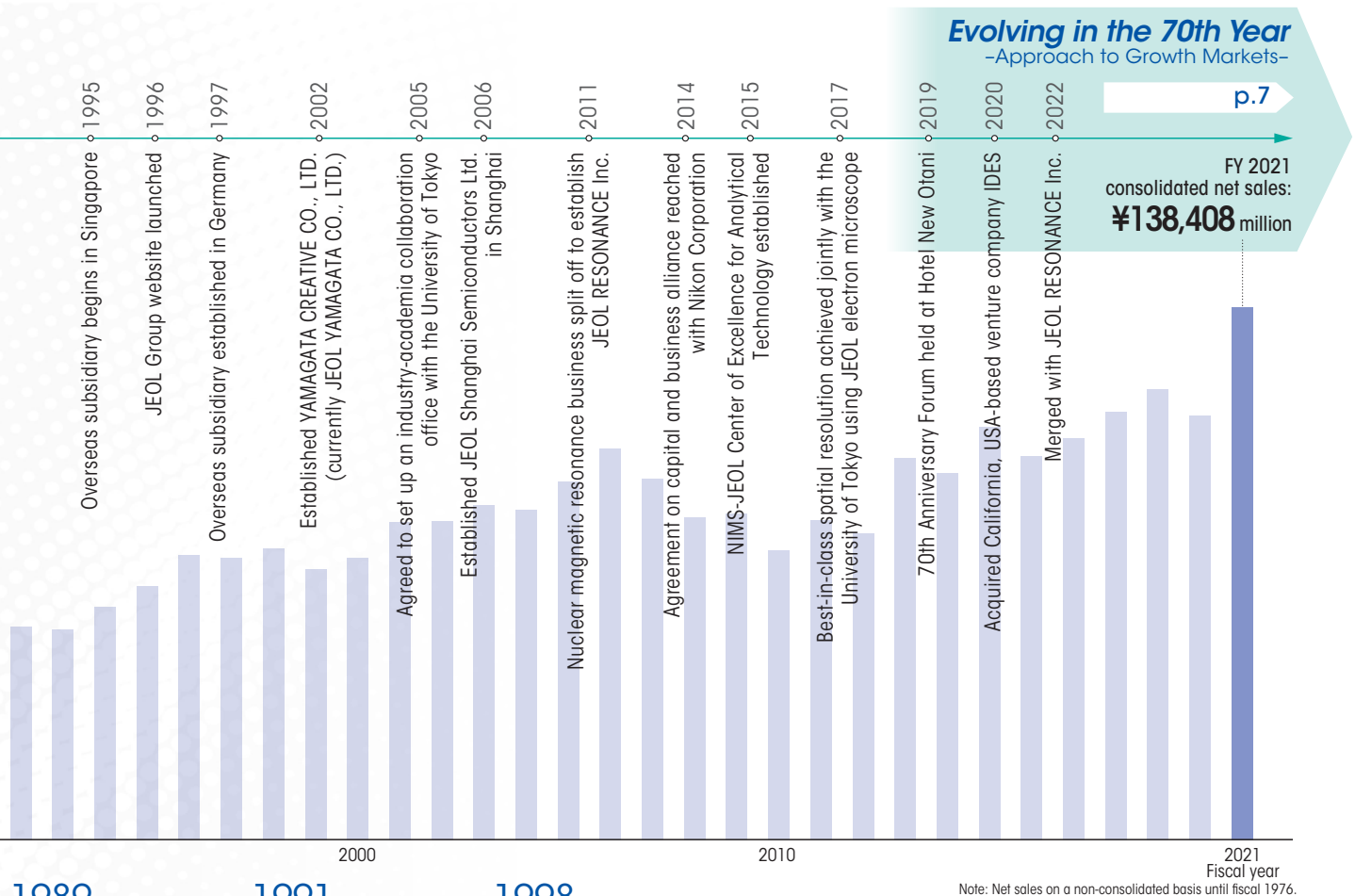


1956 JNM-1 nuclear magnetic resonance (NMR) system

The history of NMR goes back to 1944 with the discovery of this phenomenon, for which the scientists received the Nobel Prize in Physics. An overseas manufacturer released the first commercial NMR system in 1950, a time when this was considered a very special type of instrument for research. However, recognizing a highly niche market with few entrants, JEOL began work on NMR development as a new business. In 1956, JEOL launched the JNM-1, the first domestically produced NMR system.

NMR systems analyze molecular structures and physical properties, and today, they are essential in organic chemistry.

Since the release of the JNM-1, we have been working on improving NMR technology. As a result, we are now one of two major suppliers in the world in the high-end NMR market.



1989



Dr. Leo Esaki
(Physics, Japan)

1991



Sir Andrew Huxley
(Physiology or Medicine, UK)

1998



Dr. Heinrich Rohrer
(Physics, Switzerland)

2016 Dr. Ryoji Noyori
(Chemistry, Japan)

2018 Dr. Richard Henderson
(Chemistry, UK)

2020 Dr. Yoshinori Ohsumi
(Physiology or Medicine, Japan)

● Message from the Chairman

Becoming a top niche company supporting science and technology around the world

In the course of our history, corporate management has faced a number of challenges due to unforeseen socio-economic change. In FY 2008, we recorded a loss for the first time in many years following the once in a hundred years global recession triggered by the bankruptcy of Lehman Brothers. We were later impacted by the extreme appreciation of the yen and the Great East Japan Earthquake, and recently by the COVID-19 pandemic. However, with the belief that facing hardship can lead to transformation, the JEOL Group has worked as a team to reform our management, resulting in records for net sales and all profit categories for fiscal 2021, ended March 31, 2022. I have nothing but deep gratitude for the support we have received from an enormous number of people over the years.

Propelled by this momentum, and with the aim of achieving further growth, we announced a new three-year medium-term management plan in fiscal 2022 called the Evolving Growth Plan. Supporting this plan is YOKOGUSHI, our keyword that we have been using for 10 years meaning “promoting innovation through co-creation.” The plan also clearly establishes our business direction: “Becoming a top niche company supporting science and technology around the world.”

The plan adopts *Evolving in the 70th Year* as our vision, a theme that we have communicated within and outside the Company since 2019, our 70th

anniversary. We have also significantly increased our numerical targets compared with those in the previous medium-term management plans.

While specific strategies for competition and growth are necessary for achieving these targets, we will first focus on developing products that have high barriers for competitors to entry using propriety technologies. JEOL already possesses equipment that our competitors cannot match due to extremely high barriers to entry, such as multi-beam mask writers for semiconductor devices and clinical chemistry analyzers in the medical equipment field. We will accelerate the development of these types of equipment, grow our service operations, and increase our profitability through continuing business improvements that keep the wheels turning.

Every company has its own unique history and culture. JEOL started developing electron microscopes with the noble goal of contributing to Japan’s reconstruction through scientific technology in the period shortly after the end of World War II. I believe that we are the company we are today because we have firmly upheld these values. Under Japan’s current policy of becoming a “science and technology nation,” I believe our significance and duty as a company will keep growing.

We look forward to your continued support as we strive to further expand our business.



Gon-emon Kurihara
Chairman

● Toward New “Creativity” and “Research and Development”

The biggest goal of value creation at JEOL is to contribute to scientific progress and societal development, starting from the founding principles of “Creativity” and “Research and Development.” Now, 73 years after our founding, we continue to maintain that founding spirit and put every effort into improving corporate value every day to provide optimal solutions that support our customers’ innovations.

In recent years, science and technology have progressed rapidly, and the roles required of companies are becoming increasingly diverse. We have two strategies that provide a firm base as we take up the challenge of value creation, even as society changes.

In this section, we provide information on our *Evolving in the 70th Year* vision and our YOKOGUSHI (cross-sectional collaboration) strategy.

Vision

Evolving in the 70th Year

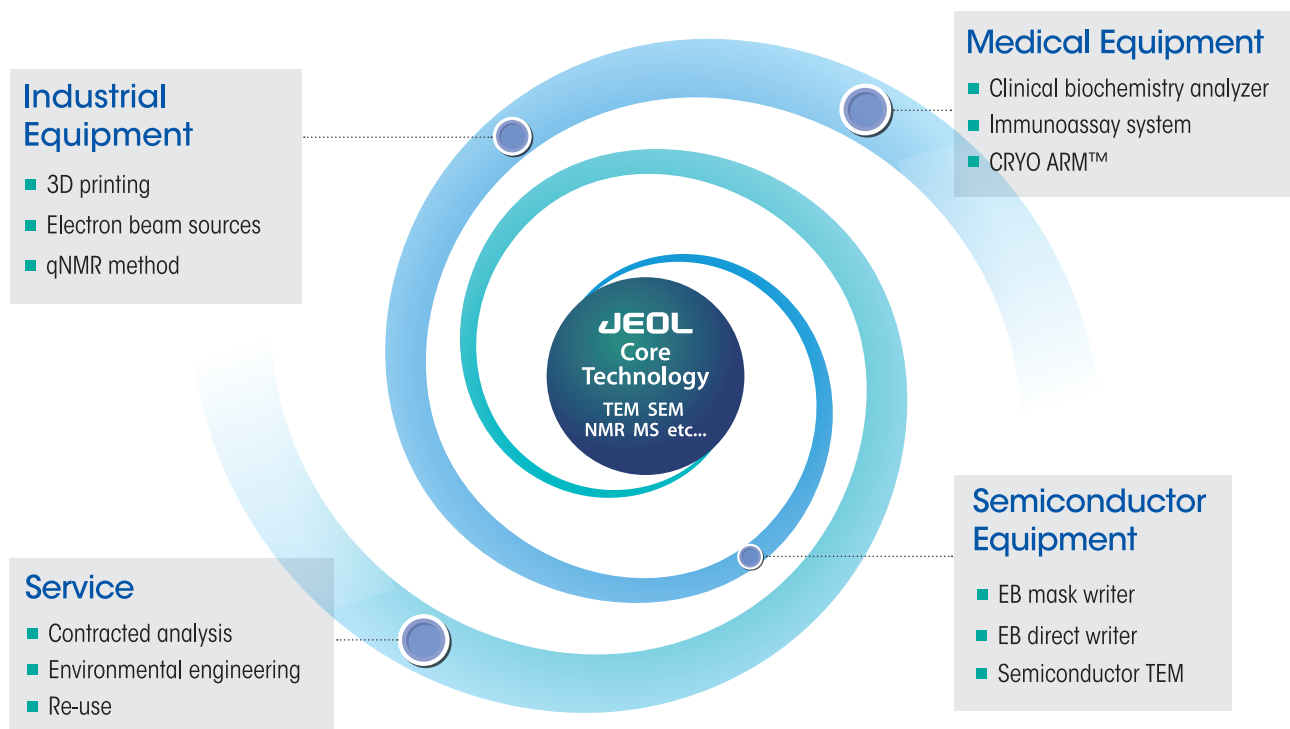
In 2019, the year we celebrated our 70th anniversary, we announced *Evolving in the 70th Year* as our new growth vision. The main initiatives are improving our core technologies, proactively entering growth markets, and providing total solutions.

The illustration below shows business creation by proactively entering growth markets.

This illustration expresses our approach toward markets expected to grow based on our strengths by starting with the core technologies—built up in the scientific and metrology instruments segment, including electron microscopes and nuclear magnetic resonance systems—and spiraling out from there.

Under our medium-term management plan, Evolving Growth Plan, equipment for semiconductors, industry, and medicine have been defined as our growth markets, and we aim to further improve corporate value by introducing new products and solutions into these markets.

In this way, JEOL will continue to move into new business domains.





Model of Behavior

YOKOGUSHI

The YOKOGUSHI strategy is our unique model of behavior for providing solutions in cutting-edge technological fields.

To create products and services that do not currently exist requires new ideas and connections that go beyond conventional boundaries—not just existing methods.

As a leading manufacturer of scientific and metrology instruments, we have provided equipment in a range of fields to meet complex market needs. Because of that, we possess a broad product lineup that you will not find anywhere else. Combining each of these products across categories in an organic way allows us to develop next-generation solutions and applications no one has ever seen before.

The model of behavior for creating these innovations is set out in our YOKOGUSHI strategy.

Having collaborated up to now with companies, organizations, and research institutes (both public and private), we have established a foundation for open innovation. YOKOGUSHI produces strong cross-sectional ties not just within our Company but with outside parties, making it possible to create new value not previously possessed by either party. We already have a track record in several product fields that includes favorable reception by the market for the unique systems we have developed in collaboration with other companies.

Through YOKOGUSHI, we will promote innovations that lead to the future so that we create solutions that completely satisfy our customers.

YOKOGUSHI Initiatives

1. The University of Tokyo-JEOL University-Corporate Collaboration Office

In June 2005, the University-Corporate Collaboration Office was established by the School of Engineering at the University of Tokyo and JEOL Ltd. The aims of the new office are to promote and provide education, both in Japan and overseas, on advanced technology related to characterization and metrology, particularly using an electron microscope. The School of Engineering at the University of Tokyo has a long history of gathering research results and know-how in education and research based on state-of-the-art microscopes and technologies. JEOL has highly advanced applied electron microscope technology and professional support. By combining these specialties, we intend to create a new type of academic and corporate collaboration, focusing particularly on nanotechnology, interdisciplinary research and education, and the promotion of scientific technology. As well, we will encourage activities that contribute to society, locally and globally.

2. Osaka University-JEOL YOKOGUSHI Research Alliance Laboratories

This collaborative research institute was jointly established by Osaka University and JEOL Ltd., in April 2018, by integrating the Endowed Research Division of Multi-scale Structural Biology (JEOL), located in the Institute for Protein Research of Osaka University, and the Mass Spectrometry Open Innovation Joint Research Seminar of Osaka University's Graduate School of Science. The institute is intended to be a center for innovation in pioneering the next generation of life science research. The goals of the institute are to drive innovation and improved performance in cryo-electron microscopes, nuclear magnetic resonance spectrometers, and mass spectrometers, as well as to establish easy-to-use, advanced, and fast measurement and analysis methods. This collaborative research institute will enable us to develop globally competitive scientific measuring instruments and related research and development by uniting Osaka University's superior fundamental research with the technological development competencies of JEOL Ltd.

3. JEOL-Nikon CLEM Solution Center

In September 2017, Nikon Corporation and JEOL co-founded the JEOL-Nikon CLEM Solution Center within the JEOL headquarters. Correlative light and electron microscopy (CLEM) is an observation and analysis method that links information obtained by optical microscopes as well as electron microscopes and harnesses the advantages of both instruments. By combining Nikon's optical microscope technology with JEOL's electron microscope technology, CLEM will provide innovative solutions.

4. Joint Development with Rigaku Corporation

In 2020, we entered into a joint development agreement with Rigaku Corporation, a leading company producing X-ray analysis instruments based in Akishima, Tokyo. Under this agreement, we have jointly developed and launched the sales of Synergy-ED, a micro electron diffraction (Micro ED) platform. By combining Rigaku Corporation's structural analysis technology and equipment, such as their high-sensitivity detectors, with our transmission electron microscopes, we will unite the core technologies of both companies and provide new solutions for single crystal structure analysis using electron diffraction.



We intend to expand the scale of our business and achieve even higher profitability by implementing our new medium-term management plan.



Izumi Oi
President & CEO

Message from the newly appointed CEO

Following my appointment as President & COO in 2019, I spent three years working hard to achieve the targets of our previous medium-term management plan, Triangle Plan 2022. I then took over the position of CEO from Chairman Kurihara on June 28, 2022. Since our founding, JEOL has firmly upheld the company philosophy of contributing to progress in both science and society. Going forward, we will make every effort to further improve our corporate value, with the aim of being a top niche company supporting science and technology around the world.

In FY 2021, not only did the COVID-19 pandemic continue to run rampant due to the emergence of the Omicron variant, it had a huge impact on society, our everyday lives, and our way of working. In addition, component shortages due to the tight supply dealt a direct blow to the manufacturing industry. While many plants were forced to suspend operations due to lockdowns, demand for semiconductor-related components increased sharply compared with the previous fiscal year as a result of growing stay-at-home consumption due to the pandemic, the spread of 5G, and rapidly increasing demand for electric vehicles. At the same time, Russia's invasion of Ukraine shocked the world, resulting in tragic news stories every day. While the conflict's impact on economies and societies across the globe is immeasurable, we can only pray that the people of Ukraine can return to peace and stability as soon as possible.

Amid this radically changing environment, I believe we have succeeded in operating our businesses without setbacks due to the rapid response of our employees, as well as their innovations, spirit of reform, and passion for their work. I want to express my deepest gratitude to all of our Group's employees who continue to go all-out in their work, as well as their family members who support them, despite being in a tense environment.

Achieving the numerical targets of the medium-term management plan with record-breaking net sales and profit

In FY 2021, we achieved record-breaking financial results, including consolidated net sales and consolidated operating income of ¥138.4 billion and ¥14.1 billion, respectively, as well as consolidated ordinary profit of ¥16.3 billion, net income attributable to owners of the parent of ¥12.3 billion, and a return on equity (ROE) of 17.9%. We achieved all the numerical targets of our previous medium-term management plan, Triangle Plan 2022: consolidated net sales of ¥134 billion, consolidated operating income of ¥10 billion, and an ROE of at least 10%. Buoyed by a strong semiconductor market, demand for electron beam lithography systems continued to grow. This enabled our industrial equipment segment to significantly increase sales and profits for the second consecutive year, driving our strong results. Further, the scientific and metrology instruments segment, where sales and profits fell in FY 2020 due to the impact of COVID-19, saw a significant turnaround due to active investment by many countries to strengthen their research infrastructure as well as a recovery in investments in R&D by private companies. Medical equipment also had a strong performance, with all three sections recording an increase in sales and profits. I would like to thank all of our stakeholders for their support and cooperation, which has undeniably enabled us to achieve these record-breaking results.

In August 2021, we announced a public offering and generated over ¥20 billion in capital. We are using these funds to invest in the development of our business in line with our growth vision, *Evolving in the 70th Year*. In October 2021, we began operations at our new plant at Musashimurayama City. This has allowed us to more than double our capacity to manufacture multi-beam mask writer systems, the main platform within electron beam lithography systems where we expect significant growth in demand. To harness this strong demand in electron beam lithography systems, we will continue to boost our manufacturing capacity at the new plant.

Our consolidated backlog of orders as of March 31, 2022, came in at ¥93.6 billion, which was also well above the previous record. A key point in carrying out

our business this fiscal year is how to tie strong orders to sales while minimizing the impact of component shortages.

Launching the Evolving Growth Plan with the aim of further improving corporate value

We launched our new medium-term management plan, Evolving Growth Plan, in FY 2022. Based on our growth vision, *Evolving in the 70th Year*, the plan aims to develop the scale of our business and raise profitability by improving on and developing our YOKOGUSHI strategy (promoting innovation through co-creation) that we have been striving to implement. The numerical targets of the plan for FY 2024 include consolidated net sales of ¥170 billion and consolidated operating profit of ¥24 billion, while we continue to aim for an ROE of at least 10%. These targets for sales and profits represent a significant jump from our past results. The name of the plan communicates the idea of both our company and our employees evolving and developing.

Implementing a strategy in line with our vision while continuing to maintain our unchanging company philosophy

Since the beginning, JEOL has continued to carry on the honorable company philosophy of “contributing to the progress of both science and human society.” While firmly maintaining this as our DNA, we believe that it is our mission to provide value as a member of society. Well before the formulation of the Sustainable Development Goals (SDGs), we supported and developed, as a core business, products that contribute to the creation of a sustainable society. Whenever I have the opportunity to talk to the people who use our equipment, I get the feeling that JEOL is a company that is directly working to achieve the SDGs. It is not an exaggeration to say that the purpose of our existence is to “contribute to the progress of both science and society.”

For our continued growth as this type of company, we established our medium- to long-term vision, *Evolving in the 70th Year*. We have communicated *Evolving in the 70th Year* since 2018 to commemorate

our 70th anniversary. Under this vision, we will strengthen the technology and business relationships for our core scientific and metrology instruments segment that have been cultivated over many years in the academic research market. At the same time, we will apply these assets to considerably larger markets, such as those for semiconductors, medical and industrial equipment, and service industries, with the overall goal of further expanding our business scale and increasing profitability. *Evolving in the 70th Year* will guide us as we continue to steadily and quickly implement business initiatives.

Catching the tailwind of investment in cutting-edge technologies to achieve dramatically rapid growth

JEOL now has the opportunity to achieve dramatically rapid growth. Demand in the semiconductor industry remains strong, and while there may be some fluctuations, the market is set to continue to grow over the medium to long term. Investment in next-generation batteries is also increasing significantly due to the acceleration of the shift to electric vehicles (EVs). In addition, on top of the emergence of COVID-19, investment in drug discovery R&D and the unending pursuit of health will only increase. With the importance of semiconductors and risks in the supply chain, many countries are competing to strengthen the

development of their infrastructures. Further, Fumio Kishida, the Prime Minister of Japan, has outlined “the realization of a science and technology nation” as the first of “the four pillars of a new form of capitalism.” He made this statement in his general policy speech during his inauguration, so there can be little doubt that more nations will encourage strengthening scientific technology. JEOL has the potential for remarkable growth as a provider of manufacturing equipment for semiconductors; the YOKOGUSHI analysis solutions required for next-generation batteries; equipment essential for drug discovery R&D, such as cryo electron microscopes and nuclear magnetic resonance systems; as well as the technology and solutions required for cutting-edge research and manufacturing. By steadily implementing the initiatives in the Evolving Growth Plan, I believe we can take full advantage of this opportunity to achieve dramatically rapid growth.

Becoming a top niche company supporting science and technology around the world

The image of clouds on page 13 of this integrated report expresses the meaning and the role of our new medium-term management plan, Evolving Growth Plan, as well as our *Evolving in the 70th Year* vision, our company philosophy, and our YOKOGUSHI strategy

that supports these initiatives. Since being founded in 1949, JEOL has been a company that contributes to scientific technology. To continue to fulfill the purpose set out in our company philosophy—contributing to the progress of both science and society—we will realize our growth strategy based on our *Evolving in the 70th Year* vision and achieve the targets of the Evolving Growth Plan, our new medium-term management plan. If we can steadily implement these initiatives and increase our corporate value by following our basic policy, I am confident that the day will soon come when JEOL is widely recognized as a top niche company supporting science and technology around the world.

To our stakeholders

Our basic policy for profit distribution is to maintain consistent dividends from a long-term perspective based on our business initiatives to improve our financial standing and our corporate structure. For the fiscal year under review, in light of our business performance and financial condition, the year-end dividend was ¥36 per share. Added to the interim dividend, this brings the total annual dividend to ¥50 per share.

JEOL has been listed in the Prime Market under the new market classification system of the Tokyo Stock Exchange. The Prime Market is a category for companies with a market capitalization (liquidity) large enough to make them a suitable target for many institutional investors. Companies in this category must also maintain a high standard of governance, emphasize constructive dialogue with investors, and be committed to sustainable growth as well as improving their medium- to long-term corporate value. We will continue to further improve our corporate governance.

With FY 2022 representing the first year of the Evolving Growth Plan, our new medium-term management plan, the JEOL Group will work as one and go all-out to achieve the targets for the current fiscal year and this plan, working to further improve our corporate value. We look forward to your continued support throughout this year.



Evolving Growth Plan

(FY 2022–2024)

Expanding our business scale and increasing profitability

We will accelerate our the business scale expansion and achieve higher profitability by further implementing *Evolving in the 70th Year*, the basic vision of the previous medium-term management plan, Triangle Plan 2022.

Specifically, we will expand our YOKOGUSHI strategy and improve customer satisfaction by enhancing our R&D, manufacturing, and service strengths, which will in turn lead to a larger business scale and higher profitability. We will also look ahead of the new medium-term management plan, continuing to improve and grow our business by implementing the new strategies needed to realize sustained long-term growth.



Becoming a top niche company supporting science and technology around the world



The illustration above was created for the announcement of the Evolving Growth Plan.

It expresses the meaning and role of our new medium-term management plan called the Evolving Growth Plan, our *Evolving in the 70th Year* vision, our company philosophy, and our YOKOGUSHI strategy that supports all of these initiatives.

The illustration represents the Company's commitment to achieving the goals of the Evolving Growth Plan by maintaining our company philosophy and executing the vision of *Evolving in the 70th Year* with YOKOGUSHI, which has been transmitted for the past 10 years, as the background. In addition, it also clearly states the business direction of the JEOL Group: "Becoming a top niche company supporting science and technology around the world."

Basic Concept of the Evolving Growth Plan

1 The concept of the growth vision, *Evolving in the 70th Year*, remains unchanged

Accelerate business growth and achieve even higher profitability based on our unique technologies and networks of people that we have developed since our Company's founding.

2 Strengthen and develop the YOKOGUSHI strategy

Provide higher added value to our customers by further developing our YOKOGUSHI strategy not only for product development, but also through business development and more effective data use.

3 Approaches for higher profitability

Company-wide initiatives to build barriers to entry, improve profitability, and strengthen business support.

4 Achieve growth in three areas: customer value; employees and human resources; plus sales and profits.

Achieve well-balanced growth to expand the scale of our business operations.

5 Initiatives for the SDGs

Tackle materiality (important social issues) from two perspectives: business activities and the ESGs.

FY 2024
targets:

• Consolidated net sales **¥170.0 billion**

• Consolidated ordinary profit **¥24.0 billion**

• Consolidated operating income **¥24.0 billion**

• Ordinary profit margin **14.1 %**

• Operating margin **14.1 %**

Net income attributable to owners of the parent **¥17.5 billion**

FY 2013– ►YOKOGUSHI◄

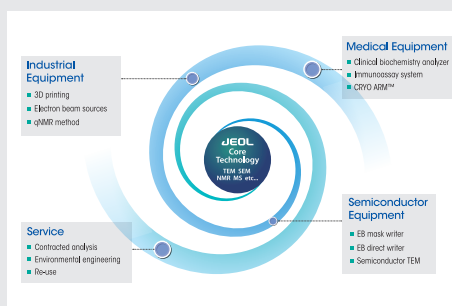
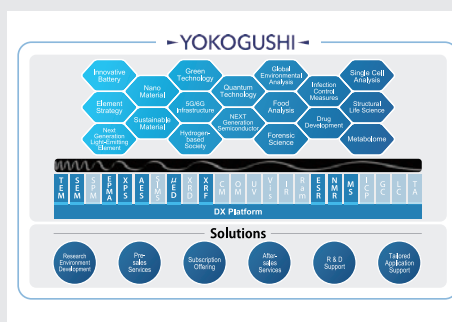
As a company with an extensive product lineup, we will combine our diverse and multifaceted instruments and technologies in an organic and cross-sectional way, implementing our YOKOGUSHI strategy to provide total solutions.

In addition, we will not only take the initiative internally, but will also promote joint R&D by collaborating with outside partners and institutions.

FY 2019– *Evolving in the 70th Year*

Guided on our core technologies developed in the academic market, we will enter large markets with growth potential, such as markets where we can capitalize on the strengths our semiconductor equipment and medical equipment.

We will continue to accelerate the growth of our business scale as set out in our *Evolving in the 70th Year* vision that we developed to mark our 70th anniversary.



Overview by Business Segment

Medical Equipment Segment

¥19.3 billion 13.9%

Industrial Equipment Segment

¥34.0 billion 24.6%

Scientific and Metrology Instruments Segment

¥85.1 billion 61.5%

FY 2021
net sales of
¥138.4
billion

Medical Equipment Segment

¥1.1 billion 5.8%*

Industrial Equipment Segment

¥13.1 billion 68.8%*

Scientific and Metrology Instruments Segment

¥4.8 billion 25.5%*

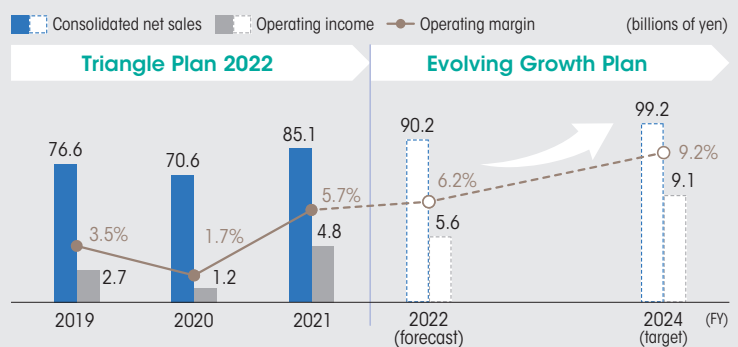
FY 2021
operating income of
¥14.1
billion

*Before Company-wide cost allocation (¥4.9 billion)



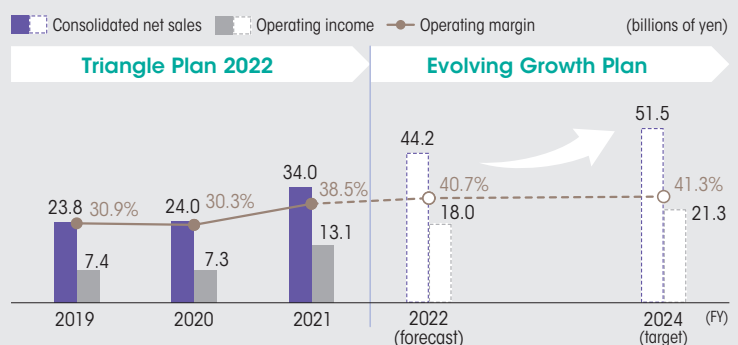
Scientific and Metrology Instruments Segment

Economic measures implemented by the governments of other countries have helped economies to recover and orders and sales are strong, supported by increased inquiries, primarily for electron microscopes.



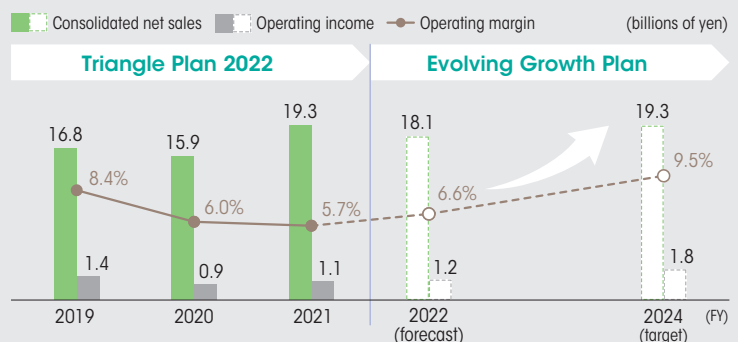
Industrial Equipment Segment

Despite the escalating COVID-19 pandemic, the semiconductor market has remained brisk, with strong orders and sales for electron beam lithography systems.



Medical Equipment Segment

Sales of immune assay systems to OEM partner FUJIREBIO Inc. have been robust, and there have been higher sales overseas for clinical chemistry analyzers.

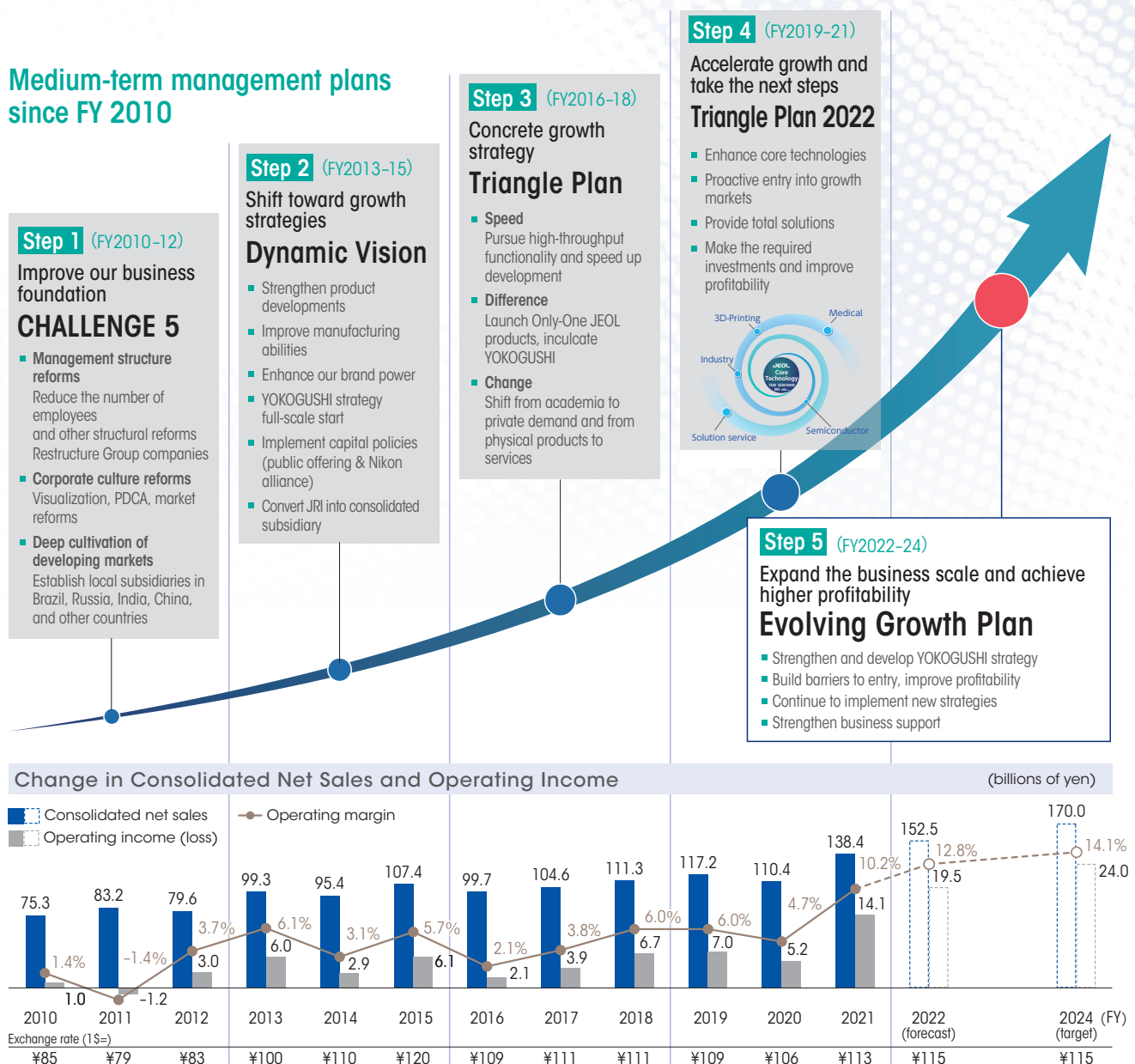


Reflection on the Medium-Term Management Plan

Previous medium-term management plan, Triangle Plan 2022 (FY 2019–2021)

In FY 2021, the final year of Triangle Plan 2022, we achieved all of our numerical targets: ¥134.0 billion in consolidated net sales, consolidated ordinary profit of ¥10.0 billion, and an ROE of at least 10%.

Medium-term management plans since FY 2010



Numerical Targets

FY 2021 results

FY 2022 forecast

:

FY 2024 target

Consolidated net sales

¥138.4 billion

Consolidated net sales

¥152.5 billion

Consolidated net sales

¥170.0 billion

Consolidated operating income

¥14.1 billion

Consolidated operating income

¥19.5 billion

Consolidated operating income

¥24.0 billion

Improving corporate value through capital management focused on efficiency and strengthening the earning power of our core businesses.

Katsumoto Yaguchi

Director and Executive Officer
in charge of Finance,
IT and Export Trade Control



Summary of the Fiscal Year Ended March 31, 2022

For our consolidated operating results for the fiscal year ended March 31, 2022, the scientific and metrology instruments segment recorded a significant increase in sales and profits due to a recovery in investments by various countries in R&D and the introduction of competitive new products. In the industrial equipment segment, orders and sales of electron beam lithography systems continued to rise amid strong demand for semiconductors, leading to growth in sales and profits and strongly driving up overall results. The medical equipment segment also saw increased sales and profits. As a result, the Company achieved consolidated net sales of ¥138.4 billion (up 25.3% year on year) and consolidated operating income of ¥14.1 billion (up 170.7%), while consolidated ordinary profit amounted to ¥16.3 billion (up 149.0%)—all significantly exceeded the operating forecast that was revised upward during the year.

The ratio of operating income to net sales was 10.2% (up 5.5 points year on year), while the return on equity (ROE) was 17.9% (up 10.1 points). The increase in ROE was due to high profitability in the industrial equipment segment and improved earning power in the scientific and metrology instruments segment. The scientific and metrology instruments segment is our “DNA business,” and improving the profitability of this segment is the core of the Group’s growth strategy. Although the cumulative capital investment in this segment is the largest, profitability is unstable and the business has matured. We intend to build “barriers to entry” to improve ROE by cutting costs, by developing proprietary technology through selective concentrated investment, and by retaining customers. Conversely, the industrial equipment segment is

in a growth phase and profitability remains high. We aim to grow our business by using our management resources aggressively. Although investment could reduce capital efficiency in the short term, we should emphasize the contribution of profits to the entire company.

We raised roughly ¥22.6 billion in capital through a public offering announced in August 2021 and a third-party allotment. As a result, shareholders’ equity increased and we repaid some interest-bearing debt. On a consolidated basis, the shareholders’ equity ratio as of March 31, 2022 was 45.3% (up 10.5 points year on year). With the increase in our share price, we believe that our recent drive to raise capital was carried out at the right time. In terms of our shareholder composition, there is a decreasing trend in the number of individual shareholders, while the percentage of overseas shareholders has surpassed 33%. There has also been changes in the composition of our major shareholders, and in light of recent shareholder trends, our capital allocation policy will be an important theme going forward.

Capital Allocation Policy and Plan for the Fiscal Year Ending March 31, 2023

The global economic environment surrounding our company is highly unpredictable. Russia’s invasion of Ukraine has not only caused a grave humanitarian crisis, it has also had a severe impact on economic growth throughout the world. While most countries were beginning to recover from the COVID-19 pandemic before the invasion, rapidly increasing primary commodity prices are now stunting global economic growth and inflationary pressures are growing. In addition,

there are concerns that the difficult business environment will continue due to factors such as a global shortage of semiconductor components and the overhaul of the global supply chain triggered by economic security issues. However, taking orders for the fiscal year ended March 31, 2022 as the leading indicator, consolidated orders received totaled ¥171.2 billion (up 39.6% year on year), while the consolidated backlog of orders came to ¥93.6 billion (up 53.9%); both were record-breaking achievements. The industrial equipment segment is maintaining strong performance levels this fiscal year, primarily in the semiconductor market. New products and those for a wider range of applications that we put into the market in recent fiscal years have stimulated demand in the scientific and metrology instruments segment, while demand is also increasing in the medical equipment segment among developed countries where COVID-19 has been contained. Based on these business circumstances, for the consolidated operating forecasts for the fiscal year ending March 31, 2023, we are planning for record financial results: net sales of ¥152.5 billion; operating income of ¥19.5 billion; ordinary profit of ¥18.8 billion; and ¥13.7 billion in net income attributable to owners of the parent.

For capital allocation, we will focus on unique investment opportunities, while considering, from a medium- to long-term perspective, the optimum balance between growth investments, improved shareholder returns, and maintaining a sound financial position. The amount of shareholder dividends also takes into account the dividend payout ratio, dividend yield, and dialogue with investors, as well as stable dividends. For the fiscal year ended March 31, 2022, the year-end dividend increased to ¥36 from the initial plan figure of ¥14 per share. Including the interim dividend, the total annual dividend came to ¥50 per share. For the fiscal year ending March 31, 2023, we plan to issue a dividend of ¥60 for the full year.

Financial Strategy Direction and the Evolving Growth Plan, our New Medium-Term Management Plan

The Group has formulated the Evolving Growth Plan, our new medium-term management plan that covers from FY 2022 to FY 2024. The Evolving Growth Plan aims to expand the scale of our business and increase our profitability through further advancing *Evolving in the 70th Year*, the fundamental vision behind Triangle Plan 2022, our previous medium-term management plan that was in place until the end of FY 2021. The numerical targets for FY 2024 include consolidated net sales of ¥170 billion, consolidated operating income of ¥24 billion, and consolidated ordinary profit ¥24 billion.

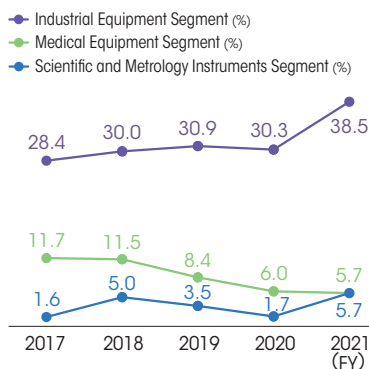
Generally, when using a business management style that focuses on economic indicators that track flow variables such as sales and profits, there is the inherent issue of low accountability to the capital market because less attention is focused on the balance sheet. As our working capital ratio and fixed asset ratios tend to be high due to the nature of our business, we aim to improve our financial condition by streamlining our balance sheet. We will achieve this streamlining by cutting the operating working capital turnover period (mainly by reducing inventories), disposing of non-business assets after reviewing their profitability, and carefully examining policies on cross shareholdings. In addition, to establish a framework for improving medium- to long-term capital efficiency, from this fiscal year we will determine the invested capital requirements of the entire Company and each business, and work to ensure the indicator of return on invested capital (ROIC) is adopted throughout the whole Company. We will also continue to target an ROE of 10% or more.

Going forward, we will strive to improve sustainable corporate value and meet the expectations of our stakeholders by improving capital efficiency and strengthening our financial position.

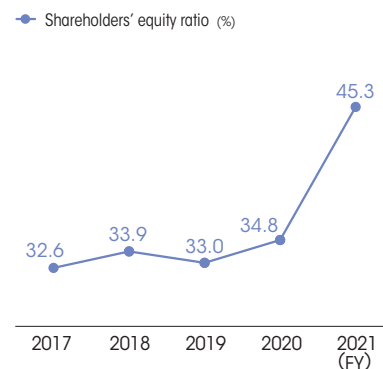
Operating margin / ROE



Operating margin by segment



Shareholders' equity ratio



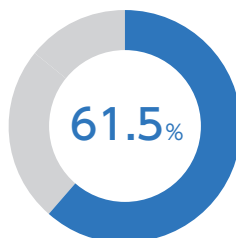
Overview by Business Segment

Scientific and Metrology Instruments

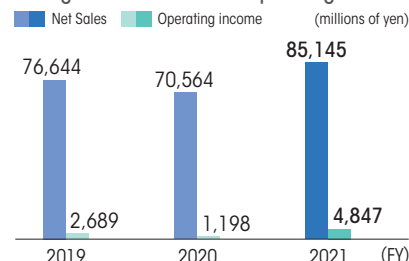


Overview of the Fiscal Year Ended March 31, 2022

Net Sales by Segment



Change of Net Sales and Operating Income



Main instruments

Electron optics instruments and metrology instruments

We are developing many instruments that apply electron beam, ion beam, X-ray, and other technologies, starting with electron microscopes.

We provide instruments that offer robust support for seeing and measuring in the nano world. These include transmission electron microscopes for seeing substances at the atomic level; electron probe microanalyzers that accurately detect elements contained in micro areas on the specimen surface; and multi-beam milling/imaging systems for milling and observation of samples at the nanometer level.

Our business fields are broad-ranging, from cutting-edge academic research to quality control in the manufacturing industry.



Analytical instruments

While electron optics instruments and metrology instruments approach substances from the outside, analytical instruments examine the nature of substances from the *inside*. Our main products in this category are nuclear magnetic resonance systems and mass spectrometers.

Nuclear magnetic resonance systems are another one of our core research instruments, as our electron microscopes were the first core research instruments. As these systems analyze the structure of substances from the inside, they are essential in the world of organic chemistry. Advanced technical capabilities are required for their development and manufacture, so there are only a few companies in the world that are currently offering such cutting-edge instruments.

Mass spectrometers tell you what a specific substance is made of and in what concentrations. One example is their use in quickly analyzing the presence of substances in food that are harmful to health, such as agrochemical residue, so they contribute to our health and safety.

Main customers Research institutes, educational institutions, manufacturing industry (chemistry, steel, machinery, food, nonferrous metal, electrical and electronic, etc.), public institutions, and analytical research companies
Main products Electron microscopes, electron probe micro analyzers, photoelectron spectrometers, Auger microprobes, multibeam systems, X-ray fluorescence spectrometers, nuclear magnetic resonance systems, electron spin resonance spectrometers, mass spectrometers, portable gas chromatographs, and electron diffractometers.

Business environment

Universities/ government agencies



Receiving inquiries due to the supplementary budget in FY 2022 (Japan)
Recovery in inquiries from Europe and the US
The Chinese market continues to be active, but COVID-19 is having an impact (Shanghai lockdown)
Movement to strengthen research infrastructure in each country

Private demand (semiconductors)



Strong inquiries for transmission electron microscopes, particularly from the Far East and China
Demand growing for electron microscopes (TEM, SEM, EPMA) with advances in refinement and complexity

Private demand (other industries)



Capital investment is active overall
Upward trend in investment for next-generation battery research and development
Effect of war in Ukraine on business has not become apparent as of today

Business description

With our roots in the development of electron microscopes, the scientific and metrology instruments segment has been nurtured and grown since our founding as a part of our DNA.

By developing the scientific and metrology instruments that are among the best-in-class in the world, we continue to support top scientists, including Nobel Prize winners, and others working at the frontiers of cutting-edge research.

Our products are used by universities and laboratories in more than 130 countries worldwide, and we provide top-class solutions in various fields, such as nanotechnology, biotechnology, and the life sciences.

As a business that contributes to progress in both science and society, we will continue working on making advances in our core technologies: measurement and analysis.

Topics

Mergers with subsidiaries strengthening the earning power of the scientific and metrology instruments segment

On October 1, 2022, we will merge with our wholly owned subsidiary JEOL RESONANCE Inc. (JRI). JRI develops and manufactures nuclear magnetic resonance systems (NMR) and electron spin resonance systems (ESR). We have decided to integrate JRI into our headquarters to promote the coordination of systems and provide greater added value to customers. This will strengthen the profitability of the scientific and metrology instruments segment.

JNM-ECZL600G
nuclear magnetic
resonance system



World's first success in directly observing an atomic magnetic field with a newly developed electron microscope

Under the Development of Advanced Measurement and Analysis Systems program of the Japan Science and Technology Agency (JST) and a joint-development team from the University of Tokyo and JEOL has succeeded in directly observing an atomic magnetic field, the origin of the electromagnetic force, for the first time in the world. This observation was made using the newly developed Magnetic-field-free Atomic-Resolution STEM (MARS). This measuring technique is expected to powerfully drive fundamental research on the magnetism of substances and advanced materials research as well as development in areas such as magnets, steel, semiconductor devices, and quantum technologies.



MARS

Aiming for further growth



Toyohiko Tazawa
Director
& Senior Executive Officer

From the observation of ever-smaller structures to playing a role as a place for co-creation

The focus of this business has been on perceiving ever-smaller structures. Our aim has been to contribute to R&D across academia and industry. In our industry, as is often said, you can't create what you can't measure (observe). The act of observing (measuring) in R&D settings is one of the basic acts for manufacturing.

Up to now, we have devoted ourselves to observations (measurement), but we also hope to play a major role as a place of co-creation for manufacturing to complement our exploratory approach that uses systematic investigative techniques. In other words, we will enable versatile and complementary analysis that increases analytical throughput by combining various methods, making possible multifaceted analyses (YOKOGUSHI strategy) based on single functions.

To create this "place for co-creation" in the post-COVID era, in addition to perfecting the individual functions of our equipment, it is important to increase convenience and flexibility to achieve effective throughput in work environments where higher information efficiency driven by digital transformation (DX) is required.

Our initiative called the Analytical Robot = Remote + AI (artificial intelligence) + DB (database), which we have worked on for some time, is at the source of current DX requirements. This initiative aims to develop our scientific and metrology instruments segment as a "place for co-creation" by promoting DX based on advances in analytic robots and the JEOL DATA Highway framework.

Industrial Equipment

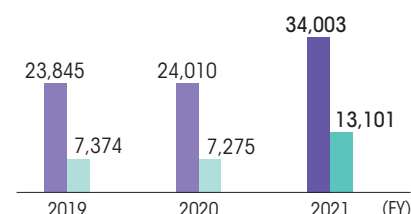
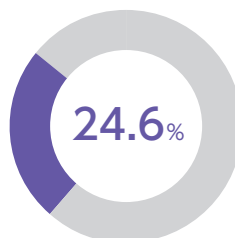


Overview of the Fiscal Year Ended March 31, 2022

Net Sales by Segment

Change of Net Sales and Operating Income

Net Sales Operating Income (millions of yen)



Main instruments

Electron beam lithography systems

Electronic devices such as computers, smartphones, and home appliances contain semiconductor components called large scale integrated (LSI) circuits. LSI circuits have extremely fine patterns made possible through progress in refinement and densification. The 5-nanometer fabrication process is used in cutting-edge devices and their patterns are 1/1,000th the diameter of a human hair or smaller.

Precise fabrication of ultrafine circuits like this requires electron beam lithography.

As demand for semiconductors grows further due to such factors as the development of an IoT society and the dawn of the 5G era, the role of electron beam lithography systems is expected to increase in importance.

Partnering with Austria-based IMS Nanofabrication GmbH (IMS), we are supplying multi-beam electron beam lithography systems with improved throughput ahead of the global competition.

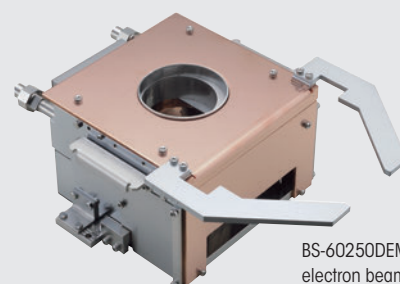


JBX-8100FS
electron beam
lithography system

Electron beam source for deposition

Electron beam deposition is a method of vaporizing metals or oxides in a vacuum using an electron beam to have them adhere to the surface of a lens, circuit board, or other component as a thin film. Our electron beam source is used to heat the material to cause it to evaporate. Because the power density of electron beams is high, they can vaporize various materials, including metals with high melting points.

When a thin film is deposited onto glasses or a camera lens, it creates an antireflective and infrared coating. Electron beam deposition is also used to form electrodes and wiring film for electronic parts, LEDs, and other products. Although you may not see it, electron beam sources for deposition play an active role as a technology that supports everyday life behind the scenes.



BS-60250DEM
electron beam
source for
deposition

Main customers Manufacturing industry (semiconductors, optical devices, electric machinery, electronic parts, chemistry, etc.) and research institutes

Main Products Electron beam lithography systems, high-power electron beam sources and power supplies, electron beam sources and power supplies for deposition, RF power supplies for plasma generation, built-in plasma sources and power supplies, RF induction thermal plasma systems, and electron beam metal 3D printers

Business environment

Lithography systems market



Demand for multi-beam mask writer systems is increasing with the spread of 5G and the expansion of extreme ultraviolet (EUV) lithography
Production-related market for spot beam lithography systems, such as distributed feedback lasers (DFB), is also growing

Electron beam source market



Significant increase in inquiries for deflection electron beam sources

Business description

In 1952, three years after our founding, we entered the industrial equipment field, starting with an induction hardening system that applied the knowledge we had acquired from the development of electron microscopes. Today, having now developed expertise in electron beam control and RF power supplies—cultivated as core technologies in the scientific and metrology instruments segment—we can now supply the industrial equipment that is essential for fabricating semiconductors, electronic devices, and optical components, such as electron beam lithography systems, electron beam sources for deposition, and RF induction thermal plasma systems.

One of our initiatives to enter a new business segment is R&D for metal 3D printers that apply our electron beam technology. We began sales for these printers in March 2021. We expect them to be used in fields that require high levels of precision, such as aerospace, medicine, and automobiles.

Topics

First shipment of the first model of our multi-beam mask writer platform produced at the new plant

In March 2020, we announced that a new plant had been acquired to boost our production capacity for products such as electron beam lithography systems, which have seen increasing demand. In October 2021, we began operations at our new plant at Musashimurayama City and have moved steadily with the development of our production system. In May 2022, we made the first shipment of the first model of our multi-beam mask writer platform produced at the new plant.



Musashimurayama Factory

Electron beam metal 3D printer receives the 64th Best 10 New Products Award

Launched in March 2021, our first electron beam metal 3D printer (JAM-5200EBM) was awarded the 64th Best 10 New Products Award, which is sponsored by *Nikkan Kogyo Shimbun* (The Daily Industrial News). JAM-5200EBM symbolizes Japan's production capabilities and was commended as a highly competitive and outstanding product that leads the global market.



Photo: courtesy of Nikkan Kogyo Shimbun

Aiming for further growth



Tadashi Komagata
Senior Executive Officer

JEOL industrial equipment supports the production of semiconductors and electronic devices

In the industrial equipment segment—based on applied electron beam technology developed with electron microscopes at the core—we develop, manufacture, and sell electron beam lithography systems used in the fabrication of semiconductor chips, the electron beam deposition equipment necessary for coatings on optical components, as well as related components.

Incredible volumes of electronic devices are needed to meet the rapid advancement in digital technology in recent years. Our products are used in the production processes for these devices, and we will continue to speedily develop and provide equipment that fulfills the requirements of each generation.

Multi-beam mask writers (multi-beam electron beam lithography systems) are essential for fabricating the photo masks used in extreme ultraviolet (EUV) lithography. Having jointly developed this equipment with Austria-based IMS and putting them into the market, they are now being introduced at advanced plants of the world's leading semiconductor manufacturers, contributing to the mass production of cutting-edge devices.

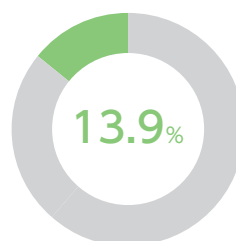
Our electron beam metal 3D printer has also at last entered the mass production machinery market. We expect to bring about a revolution in the production of essential components that demand strength and reliability. Through this printer, we are supporting the creation of groundbreaking products not only for aerospace, but for a wide range of industrial fields.

Medical Equipment

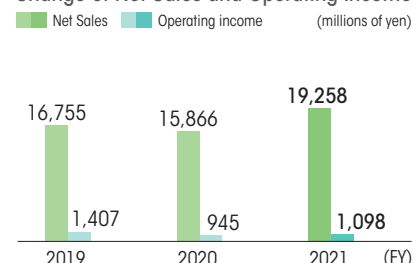


Overview of the Fiscal Year Ended March 31, 2022

Net Sales by Segment



Change of Net Sales and Operating Income



Main instruments

Clinical chemistry analyzers

Measuring sugar, cholesterol, protein, and other components in blood, urine, or other fluid samples is useful for discovering diseases and managing health. In recent years, services have been made available for individuals where blood samples are taken at home and mailed to a lab for results. The evolution of clinical chemistry analyzers has greatly contributed to blood testing becoming a familiar routine.

Our BioMajesty™ series of clinical chemistry analyzers has been delivered to small and medium-sized hospitals, testing centers (private companies specializing in analysis), and large hospitals, such as university hospitals. Using a proprietary method for diluting samples, we now minimize sample volume and reduce the amount of reagents required. This alleviates the physical stress placed on patients and contributes to lowering running costs for medical institutions.

Through ultra-micro volume measuring and ultra-high-speed processing technology, the BioMajesty™ series supports medical progress.

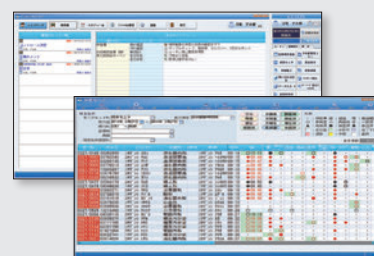


JCA-BM6070G
Clinical Biochemistry
Analyzer BioMajesty™

Laboratory information systems

This information solution helps increase efficiency and introduces IT to the frontlines of medicine by linking and managing all the data involved in clinical chemistry analyzer operations. The centralized management of everything from receiving samples to testing and reporting by the system allows for fast and accurate processing.

All the data from testing, including when the test was performed, who made the request, which device was used for registration, and who approved it, is stored by item, ensuring traceability in clinical testing.



JCS-60L CLALIST™ Laboratory Information System

Main customers Hospitals, clinical testing centers, and reagent manufacturers

Main products Clinical chemistry analyzers and laboratory information systems

Business environment

Japanese market ○ Demand for clinical biochemistry analyzers is recovering

Overseas market ○ Orders and sales for Siemens recovered
Orders and sales in China increased

Business description

In 1972, we released the first clinical chemistry analyzer by applying the measurement technology we acquired during the development of analysis and inspection systems for the medical field. This series was called Clinalyzer, and by expanding the lineup and developing products matching requirements, these analyzers became more common, and we contributed to medical progress and helped maintain people's health.

In 1996, this was replaced by the BioMajesty™ series featuring an enhanced analysis method, better economic efficiency, and improved processing. This series remains available today.

As part of our YOKOGUSHI strategy, we partnered with FUJIREBIO Inc. to link our system with theirs, providing integrated immunological and biochemical testing. In this and other ways, we address increasingly diverse clinical testing requirements.

Topics

Accelerating business expansion in the European medical equipment market

Further growth in healthcare is expected from the European medical equipment market, against the backdrop in Europe of high standards for medical care and a mature market. Growth is also expected in other regions, given the development of a medical infrastructure in tandem with economic growth and growing populations in regions such as the Middle East, Eastern Europe and Russia. To strengthen our sales and services in these regions, we have established a new showroom and warehouse for our Belgium subsidiary JEOL (EUROPE) B.V. Three new models have been installed in the showroom, and in addition to giving demonstrations of our equipment, we are providing fast, effective training for our distributors, with the aim of promoting sales. We are also reducing delivery times for products through new warehousing and logistics strengths, hoping to further boost customer satisfaction.



Showroom of JEOL (EUROPE) B.V. (Zaventem, Belgium)

Aiming for further growth



Kiyotaka Fujino
Executive Officer

Aiming for medical care that is always there for people by providing solutions that protect people's health

While COVID-19 infections have recently increased, socio-economic activity is returning to normal. We place much importance on how to protect the health of people not only in ordinary times but also in emergency situations. For this reason, we are striving to further improve the Good health and well-being, of people, which is the third of the UN's SDGs (Sustainable Development Goals).

Currently, in addition to the health risks for individuals, medical institutions that provide healthcare also face risks that they cannot always control. For economic, social, or any other risks, we must provide accurate testing information to medical professionals in every situation. While it is important to provide solutions that enable an accurate diagnosis, it is also vital to deliver speed and reliable results. We will employ IoT and digital transformation (DX) to swiftly provide findings and analyze quantities of test data that would be

difficult to process manually. As automation tends to diminish communication with medical professionals, we are proactively providing information and conducting seminars for them.

Over the last two years, we have reaffirmed the importance of having medical treatment that is always there for people.

The support framework of the system provider is crucial. By providing support not just in Japan, but on a global scale, we intend to fully achieve the SDGs goal of Good health and well-being.

New Services

Promoting the wider use of technology in society



Online

The number of companies and organizations encouraging employees to work from home is increasing in response to the COVID-19 pandemic. Currently face-to-face sales and interactions at exhibitions and other events are difficult, so there is demand for solutions that make full use of the Internet. To prevent customer research and analytical operations from falling behind, we are expanding our online support and working to maintain customer relations via the Internet.

1 Online demonstrations

We introduce systems and provide operating instructions over the Internet to customers considering their adoption. These are Web conference-based sessions that allow two-way discussions without needing to visit our company.

2 Online exhibitions

Many exhibitions and academic conferences have been canceled or postponed to prevent the spread of COVID-19. We publish the panel discussions, catalogs, technical material, and more that we had planned for these events on our website, where they can be viewed from anywhere at any time. We are also working on publishing videos of the seminars and lectures that were planned so that they can be watched online.

3 Webinars

We provide live streams of seminars (webinars) where we provide information useful for research and analysis, including operating our equipment, analytical know-how, and information on the latest technologies and products. After the webinars, we focus on follow-up with participants, including online question and answer sessions. We are also putting together an archive of recordings from past seminars.

4 Web content

We are working to improve our online educational content to give back to society by sharing the knowledge and technology we have cultivated and to promote learning even when it is difficult to leave home. This includes publishing *JEOL NEWS*, which summarizes the latest research results, glossaries explaining academic and technical terminology related to scientific and metrology instruments, and on our website we publish *Introduction to JEOL Products*, easy-to-understand explanations of the principles and application of our products for beginners.

Sharing

Moving from ownership to use of analytical instruments. Through our sharing service, we promote the use of high-end equipment.

As science progresses, demand is on the rise for using the high-end scientific and metrology instruments required for cutting-edge research, including nanotechnology and material analysis. On the other hand, there are many challenges when it comes to universities, companies, and public research institutes purchasing and maintaining high-end equipment on their own with limited budgets.

In response, we launched a metered rate sharing service in 2018 that allows use of our equipment on an as-needed basis, reducing the burdens of initial investment and running costs. By providing the best analysis via sharing to customers that had previously given up on adopting high-end equipment due to budget constraints, we are capturing demand and continually strengthening relationships with customers. With various plans, contracts are flexible, including remote operation plans offered over the Internet so that customers do not need to come to our facilities, and concierge services are provided by our expert staff.

Contract Services

We provide the experience and results we have cultivated over our more than 70 years through a contract analysis service.

We address varied needs with the latest equipment and analytical know-how, as only a manufacturer can.

① Contract analysis

We measure, observe, and analyze samples provided by customers. Our comprehensive support of customer research includes everything from recommendations on methods of analysis to advice on the results of analyses.

② Observed analysis

Our customers can come to us and consult with expert operators onsite as they conduct analyses according to their requirements. Customers can specify where to observe and what conditions to use for analysis on the spot while checking the status.

③ Online remote analysis

Customers can connect with expert operators via the Internet. Conditions for observation and analysis can be specified while checking the status in real time via video without visiting our facilities. The data obtained is delivered quickly and safely via online storage.

④ Sample preparation

Preparation of high-quality samples is essential for obtaining good analytical data. Our experienced staff use the latest equipment to prepare samples on behalf of the customer according to their requirements.

⑤ Customized lectures/sample preparation lectures

We offer lectures according to customer requests as well as person-to-person lectures on sample preparation.



Accreditation of Partnership on Research Assistance Service
文部科学省認定 研究支援サービス
Accreditation of Partnership
on Research Assistance Service
(A-PRAS) logo

Equipment available via sharing service



JAMP-9510F
field emission Auger microprobe



JNM-ECZ400R/JNM-ECZ800R
nuclear magnetic
resonance systems



JEM-ARM200F
NEOARMeX atomic resolution
analytical electron microscope

Through our sharing service, we will build a new business model by proposing value in keeping with the current trend in a shift from products to services and addressing diverse needs on the front lines of research.

Since fiscal year 2019, our sharing service was awarded with the Accreditation of Partnership on Research Assistance Service certificate by the Ministry of Education, Culture, Sports, Science and Technology.

● Initiatives for the SDGs

Contributing to the Achievement of the SDGs through Business Development that Leverages JEOL's Advantages

In Triangle Plan 2022, our medium-term management plan that we launched in FY 2019, we declared that we would contribute to the achievement of the SDGs as an entire Group, and we highlighted the SDGs that we would prioritize in our activities.

Further, in our 2020 *Integrated Report* we identified our priority social issues (materiality) and clearly stated the initiatives that we would continually use to help

resolve these challenges. We also added and arranged priority SDGs that we will work on.

We will contribute to the realization of a better, more sustainable world, as set out in the SDGs, by tackling material issues in both our business and ESG activities and by expanding our unique business operations that embody the spirit of JEOL.

Process for Identifying Materiality

STEP 1

Identify those material issues that can be resolved through our business activities

Review our lineup of products that contribute to the advancement of science and medicine and then identify issues that can be resolved, while simultaneously supporting business development.

STEP 2

Identify material issues that can be resolved through our ESG initiatives

Identify issues that could be resolved through our unique business activities that focus on the environment, society, and corporate governance.

STEP 3

External communication and gathering information on materiality

We set up key initiatives for every material issue and the targets for SDGs, while communicating information externally, beginning with publishing information in integrated reports.

SDGs

The Sustainable Development Goals (SDGs) refer to global objectives to create a better, more sustainable world by 2030. They were adopted at the United Nations Summit in September 2015 and are included in the 2030 Agenda for Sustainable Development.

The SDGs consist of 17 goals and 169 targets. These goals and targets deal with issues in such areas as the economy, industry, and society. Corporations, which lead economic activities, are expected to play an important role as one of the actors responsible for achieving the SDGs.



	Material Issues	Key Initiatives	Targeted SDGs
SDGs being addressed through business	Provide products that contribute to people's health, safety, and security	<ul style="list-style-type: none"> • Provide medical equipment indispensable for the diagnosis and prevention of illness • Provide equipment with high sensitivity and accuracy that can analyze substances harmful to the human body • Provide manufacturing equipment that contributes to the further development of sensing technology 	 
	Contribute to scientific progress and the sustainable development of society	<ul style="list-style-type: none"> • Develop world-class scientific instruments supporting advancements in science • Contribute to higher performance semiconductors supporting the communication infrastructure • Create advanced technology by promoting partnerships 	 
	Contribute to the conservation and sustainability of the global environment	<ul style="list-style-type: none"> • Provide measuring equipment indispensable for the R&D of green devices • Manage chemicals throughout the supply chain by using green purchasing • Develop equipment that reduces CO₂ emissions by conserving energy 	  
SDGs being addressed through ESG initiatives	Conduct distinctive activities that contribute to the community and society	<ul style="list-style-type: none"> • Provide science education support (lessons) using electron microscopes at elementary and junior high schools • Support academic promotions and the fostering of young researchers by donating to public interest incorporated foundations • Promote open innovation in collaboration with domestic and overseas research institutes and universities 	 
	Contribute to the conservation and sustainability of the global environment	<ul style="list-style-type: none"> • Streamline electricity use by introducing energy-saving equipment and other initiatives • Reduce CO₂ emissions at business locations throughout the Group • Thoroughly separate, reduce, and recycle waste • Deploy the Don't Litter campaign, a cleanup drive for beautifying the surroundings 	  
	Develop human resources and respect human rights	<ul style="list-style-type: none"> • Promote the creation of a workplace where women can more easily develop their careers • Enhance systems to help bring balance to work and family in line with every person's stage in life • Improve the awards program for employees making exceptional achievements 	 



Implementing Unique Educational Support Programs

We are conducting science classes for elementary and junior high schools as part of our unique approach for contributing to local communities and society. We are visiting schools to give lessons on using portable electron microscopes; children operate the microscopes themselves to observe plants and insects. By allowing students to experience the microworld, normally invisible to the human eye, the classes encourage curiosity and the enjoyment of learning. This year is the eleventh time (every year since 2011) that we have carried out these programs in elementary schools throughout Tohoku as part of our contributions to support the revitalization of the region following the Great East Japan Earthquake. Please see page 35 for more information on our science education support programs.



Unique Management System JGMS

JGMS (JEOL Group Management System) is a management system that defines the actions that JEOL must take to meet the requirements for ISO 9001:2015 and ISO 14001:2015 certifications from an outside certification authority. The ISO 9001 standard sets the requirements that help to improve customer satisfaction and the quality of products and services; ISO 14001 defines environmental requirements, including those for monitoring and reducing waste and other environmental factors, as well as compliance with environmental laws and regulations. The JGMS contains the rules, standards, and procedures that specifically define the operations that integrate these requirements with company management.

Policies

Our quality and environmental policies are clearly communicated both internally and externally through media such as our website.

Quality and Environmental Policies

In support of our Corporate Philosophy, we are offering advanced products and services to users of scientific and metrology instruments, semiconductor equipment, industrial and medical equipment, and contributing to the development of a sustainable, recycling-based society.

Policy for Quality

- In support of our mission, the JEOL Group is committed to being a total solution provider, providing high quality products and well-organized services to best serve our clients.
- Continually improve products and services using a cross-departmental approach.
- Promote quality control initiatives through execution and continual improvement of our quality management system in compliance with international standards.

Policy for Environmental Protection

- Product development and process control that is environmentally friendly.
- Never-ending environmental quality improvement at every step of our business from development to production to service.
- Compliance with laws and regulations as a socially responsible global corporation.

- Promote environmental control initiatives through execution and by continually improving our quality management system in compliance with international standards.

JGMS Operations

Senior management assesses the conditions, issues, and needs—in and outside the Company—and then uses our policies to evaluate basic risks as well as, quality, and environmental risks. Then precise guidance is provided to the people responsible in the divisions. Every division then sets the goals and plans for their departments based on this guidance and develops, manages, and evaluates them, making continual improvements so that the PDCA* cycle can be implemented throughout the Company. In this way, senior management guidance permeates all levels of the organization. These activities are managed as one JGMS system to ensure better products and services and to protect the global environment.

*PDCA: plan, do, check, act cycle (continual improvements)

Audits

External Audits

The activities of the JEOL Group are regularly audited by an external audit company, and the audit company provides an evaluation of the continuing certification, including assessment of the effectiveness and conformance with international standards and JGMS. The issues that are pointed out in the audits are regarded as opportunities for improvement, and we make full use of them as a tool for making our business operations better.

Internal Auditing

Two internal auditing periods are scheduled every year so that the JGMS activities conducted in every division can be independently audited. Internal auditing is done objectively from a neutral perspective by certified internal auditors who have completed education and training and who meet certification standards.

Recommendations made for improving operations during internal audits are not limited to improvements in a specific division, but are deployed horizontally across the Company.

Publication of International Certifications

Headquarters and Group companies obtained the first certifications for ISO 9001 in December 1995 and ISO 14001 in December 2002. Since then, the certifications have been updated and the JEOL Group companies have complied with the newest standards: ISO 9001:2015 and ISO 14001:2015. ISO certification information is shown at the right. You can always see up-to-date information on the JEOL website.

Certification authority

Bureau Veritas Certification Holding SAS-UK Branch

Registration numbers

ISO 9001: 4380808 2.0

ISO 14001: 4380809 2.0

Compliance

CSR Committee

Recently, corporations are being required to comply with regulations concerning pollution control, reduced use of chemicals, and quality/environmental control as part of their corporate social responsibility (CSR).

JEOL organized a committee to address these issues in 2006. The CSR Committee, headed by the president and advised by an external attorney, meets twice a year. The committee's purpose is to promote JEOL's activities to continually improve and reinforce compliance, quality control, social contribution, corporate ethics, and risk management.

Environmental Regulations Committees

Environmental Regulations Committees have been established to handle issues of environmental regulations that apply to JEOL products, starting with the RoHS directive.

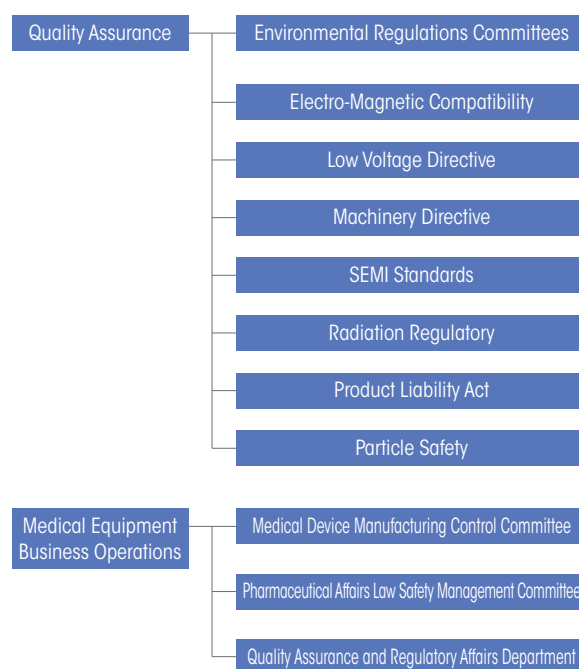
All departments related to products, including sales, development, design, procurement, manufacturing and service, participate and are working on legal compliance.

Technical Regulation Committees

To respond effectively to the laws and regulations in every country, we have established special committees within the Quality Assurance Division and are taking effective action. Every committee considers all items related to product technical regulations and the latest trends in laws. Laws and regulations change over time.

Any provisions affecting the JEOL Group are discussed in the committee specializing in that area, and a review is quickly distributed among all concerned through the Quality Assurance Division.

For medical equipment, RA (Regulatory Affairs), along with QA (Quality Assurance) is responsible for the ME quality assurance within the Medical Equipment Division, and for ensuring compliance with rules and regulations throughout the world.



Together with the Environment

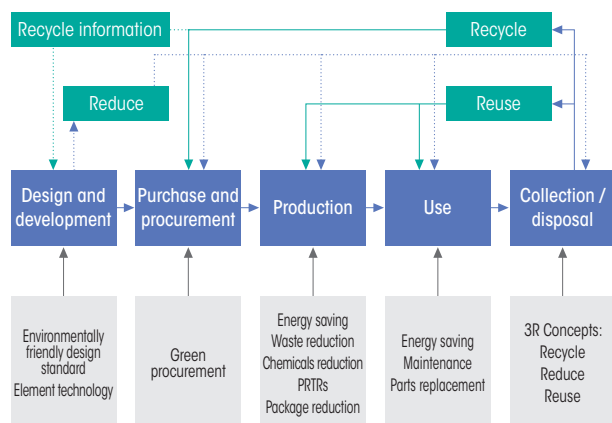


Environmental Protection through Products

Initiatives for Product Lifecycles that Are Environmentally Conscious

JEOL is implementing initiatives that incorporate the concept of reducing environmental impact in every part of the product lifecycle, from purchasing, production to distribution, through to operations, disposal, and recycling. During development and design, we not only comply with environmental laws and regulations but we also include the reduction of CO₂ emissions as a design goal. When purchasing materials, we ask component manufacturers to comply with our environmentally preferable (green) purchasing requirements and to use effective environmental management. In the production phase, we strive to reduce CO₂ emissions in the whole plant as well as to ensure that waste materials are disposed of in the correct way. When our instruments are being used, we ensure their stable operation through maintenance and inspections. We strive to reduce the environmental impact of these instruments during disposal by comprehensively following the 3Rs.

Scope of JEOL product assessment



Environmental Contribution through Products

JEOL's key products are ones that stimulate environmental improvements, and they include tools that are fundamental for R&D, instruments that improve production processes, environmental analysis equipment, and 3D printers.

Field Emission Electron Probe Microanalyzer (JXA-iHP200F)

Analysis of trace components contained in materials is critical for the development and quality control of structural materials, including high-tensile steel, which can save energy by reducing the weight of automobiles. The JXA-iHP200F Field Emission Electron Probe Microanalyzer meets the requirements for the high-speed, high-

precision analysis of trace components. In addition, this analyzer contributes to environmental improvements in a wide range of fields, such as research into the decommissioning of nuclear reactors and research for the exploration of natural resources.

High Throughput Triple Quadrupole Mass Spectrometer (JMS-TQ4000GC)

Triple Quadrupole Mass Spectrometers can detect harmful substances in food, water, and the environment with a high degree of accuracy and speed. JEOL's Triple Quadrupole Mass Spectrometer can analyze many harmful substances at high speed and enhances the efficiency of analysis for pesticide residues.

Electron Beam Metal 3D Printer (JAM-5200EBM)

Metal 3D printers are expected to play an innovative role in boosting energy efficiency and reducing the weight of parts for automotive vehicles and aircraft engines; components used in the space industry; and generator turbines. Our metal 3D printers use an electron beam system that can print difficult-to-process materials, such as titanium alloys, to make high-quality products.



JAM-5200EBM

Instruments for battery development

To realize carbon neutrality, we must reduce power demand and switch to electric power, such as that used in electric vehicles. To achieve this goal, it is essential to improve the performance and quality of rechargeable batteries. Our products are being used in R&D for these batteries.



We publish application notes that introduce case studies where cross-sectional analysis of batteries has been performed using our instruments.

Green Purchasing

The JEOL Group communicates our environmental policies to clients and business partners and asks for their cooperation in complying with environmentally preferable (green) purchasing requirements.

JEOL Group companies promote the development and design of products that do not contain certain chemical substances.

Our suppliers, provide services without adding specified chemicals, and deliver goods that do not contain the specified chemical substances, in accordance with the terms of their contracts with us. Working with our partners based on a “green contract,” JEOL Group companies provide, to their business partner companies, information related to chemical regulations and help them with analysis of chemical substance to achieve specific targets.

JEOL Group Green Purchasing Requirements [excerpts]*1 Version 5 (June 2010)

The JEOL Group is committed to activities that encourage environmental protection throughout the business cycle from material purchasing, product delivery, service, maintenance, and disposal.

We form an alliance with our clients, vendors, and partners to establish environmentally preferable purchasing worldwide. To insure green purchasing from our supply chain, we have defined a set of rules called the JEOL Group Green Purchasing Requirements.

RoHS Compliant Products

Since 2017, the JEOL Group has been providing instruments that comply with the European RoHS Directive, a regulation that limits harmful substances used in making electrical and electronic products. In addition, the number of regulated harmful substances increased from six to ten in July 2021, so the Group is making every effort to ensure that our products remain compliant.

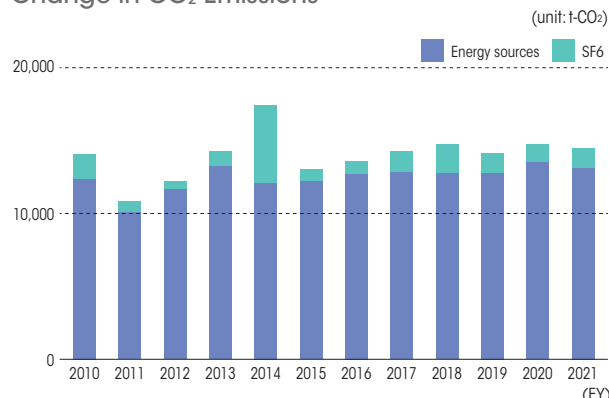
Going forward, the Group will continue to work on the development, production, and supply of products that contribute to the environment and that are environmentally conscious by complying with the RoHS Directive in an increasing number of countries worldwide. At the same time, we are reducing our environmental impact.*2

Protecting the Environment through Business Activities

Reducing Greenhouse Gases (GHGs)

Through the Energy Saving Committee, the JEOL Group is continuing with initiatives that reduce CO₂ emissions to help attain the Sustainable Development Goals (SDGs) and carbon neutrality in the future.

Change in CO₂ Emissions



Improving Efficiency of Energy Use

JEOL is working to improve energy efficiency, starting with electricity and fossil fuels. Specific examples of these improvements: upgrading to energy-saving air-conditioning systems; introducing separate air conditioners; upgrading cleanroom equipment; adopting LED lighting; introducing ice storage air conditioners for more effective nighttime use of electricity; installing light-shielding sheets and films on buildings to reduce the burden on cooling in summer; and using heat-shielding coatings. In July 2020, a solar power system with over 100 kW of generating capacity was installed on the roof of Building 3 at our head office to reduce greenhouse gases (GHGs) as well as to promote clean energy and renewable power. Some of the power generated has been used for production.



Solar system on roof of Building 3 at the head office

Companywide initiatives aimed at reducing energy consumption include the Cool Biz and Warm Biz campaigns for office clothing as well as managing the amount of electricity used in every building.

In February 2020, JEOL improved the energy consumption rate (index for measuring efficient use of energy) by 4.2% on average over a five-year period against a target of 1% or more annually on average. This 1% or more target—required by the Act on the Rational Use of

*1 Visit JEOL site for the entire document <https://www.jeol.co.jp/corporate/envi/activity/> (Only available in Japanese)

*2 Visit JEOL site for more details on our environmental projects <https://www.jeol.co.jp/en/corporate/envi/report/>

Energy and overseen by the Energy Saving Committee—is primarily achieved by conserving energy day to day. We also garnered the highest rank of “S” for energy savings for four consecutive years in a system implemented by the Ministry of Economy, Trade and Industry (METI) that evaluates businesses every year. Also, we have been recognized for other achievements: the Kanto Region Electricity Usage Rationalization Committee awarded us the top prize for four consecutive years, from fiscal 2015 to 2018, for our effective use of electricity as well as for promoting energy conservation and we received an award for being an excellent energy conservation business from the Kanto Bureau of Economy, Trade and Industry under METI for the first year of the Reiwa era (May 1 to Dec. 31, 2019).

Our energy conservation initiatives were highlighted in the November 2020 issue of *Energy Conservation* in an essay entitled “Document: Challenge Energy Conservation.” This monthly is published by the Energy Conservation Center, Japan.

For the seventh consecutive year, we also earned an “S” under an evaluation system that ranks businesses that reflect the results of METI’s 2021 periodic assessments.

Measures at JEOL Yamagata Co., Ltd.

JEOL Yamagata Co., Ltd. is a production base of the JEOL Group located in Tendo City, Yamagata Prefecture. Employees of several companies on the same site perform all the production tasks, from parts assembly to final production. This is part of our initiative to develop environmentally friendly manufacturing processes. In this way, we are reducing and/or eliminating the need for packaging materials to transfer parts and materials between companies as well as reducing our fuel consumption and the exhaust gases usually associated with transportation.



JEOL Yamagata Co., Ltd.

Management of Chemical Substances

- JEOL protects employees and prevents the illegal

distribution or leaks of chemical substances used in the production process and during R&D. We also introduced a chemical management system in October 2019 aimed at effectively managing daily use and inventories. Through the chemical management system, we educate managers on the correct use of chemical substances as well as effective ways to manage storage locations and amounts, and to ensure best management practices for chemical substances received and used.

- PRTR Law (Pollutant Release and Transfer Register) and Tokyo Metropolitan Environmental Preservation Code
JEOL uses specific chemical substances that require reporting.

Reporting to the Metropolis of Tokyo

One of the certified reporting companies: JEOL Ltd.

(Unit: kg / year)

Substance/fiscal year (amount used)	FY 2019	FY 2020	FY 2021
1) Methanol	110	—	—
2) Acetone	100	—	—
3) Isopropyl alcohol	100	110	—
4) Sulfuric acid	—	—	—

Storage and Disposal of PCB Waste

Although the JEOL Group stored PCB waste (used in high-voltage capacitors, transformers, and stabilizers), we regularly treated both high-concentration and low-concentration waste. Processing of fluorescent lamp ballasts took place in February 2020, marking the end of treating PCB waste.

Verification of Waste Material Processing and Processing Results

We introduced an electronic manifest system for waste materials in FY 2021 to comply with laws and regulations and to monitor the disposal of waste material in real time. The main reason for reducing waste materials is to improve the rate of recycling by completely separating waste products by the type of material, as well as by recycling more plastics, and by using packing containers and materials that are reusable.

For the disposal of waste materials, we make every effort to monitor the final disposal method, even for those items that are handled outside the Company’s sites. We do not rely solely on the control manifests for industrial waste. Waste materials disposal managers ensure compliance with the requirements of Japan’s Wastes Disposal and Public Cleansing Act, as well as those of local regulations. We also perform onsite checks to confirm that waste materials are handled properly.

Together with Employees

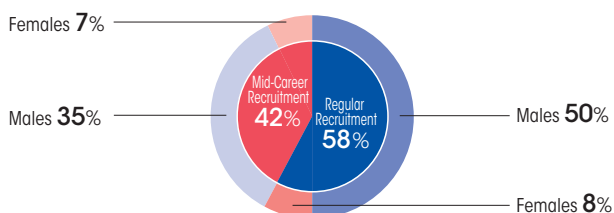


To ensure that we live up to our company philosophy for sustainably, we are striving to secure outstanding employees that have diverse understanding and perspectives. As well, we will provide an environment for them to maximize their abilities. In addition, we are working to maintain and improve our business activities by creating an environment in which employees can work safely and in good health, and that enables a variety of workstyles.

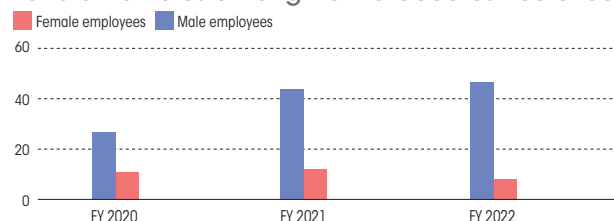
Recruitment and Human Resource Development

We continue to cultivate the DNA that we have built up over more than 70 years by hiring new graduates, while bringing in mid-career workers with diverse backgrounds. The open and mutual exchange of ideas between these two groups serves to challenge the ever-evolving world of science and technology.

Comparison of Regular Recruitment and Mid-Career Recruitment (as of March 31, 2022)



Ratio of Females among New Graduates Recruited



	FY 2020	FY 2021	FY 2022
No. of male employees	27	44	47
No. of female employees	11	12	8
Ratio of females (%)	29.0%	21.4%	14.5%

Promoting Diversity

JEOL recruits people regardless of their gender, nationality, age, or disability to create an organization where everyone can

play an active role. The fact that JEOL is a company where people can work with peace of mind for a long time is reflected in our low turnover rate in recent years.

In July 2019, JEOL received the Eruboshi certification (2nd level) from the Ministry of Health, Labour and Welfare. We have continued to maintain this certification, including in FY 2021. In addition, the rate of employees who take childcare leave and return to work is close to 100%. Many employees make use of a shortened work hour system, etc. after returning to work following childbirth and childcare. We also established a job return system in January 2019. We support a work and family life balance by introducing a return-to-work registration system targeting employees who need to stop work for reasons such as childcare or nursing care.



	FY 2019	FY 2020	FY 2021
Job Turnover Rate	1.3%	1.2%	1.3%

Health Management Initiatives

We believe that the mental and physical health of employees are important management issues. We have engaged in health management initiatives since FY 2021 and have been certified under the Health and Productivity Management Outstanding Organization Recognition Program 2022 (large enterprise category).

Almost every employee received a medical exam in FY 2021. Our resident industrial physician pays close attention to the daily health of employees. Further, over 90% of employees undergo stress checks every year to help prevent mental health problems. We have also established multiple points of contact to provide counseling and support, which includes talking with an industrial doctor specializing in mental health or getting advice from people outside the Company via telephone or email.



	FY 2019	FY 2020	FY 2021
Health checkup participation rate	99%	99%	100%
Stress check exam rate	91%	94%	93%

Initiatives for New Workstyles

JEOL encourages all employees to take paid leave to reach a balance between their work and their private life. In fiscal 2021, all employees took the five days of paid leave required by the national government, with the average number of days of paid leave being taken reaching 12 per employee. Further, in January 2021, a "paid leave by the hour" system was introduced to respond to flexible working hours and to suit diverse lifestyles.

Together with Local Communities



Contributions to Society

Science Education Support Classes

The Science Education Support Class program was started in October 2007 as part of the commemoration of the JEOL Group's 60th anniversary. Initially, this took place at elementary schools near our headquarters, but this program has since grown to include the Greater Tokyo Area, and is now being conducted at a range of sites, not just elementary schools. Through FY 2021, 649 demonstrations have been performed over 392 days.

Science Education Support Class programs are mainly held in classrooms by demonstrators sent from the JEOL Group. Using a NeoScope™ benchtop scanning electron microscope, students are able to observe pollen, insects, and the mechanisms of the body in detail. Students seeing electron microscope images for the first time display a lot of interest, making comments such as, "It was so interesting to see the bugs so clearly and the different pollen shapes," and "I really liked being able to see what goes on inside the human body in the microworld." By participating in local community events and workshops for elementary and junior high school teachers, we hope to provide many people with the opportunity to become more familiar with the microscopic world.

Some of the main schools and organizations where programs have been conducted include Fussa Dainana Elementary School (Tokyo), Junior High School Affiliated with Mito 1st High School (Ibaraki), Yamagata STEM Academy (Yamagata), Sugunami Junior High School Student Future Science Club (Tokyo), Junior High School Affiliated with Tsuchiura 1st Senior High School (Ibaraki), Institut Culturel Franco-Japonais (Paris, France). In 2021, there were also visits to two elementary schools in Ishinomaki City to work with children affected by the Great Eastern Japan Earthquake, as well as a visit to an elementary school affected by the heavy rains in the Tohoku region.

In the future, we hope that everyone who takes part, including teachers, students, and the general public, will become more interested in science.

Starting in fiscal 2015, the JEOL Group collaborated with universities and other businesses to increase the number of children with an interest in math and sciences through a two-year special support program organized by the Tokyo Board of Education. After the end of the Tokyo Board of Education program in 2017, JEOL continued activities through a Math & Science Special Support Program organized in Hino City. JEOL Group instructors use NeoScope™ benchtop scanning electron microscopes to hold the Science Education Support Classes. In 2021,

classes were held at an elementary school in Hino City, enabling students to experience the microworld via online remote control of a benchtop scanning electron microscope installed at our company.



Electron microscope class at Fussa Dainana Elementary School



Junior high school students from the Mito 1st High School experience electron microscopes

Support for the Kazato Research Foundation

The Kazato Research Foundation was established in 1969 to commemorate the 20th anniversary of JEOL Ltd. The foundation is supported by a contribution from Kenji Kazato, the founder of JEOL Ltd. The purpose of this organization is to promote the research and development of electron microscopes and related instruments, as well as applied research using these instruments (for medical science, biology, physics, chemistry, materials science, nanotechnology, and other disciplines). This foundation has helped many young researchers over the years, and JEOL continues to support the foundation's activities with annual donations. (<https://www.kazato.org/english/>)

The young researchers below received awards in FY 2021.

Kazato Prize

Tomohiro Nishizawa
(Professor, Graduate School of Medical Life Science
Department of Medical Life Science, Yokohama City University)
Membrane protein dynamics revealed by cryo-EM

Makoto Kuwahara
(Associate Professor, Institute of Materials and Systems for Sustainability, Nagoya University)
Development of a spin-polarized pulse electron gun for time-resolved transmission electron microscopy

Kazato Research Encouragement Prize

Akira Saito
(Assistant Professor, Department of Basic Pathology, School of Medicine, Fukushima Medical University)
Elucidating regulatory mechanisms of epithelial barrier by cingulin/paracingulin

Hideaki Kato
(Associate Professor, Graduate School of Arts and Sciences, Komaba Institute for Science, The University of Tokyo)
Cryo-EM analysis of intermediate structures of channelrhodopsin

Satoshi Anada
(Senior Researcher, Nanostructures Research Laboratory, Japan Fine Ceramics Center)
Development of high-speed TEM using an electrostatic subframing system and machine learning

Yuya Morimoto
(RIKEN Hakubi team leader, Cluster for Pioneering Research, RIKEN)
Micro-electron diffraction with attosecond electron beams

Prize winners are expected to play active roles in the fields of materials research and life sciences.

Local Communities

Don't Litter Campaign (Commuter Route Cleanup Drive)

The Don't Litter campaign is a volunteer community service that JEOL employees have been performing since 1994, and it has become a regular part of our routine. About once every two months, employees take part in these cleanups during their morning commute.

Employees will continue these activities, never forgetting the original spirit and enthusiasm that prompted the start of the Don't Litter campaign.

(This activity is currently suspended due to COVID-19.)

"It was depressing to see cigarette butts and other trash littering the sidewalks around the company, and along the paths to the train station. Believing that there must be something that we could do, something that we should do, we began to regularly clean the commuting routes. The name given to this cleanup drive is the Don't Litter Campaign."



Don't Litter Campaign rally

Participation in the Akishima Environment Consideration Enterprise Network

The activities of the Akishima Environment Consideration Enterprise Network started in April 2005, with 16 member organizations. By April 2022, this organization grew to include 34 member enterprises. JEOL has been involved as an executive member since the inception of this network.

During a restructuring of the organization between FY 2009 and FY 2010, JEOL chaired the network, continued in the role of vice-chair for FY 2011 and FY 2012, and as executive secretary in 2020, all the while promoting environmentally friendly activities and practices in collaboration with network members.

The network's activities are low profile, and we intend to keep promoting environmentally friendly practices in local communities.

Activities at JEOL Yamagata Co., Ltd.

JEOL Yamagata Co., Ltd. has earned the goodwill of the people of nearby Tendo City, Yamagata Prefecture. To continue doing business for many years to come, the following initiatives are being undertaken.

- ① We are accepting on-the-job trainees from high schools and colleges every year and provide factory and carrier experiences to assist the development of human resources and professional awareness.
- ② Factory tours are offered to provide opportunities to see the products being produced. In FY 2021, 87 visitors from four organizations visited our site.
- ③ Crossing guards and patrols are provided on the roads around the company during the traffic safety campaigns in the spring and autumn. The goal is not only to prevent traffic accidents during the commute to school by the young students, but also to improve the behavior in traffic of our employees.
- ④ We participate in local festivals, social gatherings and events. In particular, for the local Autumn Festival, a benchtop scanning electron microscope was prepared at the festival site to allow visitors to see magnified images of insects and other objects.



Traffic safety on school commuting routes



Students from a Yamagata City elementary school

Management Team (As of June 28, 2022)



Gon-emon Kurihara ①

Chairman

Apr. 1971 Joined the Company
 Apr. 2000 General Manager of Medical Sales Division
 Jun. 2005 Senior Managing Director
 Jun. 2006 Director and Senior Executive Officer
 Jun. 2008 President
 Jun. 2019 Chairman and CEO
 Jun. 2022 Chairman (present position)

Izumi Oi ②

President & CEO

Apr. 1986 Joined the Company
 Apr. 2012 General Manager of Management Strategy Planning Office
 Jun. 2013 Corporate Officer
 Jun. 2015 Director and Corporate Officer
 Jun. 2016 Director and Executive Officer
 Jun. 2019 President and COO
 Jun. 2022 President & CEO (present position)

Toyohiko Tazawa ③

Director & Senior Executive Officer

Feb. 1984 Joined the Company
 Apr. 2009 General Manager of SA Business Unit
 Jun. 2011 Corporate Officer
 Jun. 2013 Executive Officer
 Jun. 2016 Director and Executive Officer
 Jun. 2018 Director and Senior Executive Officer (present position)

Responsible for:

Administration of Development Technology, Intellectual Property Strategy Division, R&D Management Center, Application Management Department, Advanced Fundamental and Core Technology Center, EX Business Unit, MS Business Unit, 3D Additive Manufacturing Business Project

Koji Nakao ⑦

Outside Director

Jun. 2007 Director and Senior Managing Executive Officer of Terumo Corporation
 May 2011 Chairman of the Board of Terumo Corporation
 Apr. 2013 Chairman of The Japan Federation of Medical Devices Associations
 Feb. 2017 Representative of Art Management Shimanami (present position)
 Jun. 2018 Outside Director of the Company (present position)
 Nov. 2019 Advisor to Biodesign Japan (present position)

Ryuji Kanno ⑧

Outside Director

Feb. 2007 Vice President and Representative Director of Agilent Technologies Japan, Ltd.
 Jun. 2018 Nonexecutive Director of Rigaku Corporation
 Sep. 2020 Senior Advisor at Human Metabolome Technologies, Inc. (present position)
 May 2021 Advisor at SAMURAI Biotech Association (present position)
 Jun. 2021 Outside Director of the Company (present position)

Kaoru Terashima ⑨

Outside Director

Recently appointed

Apr. 2011 General Manager of the IVD Innovation Division, Medical Systems Business Division, FUJIFILM Corporation
 Jan. 2017 Executive Officer, Deputy General Manager of Medical Systems Business Division, overseeing IVD Innovation Division, FUJIFILM Corporation
 Jun. 2020 Fellow, FUJIFILM Corporation
 Jun. 2021 Consultant, FUJIFILM Corporation
 Jun. 2022 Outside Director of the Company (present position)





Atsushi Seki ④

Director & Executive Officer

Apr. 1983 Joined the Company
Apr. 2012 General Manager of General Affairs Division
Jun. 2014 Corporate Officer
Apr. 2015 Manager of Internal Auditing Division (present position)
Jun. 2018 Director and Executive Officer (present position)

Responsible for:

General Affairs, General Manager of the Internal Auditing Division

Katsumoto Yaguchi ⑤

Director and Executive Officer

Apr. 1982 Joined the Company
Apr. 2011 General Manager of Financial Affairs Division
Jun. 2011 Corporate Officer
Jun. 2016 Executive Officer
Jun. 2021 Director and Executive Officer (present position)

Responsible for:

Finance, IT, and Export Trade Control

Akihiro Kobayashi ⑥

Director and Executive Officer

Recently appointed

Apr. 1984 Joined the Company
Apr. 2014 General Manager of Business Operations for Scientific and Metrology Instrument Sales
Jun. 2016 Corporate Officer
Apr. 2020 Executive Officer
Jun. 2022 Director and Executive Officer (present position)

Responsible for:

Sales, Demand Generation Division, Business Operation Center, Field Solutions Business

Koichi Fukuyama ⑩

Audit & Supervisory Board Member

Recently appointed

Mitsuru Takahashi ⑪

Audit & Supervisory Board Member

Akifumi Goto ⑫

Outside Audit & Supervisory Board Member

Akihiko Minato ⑬

Outside Audit & Supervisory Board Member

Recently appointed

Kazuyuki Nakanishi

Substitute Audit & Supervisory Board Member

Senior Executive Officers

Tadashi Komagata

Executive Officers

Yoshihiro Ohkura

Hiroaki Fukuda

Jun Nagatsuka

Kiyotaka Fujino

Toshikatsu Kanayama

Osamu Wakimoto

Corporate Officers

Tadashi Okubo

Shintaro Yazuka

Masayuki Kobayashi

Hirohisa Yoshida

Toshihiko Kaneyama

Chikato Teramoto

Shoji Shiota

Board of Directors and Audit & Supervisory Board

Skills Matrix: Board of Directors and Audit & Supervisory Board

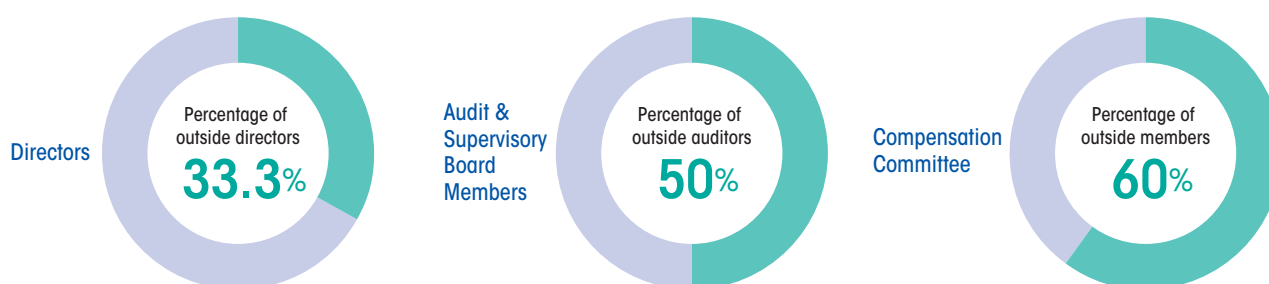
The skills matrix and composition of the Board of Directors and Audit & Supervisory Board are presented below.

The skill categories represent the knowledge and experience required for directors as well as the fields where the Company expects them to make an exceptional contribution and apply their expertise and insight to the fullest extent are designated with a “●” mark.

	Position	Knowledge and Experience Expected by the Company							
		Corporate Management	Global Business	Technology/R&D	Sales/Marketing	Finance/Accounting	Human Resources/Training	IT/Digital Technology	Legal/Risk Management
Gon-emon Kurihara	Chairman	●			●				
Izumi Oi	President & CEO	●	●						
Toyohiko Tazawa	Director & Senior Executive Officer	●		●				●	
Atsushi Seki	Director & Executive Officer	●					●		●
Katsumoto Yaguchi	Director & Executive Officer	●				●		●	
Akihiro Kobayashi	Director & Executive Officer	●	●		●				
Koji Nakao	Outside Director	●	●		●				
Ryuji Kanno	Outside Director	●	●	●					
Kaoru Terashima	Outside Director	●		●	●				
Koichi Fukuyama	Audit & Supervisory Board Member		●		●	●			
Mitsuru Takahashi	Audit & Supervisory Board Member					●			●
Akifumi Goto	Outside Audit & Supervisory Board Member								●
Akihiko Minato	Outside Audit & Supervisory Board Member					●			●

Note: The above table shows the knowledge and experience that the Company emphasizes for the skills of every director and Audit & Supervisory Board member.

Percentage of Outside Board Members



Ensuring the Effectiveness of the Board of Directors

JEOL requires that directors have extensive work-related expertise and knowledge as well as advanced management skills and the ability to effectively carry out their duties as a director, regardless of nationality, gender, employment history, or age. Directors are selected to ensure that the Board of Directors includes members who possess an effective balance of knowledge, experience, and abilities that will enable the Board to fulfill its role and

responsibilities. The Audit & Supervisory Board members are appointed based on their knowledge of finance or accounting or the law.

For the purpose of analyzing and evaluating the effectiveness of the Board of Directors as a whole, we conduct a survey targeting all directors and Audit & Supervisory Board members and disclose a summary of the results. Please see page 44 for details.

● Messages from Outside Directors

JEOL introduced an outside director system in fiscal 2012. When appointing outside officers, the Company makes sure every candidate meets the requirements for objectivity required by the Companies Act and the criteria for independence required by the Financial Instruments and Exchange Act, after considering the appropriate number of officers and their diversity. These appointments are made from the perspective of maintaining sound corporate governance through checks of corporate management by an outside third party.

In June 2022, Kaoru Terashima was appointed as an outside director, bringing the percentage of outside directors in the Board of the Directors to 33.3% (three out of nine directors).

Using third-party perspectives to help address basic medium- and long-term issues



Koji Nakao
Outside Director

Four years have passed since I was appointed as an outside director. Looking at the trends in our business operations, the industrial equipment segment is driving results, and the Company is growing strongly. On the other hand, profitability in the scientific and metrology instruments segment and the medical equipment segment has been slow to improve, making the Company rely heavily on the industrial equipment segment. Going forward, from the standpoint of an outside director, I intend to exchange ideas and opinions with management, focusing on initiatives that target the business segments that currently have low profitability.

This fiscal year, JEOL launched the Evolving Growth Plan, our new medium-term management plan. Under this plan, the Company will further strengthen and develop *Evolving in the 70th Year* and YOKOGUSHI, which have been communicated for some time now. I would like to discuss with management the actions taken to support strengthening our operations, as well as specific roles people will play, and how management intends to show leadership for the Evolving Growth Plan.

Corporate governance is one of the important themes among my many duties as an outside director. Guidelines and policies are changing radically every year in this field. Given these circumstances, I will do my best to increase my understanding of the Company's operations, particularly of the functions of the Board of Directors; the duties of the CEO, and internal directors; and the organizational structure. I will do this from the perspectives of transparency, fairness, clear ethics, sustainability, and profitability, and I will exchange opinions and offer recommendations on business issues, while continually examining the situation from a third-party standpoint and by applying my managerial experience.

As a listed company, JEOL has an exceptional corporate culture. I feel strongly that the Company is pursuing ever-higher levels of technology and making a solid contribution to advanced science. So, I think that these efforts and attitude are reflected in JEOL's history and achievements. On the other hand, looking at the evolving times, technology, and competition, there are aspects of the corporate culture that should be changed, in addition to aspects that should be maintained. I recognize that our management foundation is built on our corporate culture. I hope to provide support so that the Company can develop and reach the next level, while also offering advice and pointing out areas related to the corporate culture that are perhaps difficult to see from an insider's standpoint as well as areas that are more visible, such as financial data and aspects of the organizational structure.

Reason for Appointment

Due to his wealth of experience and knowledge, as well as his ability to make firm judgments on the appropriateness of decisions by the Board of Directors, Koji Nakao was appointed as an outside director under a process that emphasized objectivity and impartiality. We are confident that he will offer direction and advice on all aspects of business management, from an independent standpoint, to assist in improving our corporate value.

To achieve the Evolving Growth Plan, we are supporting a faster business transformation



Ryuji Kanno
Outside Director

One year has passed since I was appointed as an outside director. Before I was appointed, I felt more like a guest, but now I have complete access to the Company so I can perform my role with comparative ease. What I have seen has strongly reaffirmed my impression that JEOL is a powerful brand in Japan, that the products are developed using outstanding technical strengths indispensable to the market, and includes people who have high ethical standards. On the other hand, I have also now clearly realized that there are some challenging areas, such as the delayed restructuring to improve profitability and globalization. We have already prepared measures to address these issues, establishing a vision for transformation under the Evolving Growth Plan. I am glad that I was able to contribute to the formulation of the new medium-term management plan, having participated from the discussion stage.

I believe that one of my roles as an outside director is to speak up, without delay, if I have a concern about boosting corporate value by improving the corporate culture, rules, strategy, and policies that form the common consensus in the Company. I feel that the Board of Directors meetings have an open atmosphere that allows me to freely express my opinion. Also, from the perspective of corporate governance, some maintenance and improvements should be made to keep a step ahead of society's needs especially for transparency and fairness, but we are making steady progress here. I think that our recent transition to the TSE's Prime Market has helped to accelerate this process.

One of the centerpieces of the Evolving Growth Plan is the global expansion of our business. Overseas sales make up a high proportion of our net sales, and while we are a global company, we still have not reached our full potential in this area. Looking at the size of the market, it is highly likely that we can double or even triple our overseas business. This is an extremely exciting situation. I will apply my experience and knowledge to build a framework for realizing this growth and for supporting the Company's transformation.

I will strive to meet the expectations of all stakeholders and to become an even more beloved JEOL.

Reason for Appointment

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A time for continuous advancement through significant transformation



Kaoru Terashima
Outside Director

This year, I was appointed as an outside director. I hope to apply the knowledge I have gained through 40 years of experience in the biotechnology industry and contribute to the Company by offering a different perspective.

As an outside director, I am expected to use my experience, and from a third-party viewpoint, work to strengthen corporate governance and deepen stakeholder engagement.

By providing beneficial suggestions and expressing my opinion on a wide range of subjects concerning the Company's management at meetings of the Board of Directors, I will contribute to ensuring the effectiveness of the Board's decision-making. More importantly, I will also make recommendations for restructuring that supports the continuous advancement of the Company.

JEOL possesses outstanding technological strengths at a global level and has created numerous unique product lines that stand out from those of other companies. While each of these product lines are currently highly competitive, we must realize that they can become obsolete in the near future if we simply leave things as they are. Businesses across the globe are now shifting from business based only on the sale of products and consumable goods toward comprehensive data information services that use new business tools. These services do not involve the sale of products and instead adopt new models, such as subscriptions. How JEOL can catch up with this shift is an important focal point. The key to making a significant contribution to society and ensuring our continuous advancement lies in how we link our diverse and multiple product lines together and integrate them into a total service business model. I believe this is also a good starting point for discussion on realizing the YOKOGUSHI strategy.

One thing that I am acutely aware of when I look at the management of multiple companies is that many companies believe their culture and approach is standard and common sense, and they therefore do not question it. When taking a look outside, however, it is often the case that what is common sense inside your own company is actually not common sense to the world outside. Of course, there are strong points that we should remain firm about, but I believe that one of my roles is to notice areas for improvement and provide advice that enables JEOL to move in a positive direction.

I will take advantage of our current strong financial position, working to lay a strategic foundation for our future and support human resource development that includes the promotion of diversity. I will also strive to ensure that JEOL is a company that inspires and is trusted by society and our stakeholders.

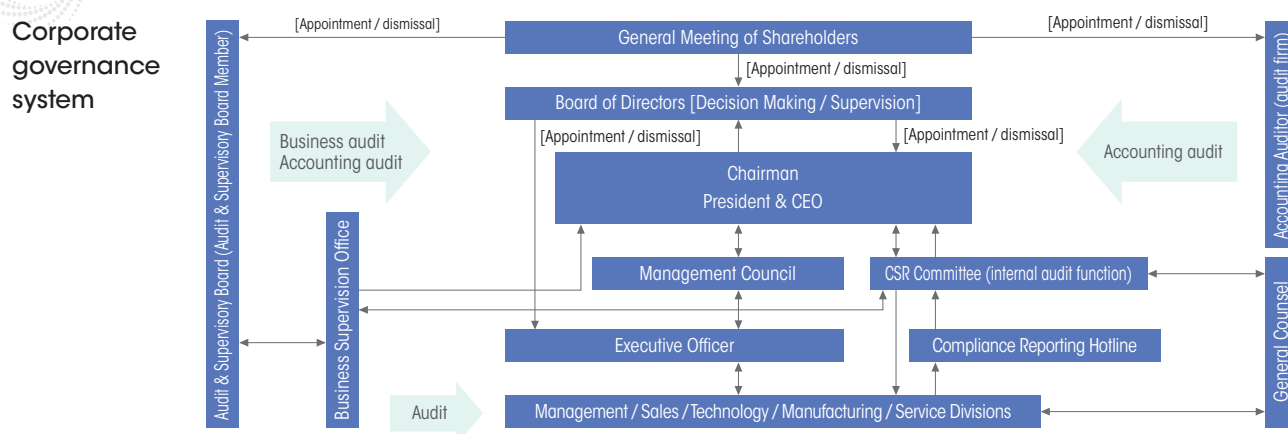
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Basic Approach

JEOL's basic approach to corporate governance is to build a stable profit structure and to realize basic management policies that focus on enhancing corporate value while achieving future-oriented development and growth. These goals will be reached by implementing various measures, including setting up an organizational management structure with efficient, highly transparent management that upholds our responsibility to respect the position of shareholders and all other stakeholders. In addition, we will respond to change, constantly pursuing an approach to corporate governance that is suited to the times.

Corporate Governance Structure



Governance System

The Company has adopted a corporate audit & supervisory system, with the Board of Directors and the Audit & Supervisory Board overseeing and auditing business execution.

JEOL has introduced an executive officer system to quickly respond to changes in the business environment with the aim of streamlining management using an optimal number of board members (the maximum number is limited by the Articles of incorporation) and to facilitate rapid decision-making and efficient business execution.

The Company's governance structure has a mechanism for effective supervision by corporate auditors consisting of an Audit & Supervisory Board whose members have considerable knowledge of finance and accounting. This board, which audits the execution of duties by Board members, includes outside corporate auditors who are independent of management to supervise affiliated companies and branches. This board also participates in meetings of the Board of Directors.

In April 2006, as part of the revisions to management meetings, the Executive Committee has been converted to a Management Council following the adoption of a system that

enables more effective and immediate business operations.

The CSR Committee—chaired by the president and includes participation by outside lawyers—was established to promote and strengthen social contributions, compliance, and risk management with an emphasis on corporate social responsibility. The CSR Committee, in response to reports from the Committee on Internal Control and Risk Management, the Internal Audit Department, as well as the JEOL Group Management System (JGMS) and Medical Devices Quality Management System (MDQMS) departments, provides consultation and proposals on CSR activities that are then reported to the Board of Directors.

In addition, internal auditing, excluding those related to JGMS and MDQMS, has been consolidated into the Internal Auditing Division.

Number of Major Meetings Held during the Fiscal Year 2021

Board of Directors	17
Management Council	52
Executive Officers' Meeting	11
Audit & Supervisory Board	22

Audit & Supervisory Board Audits

The Audit & Supervisory Board consists of four members (including two Outside Audit & Supervisory Board Members), with an internal Audit & Supervisory Board member serving as the Chairperson.

Guided by the audit policy, schedule, and responsibilities outlined in the first meeting of the Audit & Supervisory Board, every Audit & Supervisory Board member monitors and supervises the status of the Board of Directors' business execution from an independent perspective by attending meetings of the Board of Directors and other important meetings, examining important documents, and conducting audits.

Internal Auditing

The Company established the Internal Auditing Division and consolidated internal audit functions into the Division, excluding those related to JGMS and MDQMS. For the development and evaluation of internal control relating to financial reports, the Internal Auditing Division carries out audit activities together with the Japanese Sarbanes-Oxley Act (J-SOX) Audit Committee, sharing information with accounting auditors and engaging in mutual cooperation.

In addition, to ensure full legal compliance and increased management efficiency among affiliate companies, we work to deepen communication through question-and-answer sessions conducted at meetings for Japanese affiliate companies held once a year and the Tokyo Meeting for overseas affiliate companies held twice a year. These internal auditing activities are regularly reported to the JGMS and the MDQMS Departments as well as the CSR Committee, before finally being reported to the Board of Directors.

Accounting Audits

The Company, having fully considered the expertise, quality control system, independence, and global auditing capabilities essential for auditing, has selected Deloitte Touche Tohmatsu LLC as the accounting auditor.

Evaluating the Effectiveness of the Board of Directors

JEOL has analyzed and evaluated the efficiency of the Board of Directors to make certain that it is functioning effectively. Based on the results of this analysis and evaluation, we intend to improve the overall effectiveness of the Board of Directors through an ongoing process of identifying and improving on issues and by further strengthening the Board.

The results of the Board of Directors' analyses and

evaluations in fiscal 2021 have been compiled and are disclosed below.

Evaluation Method

Self-assessment questionnaires evaluating the effectiveness of the Board of Directors were completed by all Directors and Audit & Supervisory Board members at the Board of Director meetings held during fiscal 2021 (April 2021 to March 2022). The results were reported at the Board of Directors' meeting held on Tuesday, May 31, 2022.

Evaluation Items

Evaluation items were categorized into three areas:

- ① Board composition
- ② Management of the Board of Directors
- ③ Providing information to outside officers

Summary of Evaluation Results

After reviewing the self-evaluation questionnaires for all directors and Audit & Supervisory Board members, all 18 evaluation items were found to be above average and the overall effectiveness of the Board of Directors was found to be generally maintained.

Issues and Major Initiatives for Evaluating the Board of Directors

Issues Raised by Questionnaire Results

- ① Improvement of materials for the Board of Directors meetings
- ② Quicker distribution of materials to outside directors
- ③ Maintenance and strengthening of the internal auditing system

Measures Taken for Issues Recognized in the Fiscal 2020 Questionnaire

- ① Prior explanations provided to outside directors
- ② Summaries will be provided in reports.
- ③ Reviewed matters reported on

Measures to Be Taken for Issues Recognized in the Fiscal 2021 Questionnaire

- ① Simplification and summarization of materials for the Board of Directors' meetings
- ② Quicker distribution of materials to outside directors

Future Responses

The Board of Directors will respond to issues based on the results of these evaluations and will continue to make evaluations and analyses to improve their efficiency.

● Executive Compensation System (Design)

The JEOL Basic Policy on Directors Compensation is outlined below.

Basic Policy on Executive Compensation

JEOL's executive compensation helps to motivate management to achieve our management goals, in turn raising awareness of contributions to boost performance through medium- to long-term improvement of our corporate value. Our compensation system is designed to promote profit awareness among shareholders and to raise awareness of shareholder-oriented management.

Compensation Composition

Compensation for directors consists of basic compensation (monetary reward) and performance-linked stock compensation. However, outside directors who are responsible for supervision and non-executive directors receive only fixed basic compensation in view of their jobs.

Basic Compensation

JEOL establishes incentives for improving business performance after considering the business environment surrounding the Company, the salary level of others, and salary levels at other companies in the same industry.

Determining Basic Compensation

Basic compensation is determined based on a compensation table for every position and performance achievement, which is prepared using the basic policy for determining compensation. The table helps to determine the standard compensation for every director position. This amount can vary from 85% to 115% of the standard amount according to the degree of achievement of key performance indicators (KPIs). KPIs include those for achieving the goals for (1) consolidated net sales and (2) consolidated operating income. However, outside directors and non-executive directors are not paid performance compensation, and their basic compensation is set after considering the business environment surrounding the Company, the salary level of employees, and salary levels at other companies in the same industry.

Determining Performance-Linked Stock Compensation

In determining performance-linked stock compensation, directors are awarded points that are calculated by multiplying the position-based points (based on the basic policy for determining compensation) by a performance-linked coefficient (50% to 170%). The coefficient is calculated from the degree of achievement against target KPIs: (1) consolidated net sales, (2) consolidated operating income, and (3) ROE. Note that 1 point is equivalent to 1 share of the Company. However, if an event occurs for which point adjustments are considered justified, such as stock splits and reverse stock splits, the number of shares per point will be adjusted based on the split ratio, reverse split ratio, etc. For directors living overseas, monetary compensation equivalent to the number of points is paid to them.

Structure of Director Compensation

Guided by the basic policy for determining compensation, the ratio of basic compensation to performance-linked stock compensation is determined with a target of 80% for basic and 20% for performance-linked stock compensation. However, outside directors and non-executive directors are not eligible for performance-linked stock compensation, receiving only fixed basic compensation that does not consider their performance.



Risk Management

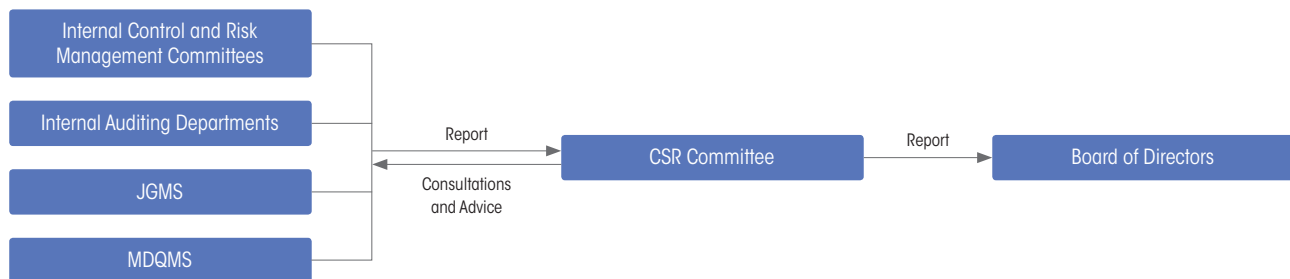
Risk Management System

JEOL's risk management system complies with all laws and regulations, and there is close cooperation among the Management Strategy Planning Division, Internal Auditing Division, Security Export Trade Control Division, General Affairs Division, Financial Affairs Division, IT Division, Intellectual Property Strategy Division, Quality Assurance Division and other divisions. Related committees collaborate to educate and raise awareness within the Company.

The CSR Committee is also responsible for internal control and risk management committees as well as

internal audit departments, and in response to reports from JGMS and MDQMS, consults and makes proposals on CSR activities and reports to the Board of Directors.

JEOL formulates Company rules and creates committees in line with Group management, including establishing Compliance Management Rules, the JEOL Corporate Ethics Code of Conduct, and the protection of personal information by observing our information security policy. We also established a compliance reporting hotline and business continuity plan (BCP), initiatives that will be promoted throughout the entire Group.



To thoroughly implement the Action Guidelines / to instill corporate ethics / to develop KF activities (activities aimed at generating a good corporate culture)

Initiatives to prevent the spread of COVID-19

To counter the risk from the COVID-19 pandemic, we held meetings of the Crisis Committee, chaired by Atsushi Seki (Director and Executive Officer), and we have been working to build an effective management system for preventing the spread of infections. When the Government of Japan declared a state of emergency, the Crisis Committee was restructured, becoming the Task Force for Countering COVID-19, where the President & CEO, Izumi Oi, serves as the Chairperson. In this way, we are strengthening our countermeasures.

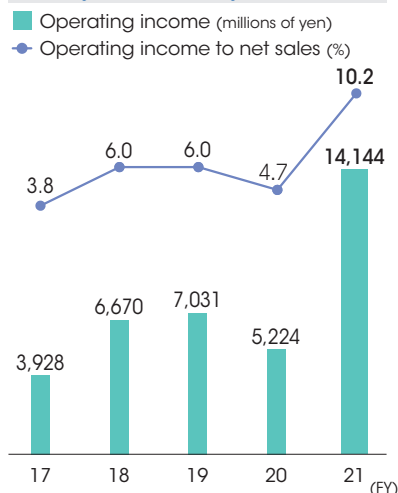
- Stopped taking nonurgent business trips
- Held exhibitions and seminars using the infection prevention guidelines
- Prohibited workplace-specific social gatherings and large parties
- Reduced contacts among employees in staff restaurants by staggering lunchtimes
- Promoted work from home and staggered work hours
- Recommended holding Web (virtual) meetings
- Implemented mask wearing, alcohol-based sanitizing, and temperature checks
- Granted special leave for employees raising children of elementary school age or younger, or a child attending a special needs school

(As of August 2022)

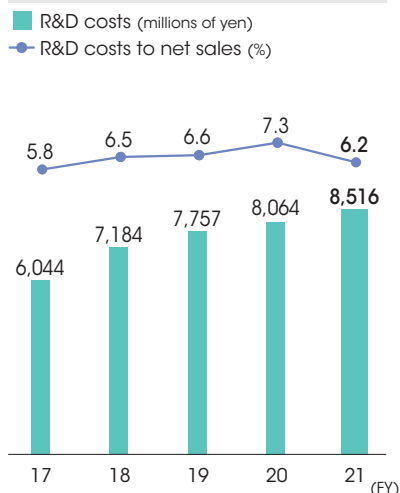
Consolidated Five-Year Summary

JEOL Ltd. and consolidated subsidiaries
Figures are the results for the fiscal years ended March 31, 2018, 2019, 2020, 2021, and 2022.

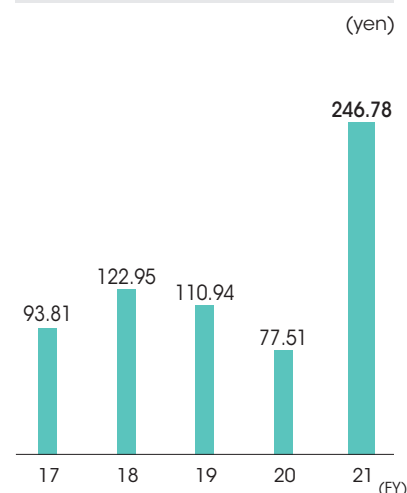
Operating income / Operating income to net sales



R&D costs / R&D costs to net sales



Net income per share*2



(JEOL Ltd. and consolidated subsidiaries)

For the fiscal year ended March 31

(millions of yen)

	2022	2021	2020	2019	2018
Net sales	138,408	110,440	117,244	111,289	104,570
Scientific and Metrology Instruments	85,145	70,564	76,644	77,589	68,480
Industrial Equipment	34,003	24,010	23,845	16,606	16,708
Medical Equipment	19,258	15,866	16,755	17,093	19,383
Selling, general and administrative expenses	41,221	37,669	37,834	35,761	33,562
Operating income (loss)	14,144	5,224	7,031	6,670	3,928
Ordinary profit (loss)	16,313	6,551	7,203	7,440	4,363
Net income attributable to owners of the parent	12,279	3,745	5,360	5,940	4,532
Capital expenditures	6,893	7,564	5,713	2,800	2,727
Scientific and Metrology Instruments	2,149	2,418	3,658	1,943	1,939
Industrial Equipment	3,541	4,530	1,360	517	354
Medical Equipment	1,035	176	303	134	284
Eliminations/Corporate	168	440	392	205	150
Depreciation expense	4,106	3,626	3,191	2,755	2,668
Research and development costs	8,516	8,064	7,757	7,184	6,044
Scientific and Metrology Instruments	5,634	5,283	5,164	4,599	4,185
Industrial Equipment	1,489	1,770	1,654	1,674	1,125
Medical Equipment	1,393	1,011	939	910	734

At year-end*1

(millions of yen)

Total assets	189,562	146,388	136,788	122,665	114,629
Total equity	85,904	51,000	45,080	41,593	37,387

Per share data*2

(yen)

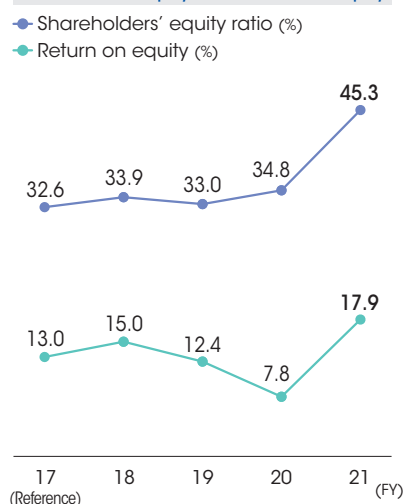
Net income attributable to owners of the parent	246.78	77.51	110.94	122.95	93.81
Total equity	1,684.08	1,055.50	933.07	860.90	773.84
Cash dividends					
Common stock	50.00	24.00	24.00	21.00	16.00

Value indicators

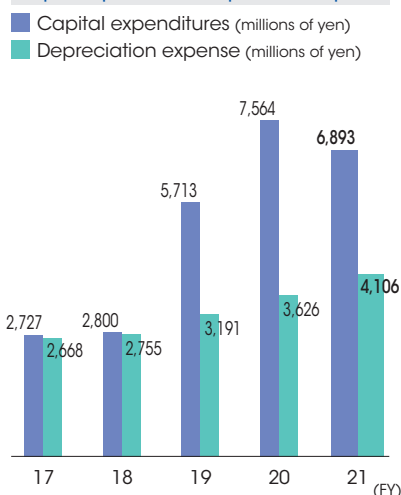
(%)

Return on equity (ROE)	17.9	7.8	12.4	15.0	13.0
Return on assets (ROA)	6.5	2.6	3.9	6.3	4.0

Shareholders' equity ratio / Return on equity



Capital expenditures / Depreciation expense



*1 "Partial Amendments to Accounting Standard for Tax Effect Accounting" (ASBJ Statement No. 28, February 16, 2018) and related guidance have been applied from March 2019. Management indicators and other data reflect the retroactive application of these revised accounting standards.

*2 Effective on October 1, 2018, the Company conducted a share consolidation that changed a share unit from two shares to one share.

Data for one share (net income attributable to owners of the parent, net assets, and annual dividends) are shown here assuming the stock consolidation occurred at the beginning of the fiscal year ended March 2018.

Overview of the Fiscal Year Ended March 31, 2022

In the consolidated fiscal year ended March 31, 2022, the economy of Japan continued to face an uncertain future, with the deepening chaos of the Russia-Ukraine conflict and no end in sight for COVID-19 due to a surge in infections from the Omicron variant, despite a temporary drop in the number of new infections.

Given these circumstances, the JEOL Group made an all-out effort to tackle the strategic priorities outlined in Triangle Plan 2022, our medium-term management plan for the fiscal years 2019 to 2021. Under this plan, we worked hard to bring in more orders and sales while boosting corporate value and creating a more robust management base by implementing new strategies for more growth during the medium-term management plan period and beyond.

Net sales for the consolidated fiscal year under review were ¥138,408 million (up 25.3% compared with ¥110,440 million in the previous year). Looking at profit and loss, operating income was ¥14,144 million (up 170.7% compared with ¥5,224 million in the previous year), ordinary profit was ¥16,313 million (up 149.0% compared with ¥6,551 million in the previous year) and net income attributable to owners of the parent was ¥12,279 million (up 227.9% compared with ¥3,745 million in the previous year).

Overview of the Financial Position

Total assets at the end of the consolidated fiscal year under review came to ¥189,562 million, up ¥43,174 million from the end of the previous consolidated fiscal year. The main factors behind these results were an increase in cash and deposits of ¥28,851 million, an increase in notes and accounts receivable-trade, and contract assets of ¥41,168 million, as well as an increase in buildings and structures of ¥4,163 million, despite a fall in notes and account receivables-trade of ¥31,630 million and a decrease in construction in progress of ¥2,236 million.

Total liabilities were ¥103,657 million, up ¥8,269 million from the end of the previous consolidated fiscal year. The main factors behind this rise were a spike in contract liabilities of ¥33,351 million, a boost in electronically recorded obligations-operating of ¥3,935 million, and higher notes and accounts payable-trade of ¥1,648 million, despite lower advances received of ¥13,891 million, a fall in short-term borrowings of ¥7,815 million, and a decrease in long-term borrowings of ¥5,601 million.

Total equity came to ¥85,904 million, up ¥34,904 million compared with the end of the previous consolidated fiscal year,

primarily due to an increase in share capital, capital surplus, and retained earnings. As a result, the shareholders' equity ratio as of March 31, 2022, rose 10.5 percentage points, to 45.3%.

Overview of Cash Flows

For the fiscal year ended March 31, 2022, cash and cash equivalents ("cash") came to ¥42,351 million at the end of the fiscal year, up ¥27,869 million from the previous fiscal year end.

Cash flow activities in the consolidated fiscal year under review are shown below.

Cash flow from operating activities

Net cash provided by operating activities was ¥22,604 million, compared with ¥3,359 million provided in FY 2020. This was mainly due to higher profit before income taxes and an increase in contract liabilities, despite a rise in trade receivables.

Cash flow from investing activities

Net cash used in investing activities was ¥649 million, compared with a net cash outflow of ¥6,989 million in FY 2020. The major reasons for this decline included purchases of property, plant and equipment.

Cash flow from financing activities

Net cash provided in financing activities was ¥5,517 million, compared with ¥3,296 million provided in FY 2020. This was mainly attributed to an increase in proceeds from issuing shares, despite the repayment of borrowings.

Outlook for the Next Fiscal Year

The outlook is expected to remain uncertain, underpinned by the deepening conflict between Russia and Ukraine, and the lack of a foreseeable end to the COVID-19 pandemic. The Group has formulated the Evolving Growth Plan, our new medium-term management plan that covers the period from FY 2022 to FY 2024.

The Evolving Growth Plan is intended to grow the scale of our business and achieve higher profitability by further implementing *Evolving in 70th Year*, the basic vision of the previous medium-term management plan, Triangle Plan 2022.

For the consolidated operating forecasts for the fiscal year ending March 31, 2023, we expect ¥152,500 million in net sales (up 10.2% year on year), ¥19,500 million in operating profit (up 37.9%), ¥18,800 million in ordinary income (up 15.2%), and ¥13,700 million in net income attributable to owners of the parent (up 11.6%).

Corporate Outline (As of March 31, 2022)



Corporate Name	JEOL Ltd.
Address	1-2, Musashino 3-chome, Akishima, Tokyo 196-8558, Japan TEL: +81-42-543-1111 FAX: +81-42-546-3353
Establishment	May 30, 1949
Capital	¥21,394 million
Number of Employees	Consolidated: 3,291 Non-consolidated: 2,092

Head Office and Branch Offices	Head Office: Factory	Tsukuba Branch
	Akishima Second Works	Nagoya Branch
	Musashimurayama Works	Osaka Branch
	Tokyo Office	West Japan Solution Center
	Tokyo Second Office	Hiroshima Branch
	Tokyo Branch	Takamatsu Branch
	Sapporo Branch	Fukuoka Branch
	Sendai Branch	

Domestic Subsidiaries and Affiliated Companies	JEOL TECHNOSERVICE CO., LTD.	SYSTEM IN FRONTIER INC.
	JEOL YAMAGATA CO., LTD.	Micro Denshi Co., Ltd.
	JEOL INSTRUMENTS INC.	CeSPIA Inc.
	JEOL RESONANCE Inc.	

Note: On April 1, 2021, we completed a full merger with our wholly owned subsidiary JEOL TECHNICS LTD.

Stock Information (As of March 31, 2022)

Stock Information	Authorized shares	100,000,000
	Issued shares	51,532,800
	Number of shareholders	15,628

Major Shareholders	Shareholders	Number of shares (thousand)	Percentage of total shares held (%)
	The Master Trust Bank of Japan, Ltd. (Trust account)	5,848	11.4
	SSBTC Client Omnibus Account	3,029	5.9
	Northern Trust Co. (AVFC) Re Fidelity Funds	2,718	5.3
	Nikon Corporation	2,300	4.5
	Custody Bank of Japan, Ltd. (Trust account)	2,285	4.4
	Custody Bank of Japan, Ltd. (Trust account 4)	1,288	2.5
	MUFG Bank, Ltd.	1,125	2.2
	JEOL Mutual Prosperity Association	1,120	2.2
	Nippon Life Insurance Company	1,042	2.0
	JEOL Group Employee Stock Ownership Association	926	1.8

Ownership ratio is calculated by subtracting treasury stock.

Overseas
Subsidiaries

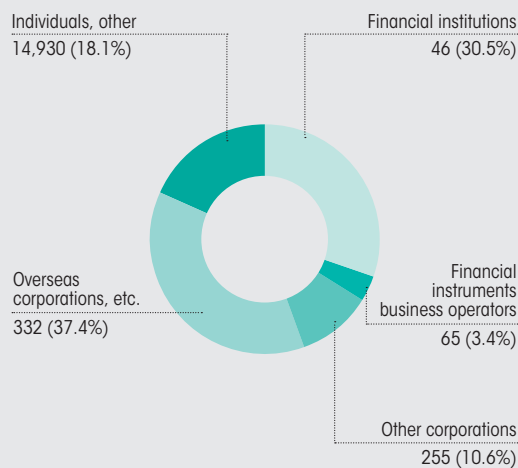
- A** JEOL USA, INC. [USA]
- B** JEOL (EUROPE) SAS [France]
- C** JEOL (U.K.) LTD. [U.K.]
- D** JEOL (EUROPE) B. V. [the Netherlands]
- E** JEOL (GERMANY) GmbH [Germany]
- F** JEOL ASIA PTE. LTD. [Singapore]
- G** JEOL TAIWAN SEMICONDUCTORS LTD. [Taiwan]
- H** JEOL (AUSTRALASIA) PTY. LTD. [Australia]
- I** JEOL DE MEXICO S.A. DE C.V. [Mexico]
- J** JEOL CANADA, INC. [Canada]
- K** JEOL (Nordic) AB [Sweden]
- L** JEOL (ITALIA) S.p.A. [Italy]
- M** JEOL Shanghai Semiconductors Ltd. [China]

- N** JEOL SEMICONDUCTORS KOREA Co., Ltd. [Korea]
- O** JEOL (MALAYSIA) SDN. BHD. [Malaysia]
- P** JEOL DATUM Shanghai Co., Ltd. [China]
- Q** JEOL BRASIL Instrumentos Cientificos Ltda. [Brazil]
- R** JEOL (BEIJING) CO., LTD. [China]
- S** JEOL (RUS) LLC [Russia]
- T** JEOL INDIA PVT. LTD. [India]
- U** JEOL GULF FZCO [UAE]
- V** JEOL ASIA (THAILAND) CO., LTD. [Thailand]
- W** JEOL KOREA LTD. [Korea]
- X** Integrated Dynamic Electron Solutions, Inc. [USA]
- Y** IonSense, Inc. [USA]*

Note: IonSense Inc. was excluded from equity method affiliates due to the sale of shares in April 2022.

Breakdown of
Shares

By type of shareholders



By number of shares owned

