# Company Profile

JEOL Ltd.
Japan Electron Optics Laboratory

# “Creativity and Research & Development”

*Advancing global technology for a better world*
*Creating a new scientific tools Inspiring - Energizing*

JEOL was established in 1949, not long after the end of the war, as a company to develop and manufacture electron microscopes with the aim of contributing to the progress of science and technology.
JEOL is the acronym of Japan Electron Optics Laboratory Co., Ltd., the English name of JEOL at the time of its establishment.
“JEOL”, this recognized brand name, is spreading throughout the world.

JEOL has expanded its business to a broad range of markets and strengthened a global & service network, leading to the current status gaining us the reputation as a world-leading manufacture of scientific and metrology instruments, industrial equipment and medical equipment.

Right image
Courtesy: Professor Peter A. van Aken, Max Planck Institute for Solid State Research

High-temperature superconductors, which reduce electric resistance to 0 (zero), are utilized for energy saving of electrical equipment. JEOL atomic-resolution TEM was used to observe a crystal structure of a copper-oxide high-temperature superconductive material, one of high-temperature superconductive materials.
All atomic columns in a multi-layer structure are clearly visible in an aberration-corrected scanning transmission electron microscope (STEM) image.

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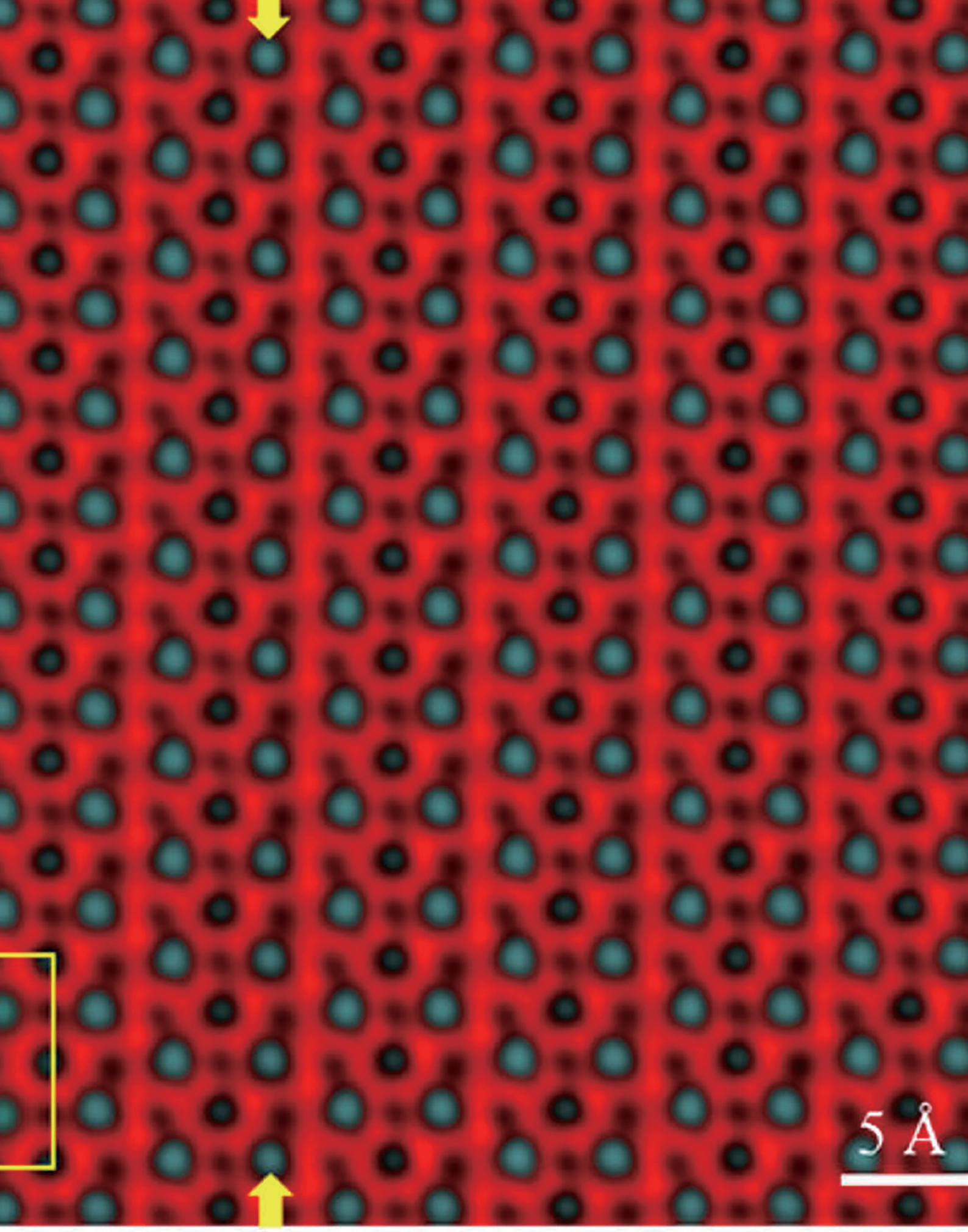
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# New Medium-Term Management Plan

FY 2022–2024

# Evolving Growth Plan

## Expanding our business scale and increasing profitability

We will accelerate our 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.


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.

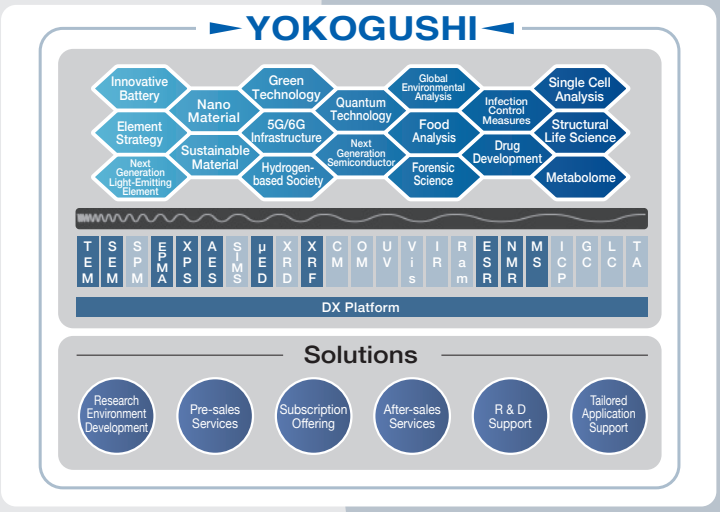
4 **Achieve growth in three areas: customer value; employees and human resources; plus sales and profits.**
Achieve well-balanced growth to expand the scale of our business operations.

5 **Initiatives for the SDGs**
Tackle materiality (important social issues) from two perspectives: business activities and the ESGs.

FY 2013 ~

## ►YOKOGUSHI◄

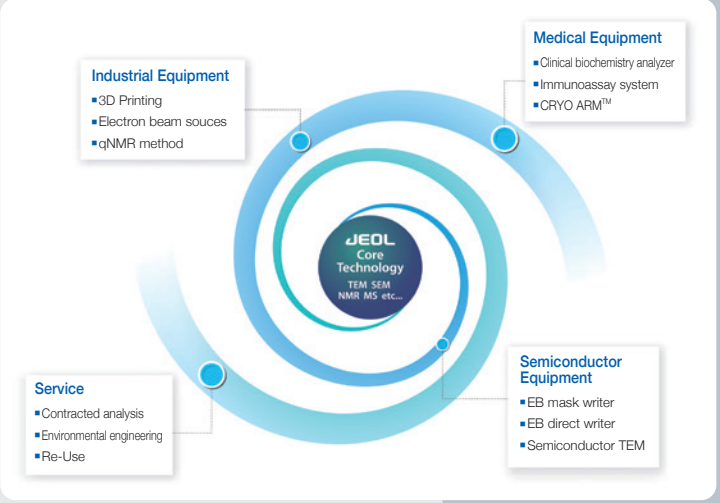
As a company with an extensive product lineup, we will combine our diverse and multifaceted instruments and technologies in an organic and cross-sectional way, implementing our YOKOGUSHI strategy to provide total solutions.
In addition, we will not only take the initiative internally, but will also promote 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.



# Technology

70 years since our funding in 1949.
Starting with the development of the electron microscope, we at JEOL have been serving the progress of scientific technology around the world.
We have continued to create unrivaled, world-leading technology. Our variety of instruments, such as scientific instruments and analytical instruments, have been highly regarded all over the world. Nowadays, JEOL instruments are used at universities and laboratories in more than 130 countries, in support of Nobel Laureates and top scientists in the world, for advancing the research and industry worldwide.
Positioning our 70th anniversary as our turning point, on the basis of our core technologies cultivated in the academia market, JEOL will expand its business to the bigger markets including industrial equipment and medical equipment.

## Exploring the Amazing Future in the Nano World

## Characterization

Transmission electron microscopes, scanning electron microscopes, etc., are used for characterization, which is a core technology of the JEOL Group accumulated since its establishment.

## Nanometrology

JEOL metrology and analytical instruments are used in a variety of researches such as structural analysis of proteins and environmental contaminants.

## Fabrication

Key JEOL technologies for beam control, ultrahigh vacuum, nanofabrication, etc., are contributing to a wide range of fabrications.

- Basic research
- Education
- Medicine, Biology
- Chemistry
- Batteries, Energy
- Environment, Asbestos
- Automobiles
- Semiconductors, Electronic components
- Food
- Drug
- Rubber, Plastic
- Glass, Ceramics, Cement
- Metal

# Products

JEOL Ltd., a world-top-class maker of cutting-edge scientific instruments, continues to offer total solutions that meet the needs of customers. Utilizing its high R & D capability, JEOL has a broad range of product lineup used for various fields including; researches and applications in nanotechnology, biotechnology, ecology and life science, clinical testing, and industrial fields such as product development, quality control and manufacturing lines.


## Scientific & Metrology Instruments business

**Electron optics instruments**
Transmission electron microscopes
Analytical electron microscopes
Electron probe microanalyzers
Photoelectron spectrometers
Auger microprobes
Electron microscope peripheral equipment
Soft X-ray emission spectrometers

**Analytical instruments**
Nuclear magnetic resonance systems
Electron spin resonance systems
Mass spectrometers (MALDI-TOFMS, GC-MS, LC-MS)
Portable gas chromatograph
Micro CT structural analysis system

**Measuring instruments**
Scanning electron microscopes
Analytical scanning electron microscopes
Electron microscope peripheral equipment
Multi beam systems
Focused ion beam systems
CROSS SECTION POLISHER™
Energy dispersive X-ray fluorescence spectrometers
Electron diffractometer

## Industrial Equipment business

**Semiconductor equipment**
Electron beam lithography systems (spot beam, variable shaped beam)

**Metal AM machine**
Electron beam metal 3D printer

**Industrial equipment for thin-film formation and material processing**
High-power electron beam source & power supply
Electron beam source & power supply for vacuum deposition
Bombardment deposition source
RF generator & plasma source
RF induction thermal plasma system
Powder feeder
Electron beam source for research & development

## Medical Equipment business

**Medical equipment**
Clinical chemistry analyzers
Laboratory information systems

JEM-3300

JEM-F200

JSM-IT800

JCM-7000

JIB-4000PLUS

JXA-iHP200F

JAMP-9510F


JPS-9030

JNM-ECZL

JMS-S3000

JBX-8100FS

JAM-5200EBM

TP series

JCA-BM8040GX

JCA-ZS050

# Sustainability

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 | • Provide medical equipment indispensable for the diagnosis and prevention of illness<br>• Provide equipment with high sensitivity and accuracy that can analyze substances harmful to the human body<br>• Provide manufacturing equipment that contributes to the further development of sensing technology | 3 GOOD HEALTH AND WELL-BEING<br>11 SUSTAINABLE CITIES AND COMMUNITIES |
| | Contribute to scientific progress and the sustainable development of society | • Develop world-class scientific instruments supporting advancements in science<br>• Contribute to higher performance semiconductors supporting the communication infrastructure<br>• Create advanced technology by promoting partnerships | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE<br>17 PARTNERSHIPS FOR THE GOALS |
| | Contribute to the conservation and sustainability of the global environment | • Provide measuring equipment indispensable for the R&D of green devices<br>• Manage chemicals throughout the supply chain by using green purchasing<br>• Develop equipment that reduces CO2 emissions by conserving energy | 7 AFFORDABLE AND CLEAN ENERGY<br>12 RESPONSIBLE CONSUMPTION AND PRODUCTION<br>13 CLIMATE ACTION |
| SDGs being addressed through ESG initiatives | Conduct distinctive activities that contribute to the community and society | • Provide science education support (lessons) using electron microscopes at elementary and junior high schools<br>• Support academic promotions and the fostering of young researchers by donating to public interest incorporated foundations<br>• Promote open innovation in collaboration with domestic and overseas research institutes and universities | 4 QUALITY EDUCATION<br>17 PARTNERSHIPS FOR THE GOALS |
| | Contribute to the conservation and sustainability of the global environment | • Streamline electricity use by introducing energy-saving equipment and other initiatives<br>• Reduce $CO_2$ emissions at business locations throughout the Group<br>• Thoroughly separate, reduce, and recycle waste<br>• Deploy the Don't Litter campaign, a cleanup drive for beautifying the surroundings | 7 AFFORDABLE AND CLEAN ENERGY<br>12 RESPONSIBLE CONSUMPTION AND PRODUCTION<br>13 CLIMATE ACTION |
| | Develop human resources and respect human rights | • Promote the creation of a workplace where women can more easily develop their careers<br>• Enhance systems to help bring balance to work and family in line with every person's stage in life<br>• Improve the awards program for employees making exceptional achievements | 5 GENDER EQUALITY<br>8 DECENT WORK AND ECONOMIC GROWTH |

4 QUALITY EDUCATION

## 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.

# Open Innovation

**The YOKOGUSHI strategy is our unique model to provide solutions in cutting-edge technological fields, based on our broad product lineup that you will not find anywhere else. Combining those products in an organic way allows us to develop innovative solutions and applications. Having collaborated up to now with other companies, organizations, and public & private research institutes, the YOKOGUSHI platform produces strong cross-sectional ties, thus creating unprecedentedly new values.**

## Osaka University and JEOL: Mass Spectrometry Open Innovation Joint Research Chairs

In April 2017, a project between Osaka University and JEOL was established aiming for developing multi-disciplinary basic and applied researches on mass spectrometers and relevant technologies, and also for promoting these cutting-edge technologies around the world.

## The University of Tokyo-JEOL University-Corporate Collaboration Office

This collaboration office was established in June 2005 by JEOL and the Institute of Engineering Innovation, School of Engineering, the University of Tokyo to promote collaborative researches using advanced technologies (mainly electron microscopes) for people around the world.

## Osaka University Institute for Protein Research and JEOL: Establishment of Endowed Research Department

In June 2016, this endowed research department was established aiming for revealing biological functions by utilizing analytical methodologies of cryo-electron microscopes and NMR, and for leading to creating innovation such as drug discovery.

## COMS-NANO: Establishment of Consortium for Measurement Solutions for Industrial Use of Nano-materials

JEOL and several analytical instrument makers joined this consortium, established by NIMS, to develop methods and instruments for characterizing nanomaterials through collaborative researches. Not only analytical instrument makers, but also a broad range of makers, universities and public research organizations will pursue research and development through close collaborations.

## Establishment of RIKEN CLST-JEOL Collaboration Center

In November 2014, JEOL collaborated with RIKEN to establish RIKEN CLST-JEOL Collaboration Center. The center serves to create unique technologies for Japan to compete in global competition in the field of analytical/diagnostic instruments.

## Establishment of NIMS-JEOL Center for Excellence of Analytical Technology

In October 2015, this center was established jointly by JEOL and the National Institute for Materials Science (NIMS). The purpose of the center is to strengthen collaborative researches using NMR for developing more advanced analytical technologies of materials.

## JEOL-Nikon CLEM Solution Center

In September 2017, a collaborative project between Nikon and JEOL was established to provide experience, and disseminate technical information on CLEM (Correlative Light & Electron Microscopy) solutions.

## Collaboration with Yale University

JEOL Field-Emission Electron Probe Microanalyzer (FE-EPMA) installed at Yale University is being used to evaluate geological materials at the micro- and nano-scale.

## Collaboration with the University of Illinois at Chicago

The University of Illinois at Chicago, which has JEM-ARM200F Cs-corrected S/TEM instrument equipped with a cold field emission gun, plays a critical role in nanomaterials research with atomic resolution.

## Collaboration with Baylor College of Medicine

National Center for Macromolecular Imaging (NCMI) at Baylor College of Medicine, which has JEOL Cryo-TEM, is engaged in collaborative service projects with a variety of groups around the world.

## Collaboration with McCrone Associates, Inc.

McCrone Associates (McCrone Group), which uses JEOL TEM/SEM/EPMA instruments, provides technical guidance and instrumentation support to laboratories worldwide.

## Collaboration with Indian Institute of Science (IISc)

In 2014, JEOL made an agreement with Indian Institute of Science (IISc), which is one of the highest scientific graduate schools in India. Based on the agreement, IISc-JEOL NMR Collaboration Office was established to promote collaborative researches that enhance cutting-edge NMR technologies in India. This office is a top-class NMR research organization in Asia.

## 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.

# Corporate Social Responsibility

## A Thriving Natural Environment
to pass down to our precious children

## Environmental Activities

### Promotion of Environmental Conservation Activities

From FY2006, the integrated management system (IMS), combining ISO 9001 and ISO 14001, had been implemented. From FY2016, a new JGMS (JEOL Group Management System) has been established to take the following measures to decrease the burden on the environment.

### Environment protection through products

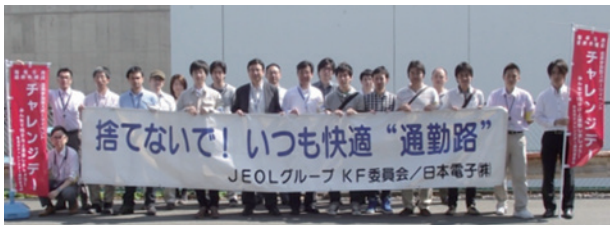
JEOL environmental-friendly design standard and the green procurement measures to remove hazardous substances from the production site have been applied over the entire lifecycle of the products, so as to decrease the burden on the environment. In addition, for the products exported to the EU regions, we comply with various restrictions such as WEEE directive and RoHS directive. For the products exported to China, we comply with RoHS directive in China.

### Reducing Greenhouse Effect Gasses

In the production and repair processes of the JEOL Group products, SF6 gases used to be released into the atmosphere, yet, have been all recovered since April 2008. In addition, to abolish HCFC (hydrochlorofluorocarbons) used for washing the product components, we are replacing the HCFC facilities with the water washing tanks.

### "Don't Litter" Campaign (cleaning up commuting routes)

This campaign is a volunteer community service activity that JEOL employees have been performing since 1994, and it became a regular part of the routine. About once every 2 months, the employees do this activity during their morning commute.




### Participation in Akishima-shi environment consideration enterprise network

Based on the concept of contribution from the regional level to the global environment, we actively participate in the Akishima-shi environment consideration enterprise network, which was set up in April 2005 and involves Akishima city and enterprises in the city.

## Contribution to Society

### Science Class Support and Math & Science Special Program

The Science Class Support Project was started in Oct. 2007 as part of the commemoration of the 60th anniversary of the JEOL Group. Initially, the activities were held only at nearby elemental schools, but were later expanded to a variety of sites. A total of 649 classes on 392 days have been performed until the end of FY2021. In addition, we have been working in collaboration with universities and enterprises to increase the number of children with an interest in mathematics and science, through programs organized by Tokyo Board of Education from FY2015.

### Supporting the Kazato Research Foundation

The Kazato Research Foundation was established in 1969, in commemoration of the 20th anniversary of JEOL, funded by a donation from Kenji Kazato, the founder of JEOL. The Foundation implements various grant programs for fostering young researchers in electron microscopy and related scientific fields to make contributions to academic development through promoting their researches using electron microscopes and related instruments. JEOL continues to support these activities with annual donations with a hope of progress of material & life sciences.

# Topics

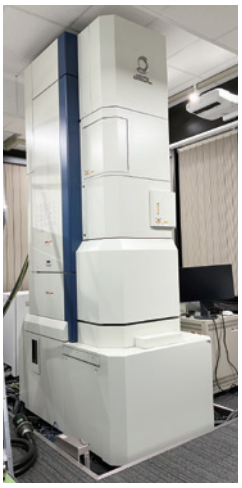
## Merger with a subsidiary of NMR & ESR to strengthen the earning power of Scientific and Metrology instruments business

On October 1, 2022, we merged with our wholly owned subsidiary JEOL RESONANCE Inc. (JRI), developing and manufacturing nuclear magnetic resonance systems (NMR) and electron spin resonance systems (ESR). Integrating JRI into JEOL, we are determined to promote coordinating systems and to provide greater added value to customers. This will strengthen our scientific and metrology instruments business.


NMR system
JNM-ECZL600G

## Successful development of a revolutionary electron microscope directly observing an atomic magnetic field

Under the Development of Advanced Measurement and Analysis Systems program of Japan Science and Technology Agency, the University of Tokyo and JEOL made success of directly observing an atomic magnetic field for the first time in the world, using the Magnetic-field-free Atomic-Resolution STEM (MARS). This new technique will drive research on magnetism of advanced materials as well as development of semiconductor devices, quantum technologies, etc.



MARS

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

In March 2020, we announced the establishment of our new plant for electron beam lithography systems, which have seen increasing demand. Practical operations of the plant at Musashimurayama City began in October 2021. In May 2022, we made the first shipment of the first model of our multi-beam mask writer platform produced at this new plant.


Musashimurayama Factory

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

Our first electron beam metal 3D printer (JAM-5200EBM), which was released in March 2020, was awarded the 64th Best 10 New Products, sponsored by the Japan Daily Industrial News. JAM-5200EBM symbolizes Japan's high production capabilities and was commended as an outstanding product that leads the global market.

Photo: Courtesy of Daily Industrial News (Nikkan Kogyo Shimbun)

## Expanding business in the European medical equipment market

Further growth in healthcare is expected from the European medical equipment market. Growth is also expected in regions such as Middle East and Eastern Europe, given the development of medical infrastructures in line with their economic growth. 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. The new showroom has our new medical products with their demonstration spaces, as well as provides fast, effective training for our distributors. By pursuing the reduced product delivery times through warehouse logistics, we will further boost customer satisfaction.

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

# Events / Seminars

The JEOL Group places a high priority on communication with customers.

## Participation in academic meetings and exhibitions

### Hearing the needs of customers

Participation in a variety of worldwide academic meetings and exhibitions provides the JEOL Group with a strong foundation for product development. It also gives us important opportunities to speak with customers who are involved in cutting-edge discoveries using our instruments. Exhibitions are crucial opportunities to learn first-hand information on customer needs. The JEOL Website provides information on exhibitions that the JEOL Group will participate in and also demonstrate new products.


## Seminars at customer's site

### On-site seminar at the customer's research laboratory

For customers who find it difficult to make time to attend a seminar at the JEOL Group, we hold seminars at customer's sites upon request. In such cases, the JEOL Group research and application staff members will visit the customer's office or research laboratory for seminar.

## Users' meetings

### Exchanging valuable information with customers

Our users' meetings have become regular events that customers look forward to every year. Customers engaged in various fields talk about their experience and present experimental data. Each of the users' meetings serves as a forum for information exchange between users, JEOL engineers and application researchers.

## Lecture seminars and training seminars

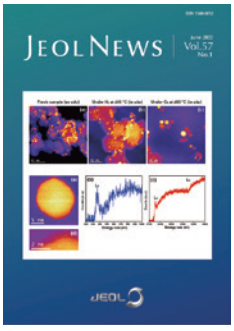
### For intensive study from basics to applications of instruments

We invite lecturers to hold seminars to provide our customers with instrumental knowledge from basic technology to high-level applications. The seminar course is suitable for intensively studying the technical field concerned. For people with a certain degree of skill, this course should be meaningful and enable them to review the basics and work out a future theme of study. A seminar course allows beginners to obtain a basic introduction to the noted field.
In addition, we organize training seminars where novice users or users who have bought new models can operate actual JEOL instruments. These training seminars are useful because various users can smoothly learn how to operate the instrument depending on the degree of skill.

## Technical information

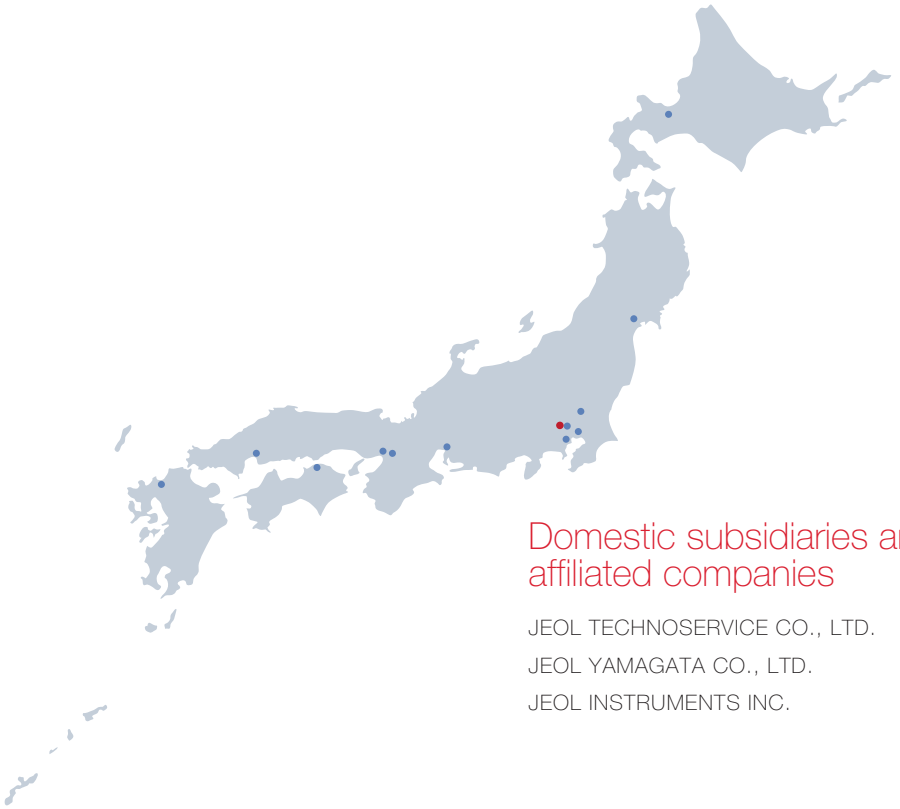
### Providing the newest information to customers

The JEOL Group issues a variety of publications, including "Nihondenshi News", "JEOL News", "Solutions News", "Applications Note", "Product Information", "Service Notes", and "Mass Media (USA)", "JEOLink (USA)", and "REALab (USA)" for introducing new products, new techniques and new applications.

# Network

The JEOL Group is striving to make use of its Global Network to maximize customer satisfaction by working to further develop operations in the solutions field, in addition to the business model focusing on sales of instruments.



## Domestic bases

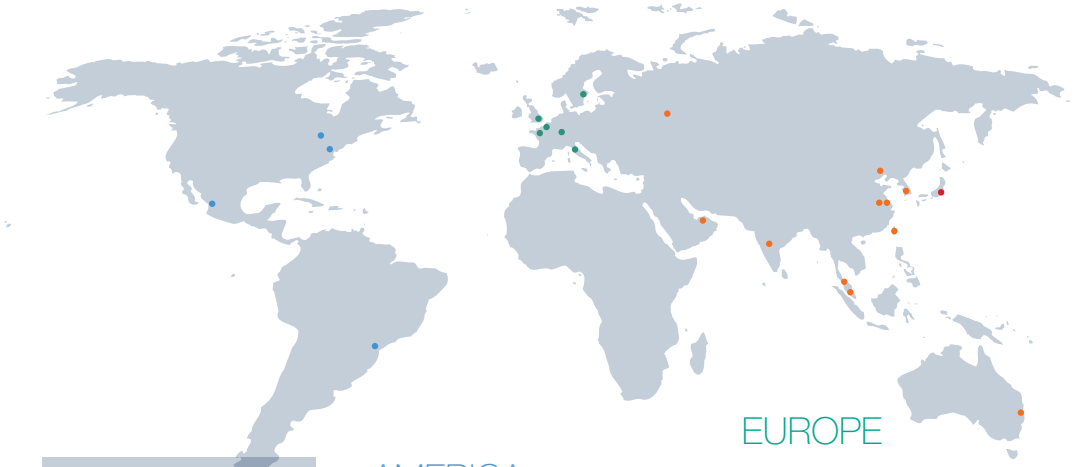
Akishima Head Office & Factory
Service support

Tokyo Office
Yokohama Office

Sapporo Branch
Sendai Branch
Tsukuba Branch
Tokyo Branch
Nagoya Branch
Osaka Branch
West Japan Solution Center
Takamatsu Branch
Hiroshima Branch
Fukuoka Branch

## Domestic subsidiaries and affiliated companies

JEOL TECHNOSERVICE CO., LTD.
JEOL YAMAGATA CO., LTD.
JEOL INSTRUMENTS INC.



## AMERICA

JEOL USA, INC.
JEOL DE MEXICO S.A. DE C.V.
JEOL CANADA, INC.
JEOL BRASIL
Instrumentos Cientificos Ltda.

## EUROPE

JEOL(EUROPE)SAS
JEOL(U.K.)LTD.
JEOL(EUROPE)B.V.
JEOL(Nordic)AB
JEOL(GERMANY)GmbH
JEOL(ITALIA)S.p.A.

## ASIA / OCEANIA

JEOL ASIA PTE. LTD.
JEOL TAIWAN SEMICONDUCTORS LTD.
JEOL(MALAYSIA)SDN. BHD.
JEOL(AUSTRALASIA)PTY. LTD.
JEOL(BEIJING)CO., LTD.
JEOL Shanghai Semiconductors Ltd.
JEOL DATUM Shanghai Co.,Ltd.
JEOL(RUS)LLC
JEOL INDIA PVT.LTD.
JEOL KOREA LTD.
JEOL GULF FZCO

Access to JEOL Group worldwide through www.jeol.com
From the Global Site to local sites around the world

# History of JEOL

Our History of "Creativity" and "Research and Development"

## Creating a Culture for Revealing Microstructures

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.

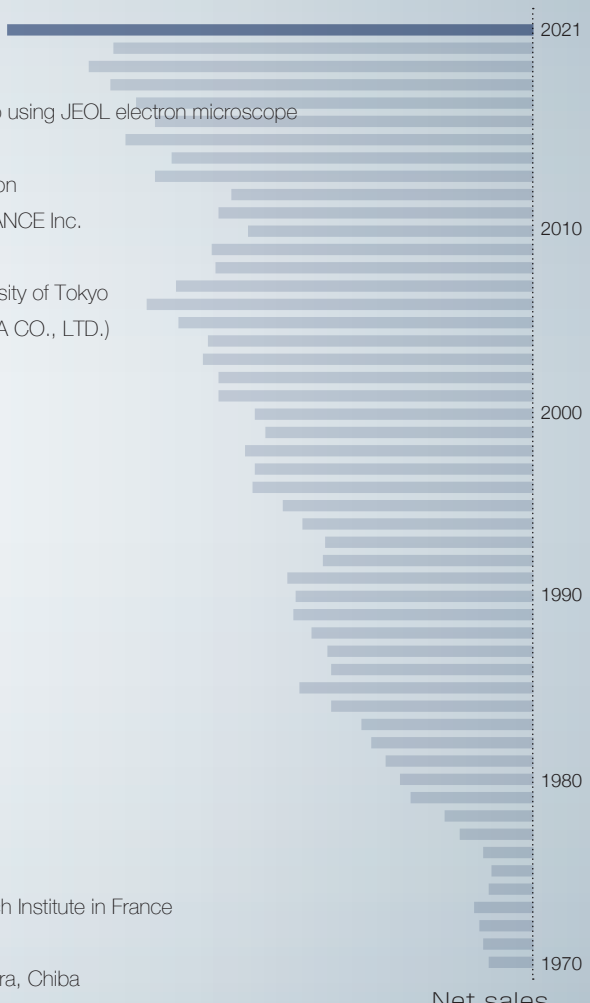
Kenji Kazato
Founder

## Evolving in the 70th Year
–Approach to Growth Markets–

**2022** Merged with JEOL RESONANCE Inc.
**2020** Acquired California, USA-based venture company IDES
**2019** 70th Anniversary Forum held at Hotel New Otani
**2017** Best-in-class spatial resolution achieved jointly with the University of Tokyo using JEOL electron microscope
**2015** NIMS-JEOL Center of Excellence for Analytical Technology established
**2014** Agreement on capital and business alliance reached with Nikon Corporation
**2011** Nuclear magnetic resonance business split off to establish JEOL RESONANCE Inc.
**2006** Established JEOL Shanghai Semiconductors Ltd. in Shanghai
**2005** Agreed to set up an industry-academia collaboration office with the University of Tokyo
**2002** Established YAMAGATA CREATIVE CO., LTD. (currently JEOL YAMAGATA CO., LTD.)
**1997** Overseas subsidiary established in Germany
**1996** JEOL Group website launched
**1995** Overseas subsidiary begins in Singapore
**1985** Office opened in Beijing, China
**1981** Name of the Company in English formally becomes JEOL Ltd.
**1976** World's first atomic micrograph taken with a JEOL electron microscope
**1973** Overseas subsidiaries established in the Netherlands and Sweden
**1970** Overseas subsidiary established in Italy
**1969** Kazato Research Foundation established to support academic learning
**1968** Overseas subsidiaries established in the UK and Australia
**1966** JEOL listed on the First Section of the Tokyo Stock Exchange
**1964** Overseas subsidiary established in France
**1962** First overseas subsidiary established in the United States
**1961** Company name changed to JEOL Ltd.
**1959** Representative office opened in Paris, France, as the first overseas office
**1956** First electron microscope exported to CEA Saclay Atomic Energy Research Institute in France
**1949** Japan Electron Optics Laboratory Co., Ltd. established in Mitaka, Tokyo
**1947** Predecessor company, Electron Science Laboratory, established in Mobara, Chiba

FY 2021
consolidated net sales:
¥138,408 million

Note: Net sales on a non-consolidated basis until fiscal 1976.

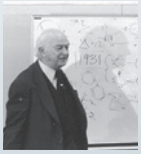



## Visits by **Nobel Prize winners**

**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)

**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)

# Company Profile

Based on the Company Philosophy and the Guiding Principles, we aim to deliver the best products and services to our customers all over the world.
With continually supporting and working together with the customers, we will strive to make continuous contributions to the future of Science.

## 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 a pride as JEOL staff and realizing 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 others' 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.

## Company Outline

**Name**
JEOL Ltd.

**Address (head office)**
1-2, Musashino 3-chome, Akishima, Tokyo, 196-8558, Japan

**Business activities**
Manufacturing, sales, research and development of high-precision scientific instruments (electron optics instruments and analytical instruments), measuring instruments, semiconductor equipment, industrial equipment and medical equipment.
Manufacturing and maintenance service of products and components associated with these instruments, and purchase and sales of peripheral equipment.

**Establishment**
May 30, 1949

**Capital**
21,394 million yen (as of March 31, 2022)

**Stock**
Listed on the Prime Market of the Tokyo Stock Exchange

**Net Sales (consolidated)**
138,408 million yen (as of the end of fiscal year 2018 (March 31, 2022)

**Number of employees (consolidated)**
3,291

**Domestic subsidiaries and affiliated companies**

| Corporate name | Production | R&D, design | Service | Training, others |
|---|---|---|---|---|
| JEOL TECHNOSERVICE CO., LTD. | | | | ● |
| JEOL YAMAGATA CO., LTD. | ● | | | |
| JEOL INSTRUMENTS INC. | | | ● | |

Akishima Head Office & Factory

The DA-1, a transmission electron microscope developed in 1947, is an early magnetic field electron microscope that was designated as a “Mirai (future) Technology Heritage” by National Museum of Nature and Science, Tokyo.
The photo shows the one that was originally delivered to Ibaraki University. This microscope is the only one in existence.
The DA-1 is currently preserved and displayed at the company headquarters in Akishima.

▼ Local office

Certain products in this brochure are controlled under the "Foreign Exchange and Foreign Trade Law" of Japan in compliance with international security export control. JEOL Ltd. must provide the Japanese Government with "End-user's Statement of Assurance" and "End-use Certificate" in order to obtain the export license needed for export from Japan. If the product to be exported is in this category, the end user will be asked to fill in these certificate forms.


JEOL Ltd.

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www.jeol.com ISO 9001・ISO 14001 Certified


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Fax. 54-11-4555-3321

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- Frenchs Forest NSW 2086
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Fax. 61-2-9451-3822

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Room A2118, Zhongshang Plaza Office Bldg.,
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Fax. 86-27-8713-2567

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1807A Zongfu Building,
NO. 35 Zhongfu Road, Chengdu, Sichuan, 610016
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JEOL SERVICE BUREAU
3rd Fl. Nile Center Bldg., Nawal Street,
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Espace Claude Monet, 1 Allee de Giverny
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Unit No. 1009, 10/F., Prosperity
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Kolkata - 700017, India
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1-10-39 to 44, level 4, Gumidelli Towers, Old Airport Road,
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Fax. 52-5-55-211-0720

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Dubai, UAE
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Fax. 971-4-609-1498

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Fax. 507-303-3115

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