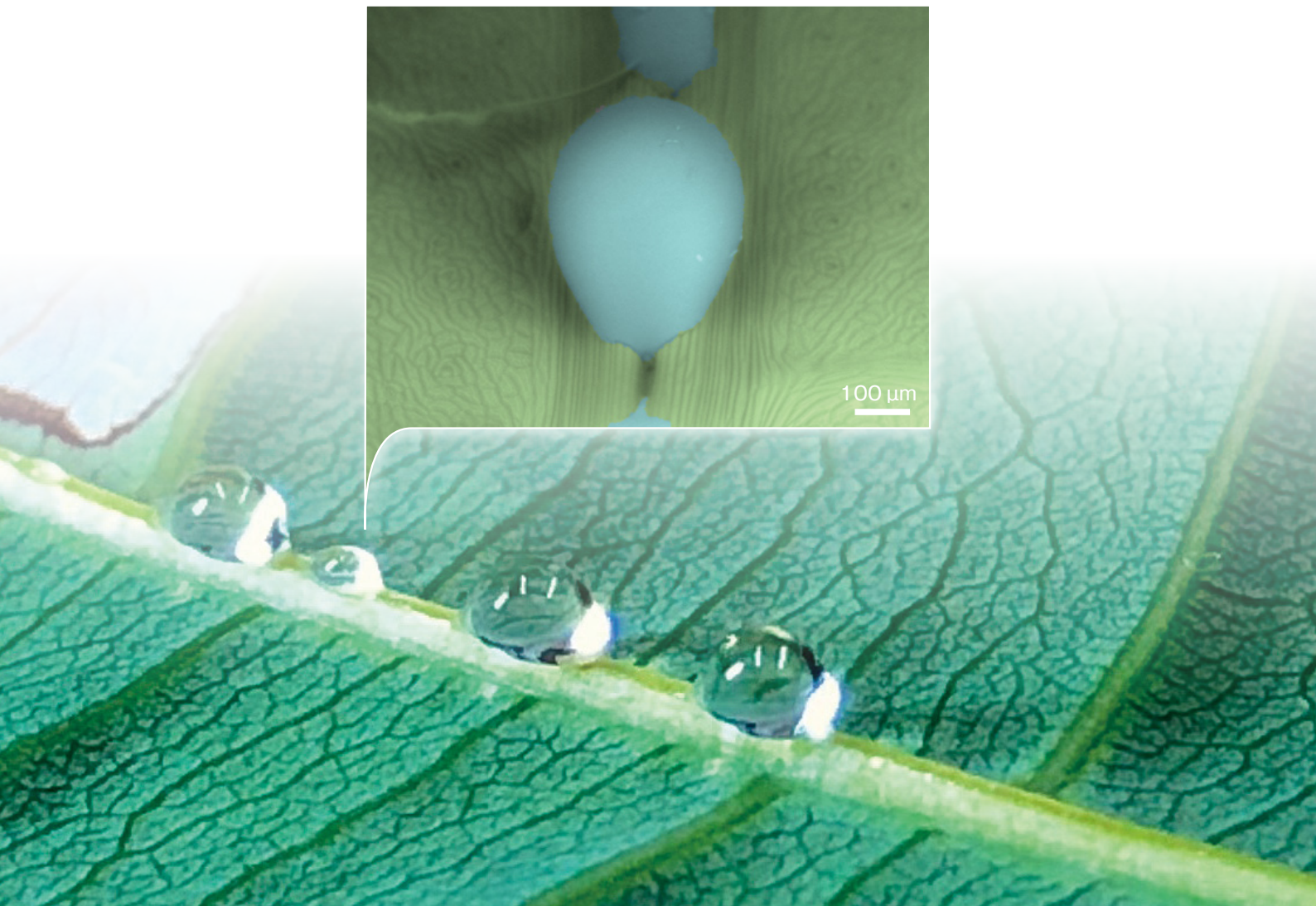


# JEOL Group Environmental Activities 2017 Report



# JEOL Group Environmental Activities 2017 Report

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## Company Outline

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Company name : JEOL Ltd.

Establishment : May 30, 1949

Main office : 3-1-2 Musashino, Akishima,  
Tokyo 〒 196-8558 JAPAN

Employees : 3,008 (As of end March 2018)

## Report scope

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Subject organization : JEOL Ltd.

JEOL Technics Co. Ltd.

JEOL Yamagata Co., Ltd.

JEOL RESONANCE

Target period : April 1, 2017 to March 31, 2018

Field : Matters related to environmental protection

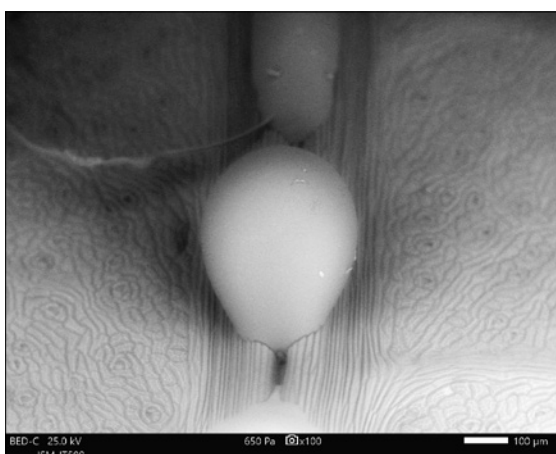
Target audience : Everyone

## Cover

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Droplets exuded from the back of a Pachira leaf observed with an optical camera and scanning electron microscope JSM-IT500. The electron microscope image was acquired using the Aqua Cover method, and the colors were added by referring to the color information obtained with the optical camera.

Original SEM image



# 2017

## A Letter from Our CEO

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The JEOL Group management philosophy is to “On the basis of “Creativity” and “Research and Development”, JEOL positively challenges the world’s highest technology, thus forever contributing to progress in both science and society through its products.” That is, there can be no progress of society if there is no advancement in science. This expresses the passionate belief held at the time that JEOL was founded in 1949 to produce and sell electron microscopes. Under this philosophy, throughout the years the JEOL Group has continued to develop and provide scientific metrological instruments that contribute to cutting-edge research, like Electron Microscopes and Nuclear Magnetic Resonance; Medical Equipment that supports the preservation of human health, like biochemical analyzers; and high-efficiency, energy-conserving industrial equipment.

As a part of the philosophy of “sustainable society”, there has been a world-wide focus on the issues of energy resource depletion and the destruction of the natural environment. Science and technology is challenged with the important role of research and development of technologies such as more efficient solar power generation, high-efficiency power transmission technology, and technologies for utilizing biomass. In addition, as a part of the current generation responsible for preserving and passing on a beautiful environment to future mankind, the power of science has become very important in terms of finding solutions against environmental pollution, the decommissioning of nuclear power plants and so on. We are confident that the scientific/metrology instruments that we develop can make a large contribution to addressing these issues. At the same time, the growing speed of semiconductors, development of industrial technology, as well as the remarkable progress in medical technology are all contributing to the further enrichment of society. In keeping with the JEOL corporate message of “Solutions for Innovation”, we will continue to work hard to provide the optimal solutions.



In order to implement the JEOL Group philosophy, and to promote the development of science and technology in Japan, we believe it is important to foster the development of the personnel. As a part of the effort to achieve this, we support young researchers through the operation of the Kazato Research Foundation, as well as working to support science through activities like special classes at elementary and junior high schools utilizing electron microscopes, to help reverse the trend of children moving away from interest in science.

We also regard contribution to our local community as being very important. We continue to actively participate in the Akishima Environment Consideration Enterprise Network in a vice-executive role. Through this network, in collaboration with the city of Akishima and local enterprises, we contribute to the improvement of the local environment.

Since starting as a company that developed electron microscopes shortly after the end of the war in May 1949, the JEOL Group has received warm local support, and has grown into a company that is expected to meet the needs of the world. Making use of our world-leading technologies, the JEOL Group will continue to provide products quickly and flexibly to meet the ever-changing needs from around the world.

**栗原 権右衛門**

Gon-emon Kurihara  
President & Representative Director

## Outline of JGMS (JEOL Group Management System)

### Outline

In 2015, the international standards on Environment Management Systems and Quality Management Systems were revised (ISO14001:2015, ISO9001:2015). The JEOL Group also undertook a comprehensive review of the Integrated Management System (IMS), and established the JEOL Group Management System (JGMS) as the new integrated management system in conformance with the revised ISO standards. JGMS has been operating since March 2016. In the revised points of the new ISO standards, the involvement of the top executives in the integration of the operations of management systems received greater emphasis. It is important to understand the circumstances, both internal and external, identify the issues and evaluate the risks; and, this must be properly communicated to responsible people in each division. Plans are made in each division based on these instructions, and continuous improvements are achieved through appropriate development, implementation and assessment, creating a PDCA cycle throughout the company as a whole. Such instructions from top management are implemented through JGMS and disseminated to all divisions and levels.

As a result of the construction of JGMS, in October 2016 the JEOL Group was recognized by certification authorities as being compliant with ISO14001:2015 and ISO9001:2015, and the certifications under the new ISO standards were issued.

### Policy

The quality and environmental policies are clearly communicated both internally and externally through media such as the web site.

### Basic policy

Based on our Corporate Philosophy, The JEOL Group offers advanced products and services to the users of scientific and metrology instruments, semiconductor equipment, industrial and medical equipment, thereby contributing to the development of a sustainable, recycling-based society.

### Quality policy

- As a total solution provider, provide high quality products and well-organized services to best serve our clients.
- Continuously improve products and services by establishing goals through a cross-departmental approach.
- Promote quality control initiatives through execution and continuous improvement of our quality management system in compliance to international standards.

### Environmental policy

- Product development and process control in an environmentally friendly manner, with consideration of the entire product life-cycle.
- Continuous setting of goals and efforts to improve environmental quality at every step of our business from development to production to service.
- Compliance with applicable laws and regulations as a socially responsible global corporation.
- Promote environmental preservation initiatives through execution and continuous improvement of our environment management system in compliance with international standards.

### JEOL Group Environmental Management / Promotion System

The improvements of environmental aspects within the JEOL Group are included in the implementation of the JGMS (JEOL Group Management System), which is a comprehensive management system for both environment and quality, so that there is single management system being implemented at each of the JEOL Group companies. Based on the environmental policy, in addition to strict compliance with the law, we also work to identify the unique environmental aspects related to each area of operation, and conduct environmental improvement activities.

### JGMS Outline

As part of their corporate activities, it is natural for companies to comply with environment laws and regulations as well as to monitor and reduce wastes that create an environmental burden. ISO14001 is a system providing verification by an external agency that such activities are conducted properly and continuously. The JEOL Group first received ISO14001 certification in December 2002. From that time a comprehensive management system was constructed, also incorporating ISO9001 of the quality management system that had been previously certified for product quality control, and the Group activities were conducted in accordance with this comprehensive management system.

In 2015, both ISO14001 and ISO9001 were revised, and a new management system [JGMS] was developed, and has been in operation since FY2016. This JEOL Group Management System covers the revised points in the new ISO standards, and establishes the structure for properly conveying instructions to the responsible parties in each department with strong management leadership. This is

based on assessments of the risks, and opportunities and issues identified from an understanding of the circumstances both inside and outside the company, in order to improve customer satisfaction by emphasizing quality and managing the environmental aspects. Each department establishes a plan based on the instructions, and performs the appropriate deployment, operation and evaluation for continuous improvement. It is implemented as an PDCA cycle throughout the entire JEOL Group. In this way, the instructions from top management are delivered to all levels, and activities are conducted through JGMS as a single integrated system to achieve a better global environment and better products.

### 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 to international standards and JGMS. The issues that are pointed out in the audits are regarded as opportunities for improvement, and we make a full use of them as a tool for improving business operations.

#### Internal Audits

Regular, voluntary audit activities for environment and quality in accordance with the JGMS are performed by internal auditors for the entire JEOL Group. The internal audits are conducted objectively and without bias by internal auditors who have received the appropriate education and training, fulfilled the standards and have earned the necessary certifications.

These audits are regarded as a tool for business operation improvement. The points identified as areas of improvement for a specific group are also disseminated throughout the entire JEOL Group.

#### Second party Audits

Second party Audits In order to maintain and improve the JEOL Brand that is expected by our customers and the market, a relationship of trust with our business partners is essential.

Second-party auditors perform audits of our vendor companies. This creates a Win-Win situation between the JEOL Group and our vendor partners, as we work together, with a common goal of creating the best possible products.

# Outline of JGMS (JEOL Group Management System)

## Publication of International Certification

Not only the JEOL headquarters in Japan, but the entire JEOL Group received ISO9001 certification in December 1995, and ISO14001 certification in December 2002. Since then, the ISO standards have been revised to ISO14001:2015 and ISO9001:2015, and the JEOL Group has remained certified under the new standards without interruption. Details of the certification related to JGMS is shown below. The latest certification information can always be viewed on the JEOL website.

- » Certification authority: Bureau Veritas Certification Holding SAS UK Branch
- Registration numbers ISO14001: 3673646 1.0
- ISO9001: 3253537 1.0

## Compliance Measures

### CSR Committee

Recently corporations are being required to comply with regulations concerning "Pollution Control, Chemical Reduction, Quality/Environmental Control" as part of their Corporate Social Responsibility (CSR).

JEOL organized a committee to address this issue in 2006. The CSR Committee, headed by the president and advised by JEOL's attorney, meets quarterly. The committee's purpose is to promote JEOL's activities to continuously improve and reinforce compliance, quality control, social contribution, corporate ethics, and risk management.

### Environmental Regulations Committees

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

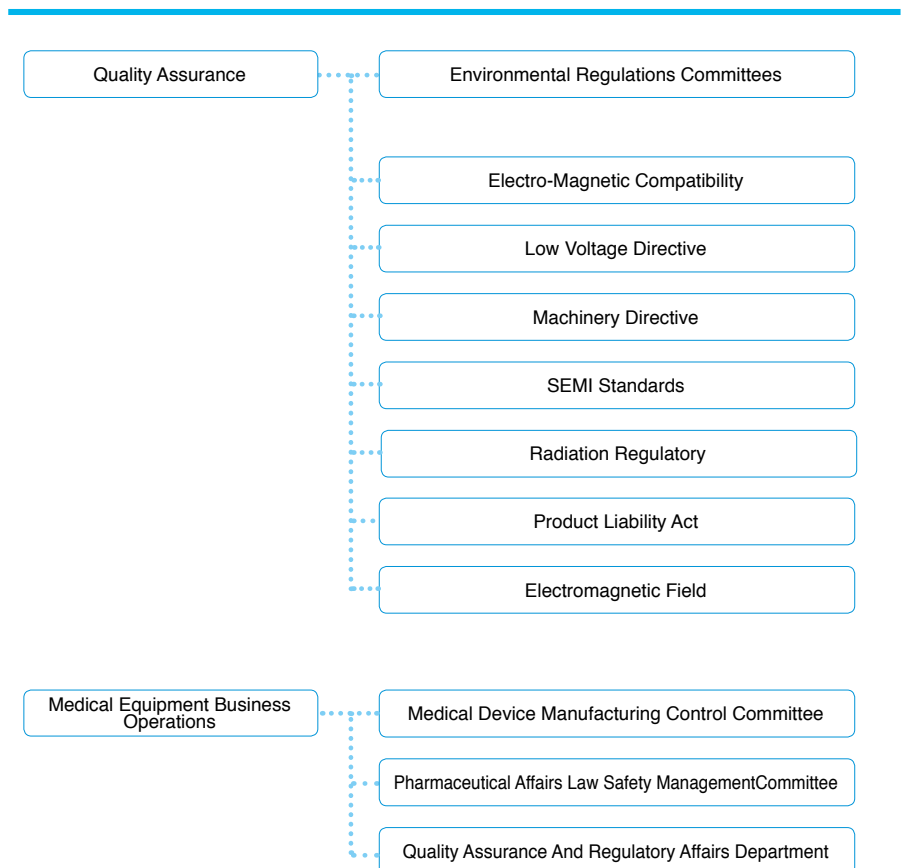
### Technical Regulation Committees

Our Engineering Division organized a number of committees to study and comply with regulations and directives worldwide.

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

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 Control Office.

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



# Environmental Protection through Products

## Measures to decrease the burden on the environment

The JEOL Group contributes to improving the global climate by developing and marketing environmentally-conscious and environmentally-contributing products in accordance with the company mission statement "Contribute to the advancement in science and society through our products".

## Development & Distribution of Environmentally-Conscious Products

Since 2002 it has been a company rule to perform product assessment, focusing on saving of energy, resources, and space, as part of every new product development project.

Recently, there has been progress in modularization in the production of electron microscopes, and for several of our current models a 20% reduction in the construction time compared to previous models has been achieved.

The field emission transmission electron microscope JEM-F200 was developed based on a concept of energy conservation and CO<sub>2</sub> reduction, and is the first model to be equipped with an ECO mode in the standard configuration. This ECO mode is a system for maintaining the instrument in an optimal standby state while reducing energy consumption to the minimum during periods when the instrument is not being used. In the ECO mode status, energy consumption is reduced to about 1/5 the level used during instrument operation. There is also a scheduling function, which allows users to specify the date and time for restoring the instrument to a normal operating status from the ECO mode state.

In addition, the compact, fast JCA-BM6010G automated biochemical analyzer not only offers the most compact footprint in its class, but is also equipped with a reagent management function, shorter cleaning cycle, and the ability to analyze micro-volume 1 μL samples. Blood tests can be performed on extremely small specimen volumes with a minimal amount of reagent, contributing to society through better health and protection of the environment.

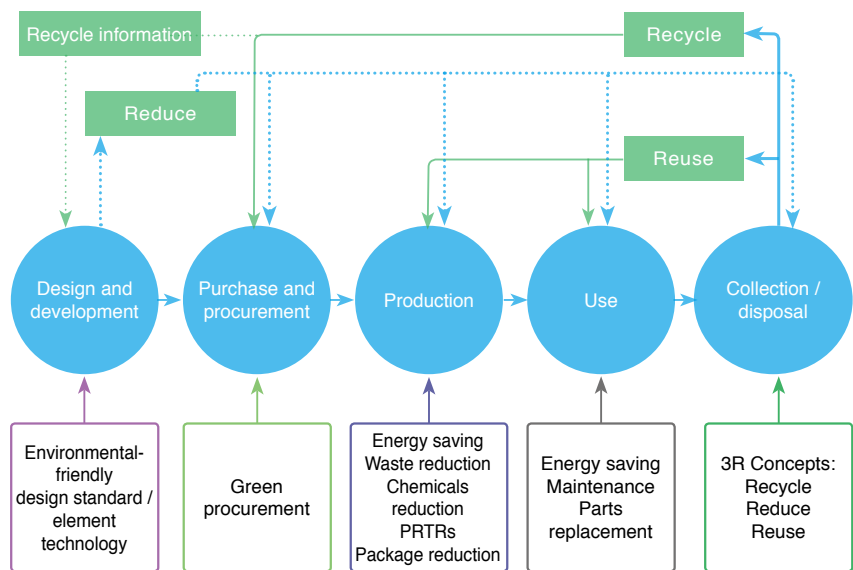
### » Environmentally-conscious products :

Products designed to reduce the burden on the environment at each step of the product cycle, from materials purchase, production, distribution , through operation, disposal and recycling.

### » Environmentally-contributing products :

Products used by customers that are useful for the analysis and evaluation in areas of environmental protection and pollution control.

## Scope of JEOL product assessment



## Environmentally-Conscious Products



**JEM-F200**

ECO mode provided in the standard configuration



**JCA-BM6010G**

An easy-to-use, space-saving model packed with functions, able to handle micro-volume 1μL samples, and features a shorter cleaning time

## Environmentally-contributing Products

JEOL is a supplier of research tools such as electron microscopes and NMR systems that are essential for research and development of green devices such as LED, solar battery, organic EL, etc. We also provide components needed for green device manufacturing equipment, including electron guns for LED electrode fabrication. In addition to the products supporting the green device industry, we manufacture and distribute various instruments directly contributing to environmental improvement including **1) Dioxin Analysis Mass Spectrometer, JMS-800D**, a total solution for dioxin analysis; **2) Portable Gas Chromatography: GC-8610T**, enabling analysis in the field for the Type 1 hazardous substances (11 substances) specified in the Soil Contamination Countermeasures Law, and equipped with dry purge and trap functions to support analysis of chloroethylene, which was added in April 2017.; **3) Quadrupole Mass Spectrometer (QMS), JMS-Q1500GC**, capable of qualitative and quantitative analysis with high accuracy and sensitivity for various isomers, such as brominated flame retardants like PBB and PBDE, **4) X-ray Fluorescence Spectrometer, JSX-1000S**, which can be used to easily measure harmful substances that are subject to regulation, such as for soil contamination measures, **5) Transmission Electron Microscope JEM-1400Flash**, which is widely used for asbestos testing in Europe, and **6) Electron Probe Microanalyzer JXA-8530FPlus**, used in studies for the decommissioning of nuclear reactors, as well as PM2.5 component analysis surveys and environmental surveys, such as of soil pollution.

## Environmentally-contributing Products



1) Dioxin Analysis Mass Spectrometer: JMS-800D



2) Portable Gas Chromatography: GC-8610T



3) Quadrupole Mass Spectrometer (QMS): JMS-Q1500GC



4) X-ray Fluorescence Spectrometer: JSX-1000S



5) Transmission Electron Microscope: JEM-1400Flash



6) Electron Probe Microanalyzer: JXA-8530FPlus

## Green Procurement measures

The JEOL Group communicates our environmental policies to our 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.

JEOL Group companies provide information related to chemical regulations to their business partner companies, and make efforts to assist in achieving the targets, by working with their partners, and helping with analysis of the chemical substance content.

### JEOL Group Green Purchasing Requirements

[excerpts] \*1

Version 5 (June 2010)

*The JEOL Group is committed to activities to 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 as the JEOL Group Green Purchasing Requirements.*

## RoHS Compliant Products

There are a variety of regulations on the substances contained in products being enforced, such as the RoHS directive in Europe, and similar regulations are becoming adopted throughout the world.

A system has been built to maintain and continuously improve RoHS compliance efforts by incorporating RoHS-related mechanisms into the integrated quality and environment management system, JGMS, in order to provide products that conform to the RoHS directive, and RoHS compliant products are being delivered.

We are committed to the development, production, and distribution of environmentally-contributing products and environmentally-conscious products to comply with these standards throughout the entire product lifecycle, from procurement to final disposal.\*2

\*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/>

## Protecting the environment through business activities

### Reducing Greenhouse Effect Gases

The JEOL Group, in compliance with the Global Warming Policy promoted by the Tokyo Metropolitan Government, implemented various measures through the Energy Saving Committee to reduce the amount of CO<sub>2</sub> emissions.

### Enhancing Energy Efficiency

We are proactively working to improve energy efficiency of electricity, fossil fuels, and other resources. Specific measures include phased conversion of the lighting to LED, the introduction of ice thermal-storage air conditioning to make effective use of electricity during the night, the installation of shading sheets and thermal barrier coatings on buildings to reduce the cooling load during the summer.

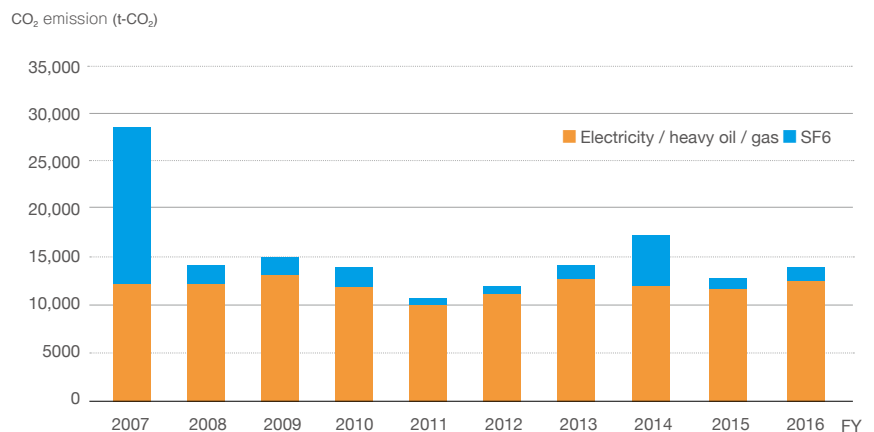
Furthermore, as a company-wide activity, efforts are being made to reduce energy consumption, including the promotion of the Cool Biz and Warm Biz initiatives, and the control of electricity consumption for each building.

### Storage and Disposal of PCB Waste

We store the PCB waste used in high voltage capacitors, transformers, and stabilizers. We have continued the storage for over 30 years since 1972. In some older buildings, PCB is still used as a lighting equipment stabilizer. However, it is being replaced according to a systematic plan.

In 2001, two acts concerning PCB became effective: Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes and Tokyo Metropolitan Government's Guidelines for Proper Management of PCB. We comply with these regulations, filing various documentation including the annual Storage/Disposal of PCB Wastes report for the Tokyo Metropolitan Government.

### Transition of CO<sub>2</sub> Emission



Main office & factory



## Management of Chemical Substances

- Materials used in the manufacturing processes that are handled as toxic substances are subject to special measures, including limiting the handling to specified personnel only, management of the storage locations and amounts, as well as training for the management personnel. These measures are taken to protect employees and to prevent inappropriate circulation or leakage of the toxic substances.

Records of the amounts of toxic substances received and the amounts used are maintained at each storage site for the toxic substances, and all these records are maintained in a company-wide database.

- PRTR Law (Pollutant Release and Transfer Register) and Tokyo Metropolitan Environmental Preservation Code

The reporting on the specified chemical substances that are subject to reporting is made by 2 companies within the JEOL Group, which have received environmental certification. These materials are carefully managed, even at JEOL Group companies that do not handle reportable quantities, so that the quantities at each business location can be continuously monitored.

### Waste materials

For waste materials, the issue is to improve the rate of recycling, and efforts continue to achieve this goal. Through measures such as completely separating waste products by the type of material, improving the rate of recycling of waste plastics, and adopting reusable packing crates and materials, we are currently recycling more than 86% of all the materials being used (main office, Akishima factory). In addition, at JEOL Yamagata Co., Ltd, a recycling rate of 84% has been achieved.

### Waste material processing / Verification of processing results

For the disposal of waste materials, we make the effort to monitor the final disposal method, even for those items that are handled outside the company grounds. We do not rely solely on the control manifests for industrial waste. Waste materials disposal managers ensure compliance with the stipulations of Japan's Wastes Disposal and Public Cleansing Act, as well as those of local regulations. We also perform on-site checks to confirm that the disposal of waste materials is being conducted properly.

### Measures at JEOL Yamagata Co., Ltd.

Employees of multiple enterprises on the same premises perform all the production tasks, from parts assembly to production completion, as part of an effort to develop environmentally-friendly manufacturing processes, by reducing and eliminating the need for packaging materials to transfer parts and materials between companies, as well as the fuel consumption and exhaust gases usually associated with transportation.

### Reporting to the national government

Reporting business locations of the certified company: 2 companies (1 substance)

Substance name.....Dichloropentafluoropropane

unit: tons/year

Fiscal Year	Output destination	FY 2014	FY 2015	FY 2016
Emissions amount	To the atmosphere	1.1/1.2	0/0.65	0/0.14
	To public waterways	0/0	0/0	0/0
	Into the ground	0/0	0/0	0/0
	Reclamation processing	0/0	0/0	0/0
Transferred amount	Into the sewer system	0/0	0/0	0/0
	Transferred externally	0/1.0	0/0.85	0/0.29

### Reporting to the City of Tokyo

Reporting business locations of the certified company: 1 company (2 substances): JEOL Unit: kg/year

Substance \ Year (amount used)	FY 2014	FY 2015	FY 2016
1) Methanol	160.0	137.0	123.0
2) Acetone	110.0	-	-



JEOL Yamagata Co., Ltd.

## Contributions to Society

### Science Class Support and Math and Science Special Programs

The Science Class Support Project was started in October 2007 as part of the commemoration of the 60th anniversary of the JEOL Group. Initially, the activities were held at nearby elementary schools, but was later expanded to include teachers, and is now being conducted at a variety of sites, not just elementary schools. Through FY2016, a total of 353 demonstrations on 207 days have been performed. The Science Class Support programs are mainly conducted in classrooms by demonstrators sent from the JEOL Group using benchtop scanning electron microscope (NeoScope™). Students are able to observe pollen, insects and various mechanisms of the body in detail. Students seeing electron microscope images for the first time display a lot of interest, making comments like "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 micro world." By actively participating in local community events and workshops for elementary and junior high school teachers we hope to provide a chance for many people to become more familiar with the microscopic world.

Examples of activities include:

- 1) "73th Annual Meeting of the Japan Society of Microscopy and Public Lectures" (Sapporo Convention Center)
- 2) "JAIMA Science Summer School: Experiments with Analytic Instruments for Junior High-School/ High-School Students"

### Science Class Support activities



- National Museum of Emerging Science and Innovation)
- 3) "2017 Youngsters' National Science Festival" (Science Museum)
  - 4) "Suginami City Future Science Club for Junior High School Students" (Suginami City Koenji Junior High School)
  - 5) "Institut Culturel Franco-Japonais . Ecole Japonaise de Paris" (Paris, France)
  - 6) Tsuchiura City Tsuwa Elementary School Nakamura Elementary School Science Special Class (Tsuchiura City)

In 2017, there were also visits to 2 elementary schools in the city of Ishinomaki, 2 in Kesenuma city, and 1 in Taga Castle city to work with some of the children affected by the Great Eastern Japan Earthquake.

In the future, we hope that the everyone, including teachers, students, and the general public will be interested in science.

Additionally, the JEOL Group worked in collaboration with universities and other businesses to increase the number of children with an interest in math and sciences, through a 2-year special support program organized by the Tokyo Board of Education starting in FY2015. After the end of Tokyo Board of Education program in 2017, JEOL activities have continued through a Math & Science Special Support Program organized in Hino City. JEOL Group instructors utilize benchtop scanning electron microscopes (NeoScope™) to conduct the science support classes. In 2017, 3 elementary schools and 2 junior high schools in Hino city were visited (total of 20 classes with 710 students) giving the children a chance to experience the micro-world using an electron microscope.

### Support of the Kazato Research Foundation

The Kazato Research Foundation was established in 1969, in commemoration of the 20th anniversary of JEOL Ltd. funded by a contribution from Kenji Kazato, the founder

of JEOL Ltd. The purpose of the organization is to promote the research and development of electron microscopes and other related devices, as well as application research using these instruments (medical science, biology, physics, chemistry, materials science, nanotechnology, and others). The foundation has helped many young researchers over the years, and JEOL continues to support the foundation activities with annual donations. (<http://www.kazato.org/english/>)

The young researchers below received awards in FY2017.

#### Kazato Prize

**Yoshihiko Togawa** Associate Professor  
 (Department of Physics and Electronics, Osaka Prefecture University)

"Demonstration and Exploring Functionality of Macroscopic Spin Phase order Using Transmission Electron Microscopy"

**Kenjiro Ono** Professor  
 (Department of Neurology, Showa University School of Medicine)  
 "Elucidation of the Alzheimer's disease pathogenesis by using electron and atomic force microscopies"

#### Kazato Research Encouragement Prize

**Motomichi Koyama** Associate Professor  
 (Department of Mechanical Engineering, Faculty of Engineering, Kyushu University)

"In situ characterization of dislocation motion using electron channeling contrast imaging"

**Takanori Onouchi** Senior Assistant Professor  
 (Center for Research Promotion and Support, Fujita Health University)

"Correlative Light and electron microscopic studies on novel functions of APC protein in the intestinal epithelium cells"

The winners are expected to continue to be active in the fields of life science and materials research.

### 11th Kazato Prize and Kazato Research Encouragement Prize awards ceremony

The awards ceremony was held at the Keidanren Hall in March 2018.



## Local Community

### “Don’t Litter” Campaign (Commute Route Clean-up Action)

The “Don’t Litter” campaign is a volunteer community service activity that JEOL employees have been performing since 1994, and it has become a regular part of the routine. About once every 2 months, employees engage in these clean-up activities 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.

“ 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 clean-up activity is the [Don’t Litter Campaign] ”

### Participation in the Akishima Environment-Consideration Enterprise Network

The activities of the Akishima Environment Consideration Enterprise Network were started in April 2005, with 16 member organizations. By the end of FY2016, the organization had grown to 38 member enterprises.

JEOL has been involved in the activities as an executive member since the inception of the network. During the major revision of the organization between FY2009 and FY2010, JEOL filled the role of chairman of the network, continued in the role of vice for FY2011 and FY2012, and as executive secretary in 2015, continuing to promote environmentally friendly activities and practices in collaboration with the network members.

Exhibits were halted and many other activities were limited in FY2011 due to the Great East Earthquake and Disaster, but the activities were revived in FY 2012.

The activities are low-profile but we intend to continue to make steady dedicated efforts to “Promote environmentally-friendly practices in

the local community”.

### Activities at JEOL Yamagata Co., Ltd.

JEOL Yamagata Co., Ltd. is a production base of the JEOL group located in Tendo City, Yamagata prefecture. In order to be able to continue working for many years to come, and earn the goodwill of everyone in the region, the following efforts are being made.

- 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 2017, 189 visitors from 15 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 traffic manners and practices of the employees.
- 4) Active participation 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.
- 5) The company parking areas were used for the “Summer Nights” festival to provide support the local community and invite greater interaction with local residents.

### Don’t Litter” Campaign Action



### Activities at JEOL Yamagata Creative Co. Ltd.



Traffic safety on school commuting routes



Students from Yamagata city elementary school



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Publishers

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[www.jeol.co.jp/en/corporate/envi/report/](http://www.jeol.co.jp/en/corporate/envi/report/)