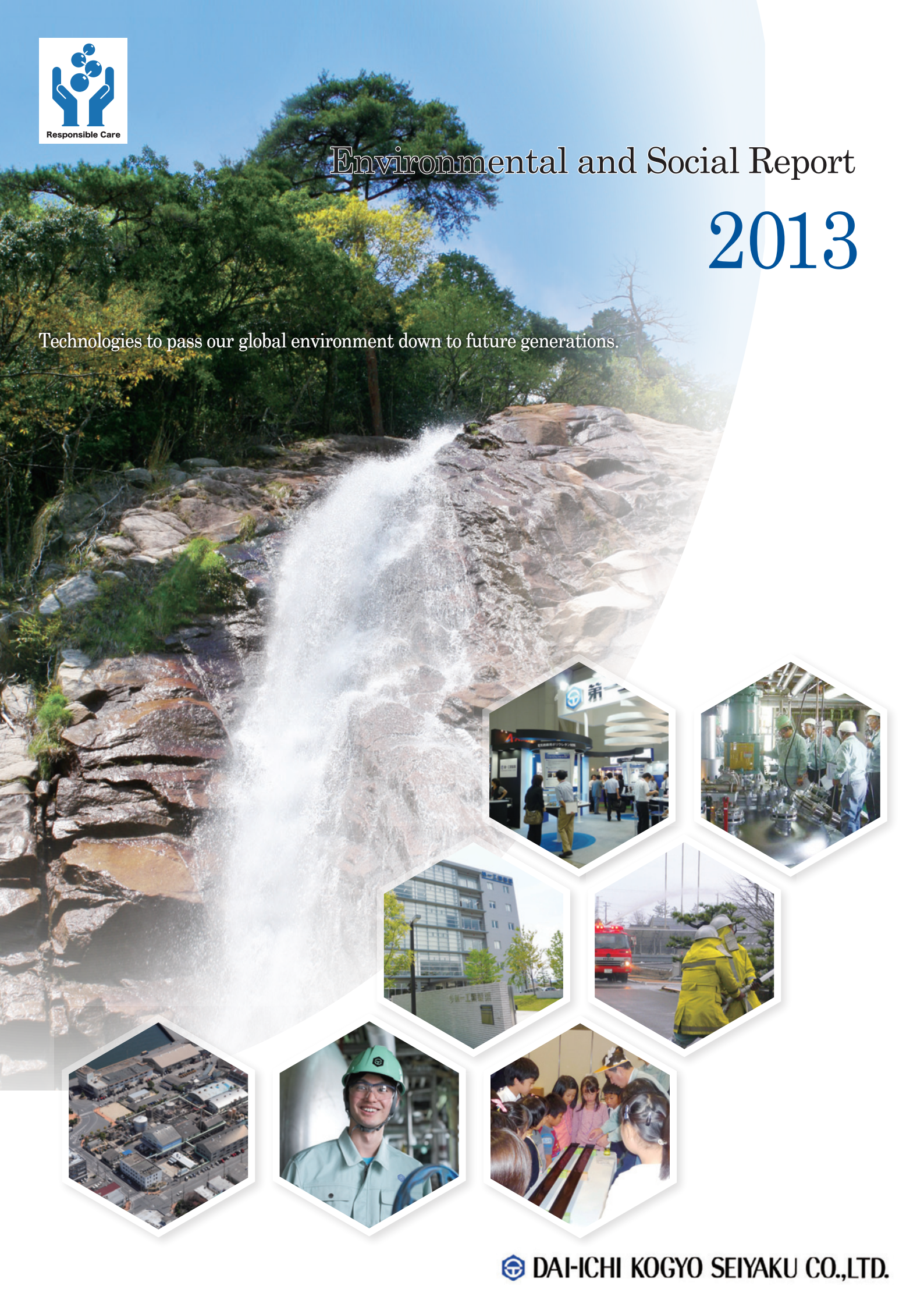




# Environmental and Social Report 2013

Technologies to pass our global environment down to future generations.





# Our "chemistry to respond to people's needs"



## ●Surfactant Business

Surfactants, which have played a pivotal role from the starting point of our company, are used in a wide variety of industrial fields, such as rubbers, plastics, colorants, machines/metals, cosmetics/human-life related industries, paper/pulp, fiber, agrochemicals/agricultural materials, civil engineering, and energy-related industries.

## ●Amenity Material Business

Our amenity material business has been supplying not only various materials used to improve the amenities within our living environment, such as sucrose fatty acid esters, sodium carboxymethyl cellulose, and polyvinylpyrrolidone, but also the peripheral applied technologies. They are widely used in many fields surrounding our daily life including foods, pharmaceuticals and cosmetics, and fishery/livestock industries.

## ●Polyurethane Business

Because they change themselves from a liquid to a solid state via an appropriate reaction process or process technique, polyurethane resins are used in many industrial materials, such as urethane foam, elastomer, paints, adhesives, artificial leather, civil engineering and building materials, and electrical insulating materials. Our company's polyurethane resins can serve as the raw material for many urethane products.

## ●Functional Material Business

The usage of synthetic resins covers home electronic appliances, residential materials, and other commodities of daily life. Our functional material business has been supplying radcure resins, polyurethane resin water dispersions, flame retardants, and plastic additives, for which the intention is to enhance the performance and added value of synthetic resins and to facilitate environmental improvement.

## ●Electronic Device Material Business

Technological innovation in the IT-related field, as symbolized by the popularization of computers and cellular phones, has been constantly spurred on public demand. By drawing on our unique technologies, we have been devoted to developing various types of electronic products, including conductive pastes, ceramic materials, ionic liquids, and lithium cells, and providing support for technological innovation in the field of electronic devices.

**Our  
company  
motto**

Contributing to the nation and society through industry.

**Our  
company  
credo**

Quality First / Cost Reduction / R&D Efforts

#### The Spirit Enshrined in Our Company Credo

1. To Embody the Dai-ichi Kogyo Spirit, Put Quality First into Practice  
We believe the key to continuing growth for our company is to earn and maintain the trust of customers within the field of specialty chemicals. Each of our employees must pay constant and profound attention not only to product quality, but also to product evaluation by consumers.
2. To Embody the Dai-ichi Kogyo Spirit, Try to Pursue Cost Reduction Opportunities  
Conditions necessary for the best production in terms of quality and quantity include reducing production costs through cost reduction, increasing production values, and taking advantage of declining market prices. Each of our employees must discharge their duties in a way that allows them to use their own ingenuity and creativity to achieve highly efficient results on both a spiritual and technological basis.
3. To Embody the Dai-ichi Kogyo Spirit, Always Maintain R&D Efforts  
Both Quality First and Cost Reduction are the fruits of R&D Efforts. R&D Efforts is the motive power for all our activities. We must be committed to sustaining our R&D Efforts while enlightening ourselves with this concept.

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## Environmental and Social Report 2013: Editorial Policy

Dai-ichi Kogyo Seiyaku has published the "Environment & Safety Report" annually since 2003, and delivered the report about RC (Responsible Care) activities. In 2008 we added new content on our social activities to the previous contents on our environmental, safety, and health efforts, and renamed the report "Environmental and Social Report." Since then we have continued to improve our involvement in society. This report aims to explain to our stakeholders the efforts taken by Dai-ichi Kogyo Seiyaku on environmental and social activities, and promote our communication. We always keep in mind that we should do our best to disclose lucid and comprehensive reports in a sincere manner. Since 2010 we have posted our reports in English on our website.

### A Summary of Dai-ichi Kogyo Seiyaku's Environmental and Social Report

#### Organizations Covered by this Report

Dai-ichi Kogyo Seiyaku

Head Office, Laboratory, Tokyo Head office, Osaka Branch, Nagoya Branch, Kyushu Branch, Yokkaichi Branch, Ohgata Branch, and Shiga Branch

National Affiliates (\*: located within the premises of Dai-ichi Kogyo Seiyaku)

Yokkaichi Chemical Company Limited

Gembu Co., Ltd.\*

DAI-ICHI KENKOU CO., Ltd.\*

DAI-ICHI CLEAN CHEMICAL, INC.\*

DAI-ICHI CERAMO Co., Ltd.\*

KYOTO ELEX CO., LTD.

Elexcel Corporation

SUZAKU MICHI Co., Ltd.

In the description related to our performance, we use the following definition and distinguish between "Dai-ichi Kogyo Seiyaku" and "Dai-ichi Kogyo Seiyaku Group."

Dai-ichi Kogyo Seiyaku: Dai-ichi Kogyo Seiyaku and national affiliates located within the premises of Dai-ichi Kogyo Seiyaku

Dai-ichi Kogyo Seiyaku Group: Dai-ichi Kogyo Seiyaku and all national affiliates

#### Period Covered by this Report

Essentially, this report contains our activities and data for fiscal year 2012 (from April 1, 2012 to March 31, 2013).

The data on Industrial Accident Severity Rate (ASR) and Industrial Accident Frequency Rate (AFR) were obtained from January to December 2012. Note that this report in part contains descriptions after April 2013.

#### Reference Guidelines

"Environmental Reporting Guideline 2012"/"Environmental Accounting Guideline 2005" from the Ministry of the Environment

"Environmental Accounting Guideline for Chemical Industries (November 2003)" from the Japan Chemical Industry Association (JCIA)



# Message from the President

## Implement the approach to "chemistry to respond to people's needs," and contribute to the realization of a sustainable society through our business practices.

In FY2012, the first year of the medium-term management plan: "Change 100 Plan" stage II, we faced a lot of difficult problems to be solved as a company under severe economy conditions, such as the debt problem in Europe, decelerated business conditions in China, prolonged stagnation of demands, and deflation. Especially, we were in a tough situation in terms of sales expansion, however, we attempted to expand sales of the core product business in our group, and have been devoted to development of a new market and new materials, securing of appropriate profit margins, and reduction of total expenses, mainly in the growing fields, such as "environment," "energy," "electronic materials," and "life materials."

Though the economy in Japan shows bright signs on the background of the economic policy effects, domestic large expansion of demands is hardly expected, and the price of raw materials and fuels still remains at high levels while showing wild ups and downs. Under such circumstances, our management environment is still in a tough situation. On the understanding of such a situation, we think we have to continue our motivation to reform, improve, and make efforts precisely in the second year of stage II based on "change" of consciousness to assign the highest priority to costs, which was established in stage I.

### "Change 100 Plan" Stage II – Based on achievements, stepping into the future and beyond

Our corporate group started stage II of the three-year "Change 100 Plan" in April, 2012 on the axis of "Expansion Accompanied by Earnings." "Getting ahead of the times as a leading chemical manufacturer that offers industrial chemicals," through accomplishment of this management vision, we intend to walk the paths of continuation and progress, which is regarded as our mission, and aim at attaining our goal while interpreting global trends. We regard this management plan as the milestone on the road to company image in 2025, and reveal plans based on a long-range perspective. According to one of the plans, we changed the Tokyo Branch to Tokyo Head Office in October, 2012. This is meant to improve the base status while enhancing it as the sales base and unifying the purchasing practice, fully develop the selling policy by top management, and produce a group synergy driven on the two wheels of our Tokyo and Kyoto Head Offices. Furthermore, our especially important agenda to be implemented is the Yokkaichi district production base realignment plan. In March, 2013, we launched the Yokkaichi district base realignment plan which aims at acquiring new land in the Yokkaichi City Kasumi district and constructing a new plant in the next five years. When we set the year of 2025 to one mark, we think the first step is to enhance our domestic bases, and the next is to leap



overseas. Our current conclusion is to first build up the strong foundation in "Yokkaichi" as the cornerstone of our growth, and secure practical accomplishments in Japan in order to create a determined pace.

### Introduction of a system to strategically control all operations

In addition to maintenance and restructuring of our domestic bases, in order to enhance overseas operation in our next step, we set up a department to control marketing mainly based overseas in April, 2013. Furthermore, we integrated production technology and sales sectors that pursue optimization of our group, and also changed the organization with federated functions activated by crossing through various businesses promoted by each department. We think it difficult to achieve the goals we have set in the management plan if we proceed with traditional and conventional ways of thinking. We will reverse our way of thinking and actions, and make our efforts to completely accomplish our plan with the key phrase, "breaking the shell."

### Management to Enhance Further Thoroughness of Compliance

We established our Code of Corporate Ethics in 2004. In this code, we declare that each of our employees will observe all legal regulations and international rules and obey the spirit thereof, respect cultures and customs in each country and region where we conduct business activities, and behave in a socially sensible manner. We also established a Compliance Control Committee. This committee has been engaged in establishing our own compliance system and performing multiple activities, including employee education and preparation of relevant regulations, in order to instill compliance practices within our company. We will continue transparent and healthy management in order for the company to continue being trusted by our stakeholders and with a high entity, as well as in order to continue as a company where all employees conduct fair and healthy business activities as members of society.

### Continuous Efforts on RC (Responsible Care) activities

We joined the Japan Responsible Care (RC) Committee in 1998, and since then have strongly promoted independent RC activities in order to gain a reputation for higher reliability within society through approaches to global environmental problems, chemical substance control, and dialogue. In FY2012 we promoted energy conservation especially on a company-wide basis, and provided a proper response to the revised Water Pollution Control Law. We will make continuous efforts not only to achieve our environmental goals, but also to utilize renewable energy by introducing electric power facilities that use methane gas obtained as a by-product of wastewater anaerobic disposal, as well as security and accident prevention measures.

We encourage you to look over this summary of our activities in FY2012 titled "Environmental and Social Report 2013." We hope this report will help you to deepen your understanding of our company. We would appreciate and welcome any and all straightforward opinions and reviews. Sincerely yours,

August, 2013

OYANAGI Masatoshi, Ph.D.  
President

A handwritten signature in black ink that reads "M. Oyanagi". The signature is written in a cursive, flowing style.





# Getting Ahead of the Times of Chemistry

The medium-term management plan "Change 100 Plan" started in the year of the 100th anniversary of the company's foundation. We devote our efforts to converting the corporate culture, and proceeding towards expansion of our business while maintaining our business quality.



## Medium-term management plan "Change 100 Plan" Stage II –Expansion Accompanied by Earnings– (from April 2012 to March 2015)

### ● Management Vision

We "get ahead of the times as a leading chemical manufacturer that offers industrial chemicals," and realize the company motto "Contributing to the nation and society through industry." We take responsibility in product innovation and progress through the age of globalization.

We interpret global trends, and walk the way of continuation and progress according to our company credo of "Quality First, Cost Reduction, R&D Efforts."

In the mature society of advanced countries, we set our sights on purification maintenance of global environment, and conversion fields to recyclable or natural energy.

Looking over the developing society of emerging countries, we pursue our business opportunities under similar geographical conditions as those in China, India, and ASEAN countries that represent the said countries.

Based on the solutions of our own development ability and technology, we implement the approach to "chemistry to respond to people's needs," and realize a company image generating from Kyoto, to the world, and to the future.

### ● Management Policies

We maintain the quality of business contents we have secured in Stage I, and move forward on expansion of our business.

#### (1) Expanding into the peripheral fields

We enhance increase of sales by horizontal development and deep digging to expand the peripheral fields of "current products, technology, and customers."

#### (2) Replenishing and revitalizing the production bases in Japan

We devote our efforts on the securing of and the replenishing of new production bases and build the foundation of expansion and growth.

#### (3) Speeding up creation of new businesses

We create new business and invest facilities for our future business portfolio.

#### (4) Pursuing cost minimization

We promote activities on improvement of thorough productivity and new cost minimization.

#### (5) Enhancing management and fostering human resources

We foster human resources through the DKS Productive Maintenance, and put our efforts on enhancement of management ability in Japan and overseas.

#### (6) Strengthening overseas operations

We strengthen development and management in China and Asian regions, and have started to new expansion of business.

### ● Numerical Targets

	Performance in FY2012	Target in FY2014
Consolidated Net Sales	51.8 billion yen	75 billion yen
Consolidated Operating Margin on Sales	3.4 %	8.0 %
Per Capita Sales	52.95 million yen	70 million yen
Cost of Sales Ratio	79.7 %	78.0 %
SG&A Expense Ratio	16.9 %	14.0 %
Inventory Turnover Period	1.9 months	1.6 months

## Expansion Accompanied by Earnings



We approach the company's progression with the viewpoints of "5W1H plus 1." We execute the points of Why (management vision), What (management policies), When (periodical index), Where (each department), Who (a person in charge), How, and How Much, and make efforts to accomplish our targets.

For the overview of the "Change 100 Plan," please see our company's website (<http://www.dks-web.co.jp>).





# Making Efforts on Environmental and Social Activities

Our company has been actively making efforts on environmental and social activities since the company's establishment. We received a commendation from outside organizations, and our activities have attained high reputation.

## Company Overview

### Overview

Company Name: Dai-ichi Kogyo Seiyaku Co., Ltd.  
 Head Office: 5 Ogawara-cho, Kisshoin, Minami-ku, Kyoto, Japan  
 Date Business Started: April 1909  
 Date Established: August 1918  
 Representative: OYANAGI Masatoshi, Ph. D. (President)  
 Capital: 7.1 billion and 41.7 million yen\*  
 Number of Employees: 979 persons (consolidated)\*  
 526 persons (non-consolidated)\*  
 (\*as of the end of March 2013)

### Domestic Branches

#### Dai-ichi Kogyo Seiyaku Co., Ltd.

- Head Office, Laboratory (in Kyoto Central Branch)
- Main Branch
  - Tokyo Head Office
- Osaka Office
  - Nagoya Office
- Kyushu Office
  - Yokkaichi Branch
- Ohgata Branch
  - Shiga Branch

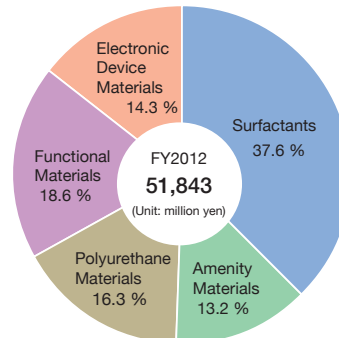
#### Affiliates

- Domestic: 9 companies
- Overseas: 8 companies
- Total: 17 companies

### Business Segments & Main Products

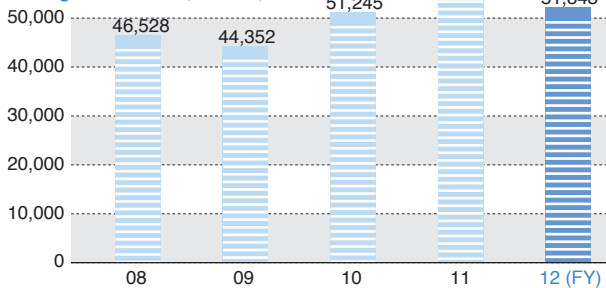
Business Segments	Main Products
Surfactants	Non-ionic surfactant, anionic surfactant, cationic surfactant, amphoteric surfactant
Amenity Materials	Sucrose fatty acid esters, cellulose type polymer, vinyl type polymer, acrylic acid type polymer
Polyurethane Materials	Polyether polyol, urethane prepolymer, urethane system
Functional Materials	Materials used for radcure resins, water-borne urethane resin, flame retardants, amide-type lubricant
Electronic Device Materials	Conductive paste for electronic components, injection molding pellets, functional inorganic materials

Sales by Business Segment (Consolidated)

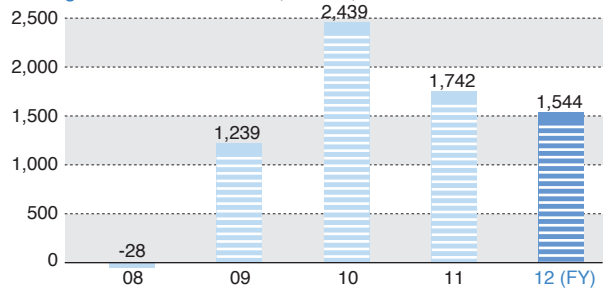


### Management Index

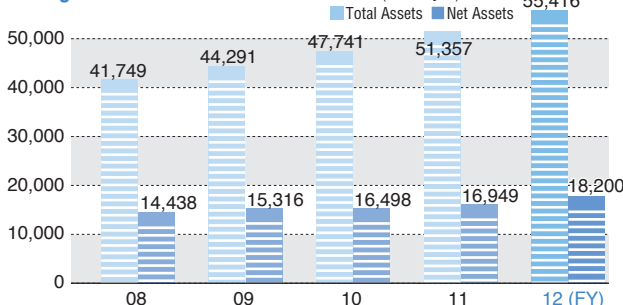
Changes in Sales (million yen)



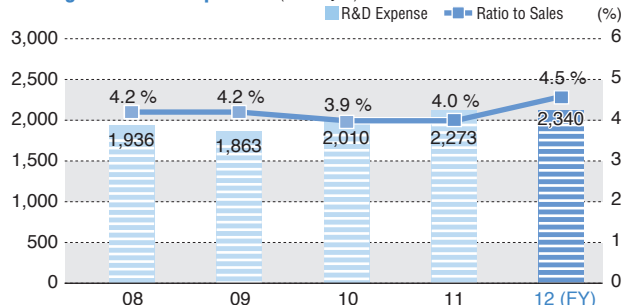
Changes in Current Profits (million yen)



Changes in Total Assets & Net Assets (million yen)









Changes in R&D Expenses (million yen)





● Business of Dai-ichi Kogyo Seiyaku and History of Environmental and Social Activities

	Business of Dai-ichi Kogyo Seiyaku	Environmental and Social Activities	Situations in Japan and Abroad
1900	'09 Founded in Ohno Kungyokudo Co., Ltd. '10 Launched the Cocoon Reeling Agent '18 Established Dai-ichi Kogyo Seiyaku Co., Ltd. 	'18 Established our company motto and company credo	'05 The Russo-Japanese War begins '10 The Japan-Korea Annexation Treaty is signed '14 The World War I begins '20 The League of Nations is established '23 The Great Kanto earthquake
1925	'34 Launched higher alcohol detergent "DKS300" (renamed MONOGEN in '37) '38 Newly constructed Yokkaichi Plant '49 Launched CMC "CELLOGEN" 	'31 Published the first newsletter '36 Introduced the weekly holiday system '47 Made presentations at the Kyoto Commerce and Industry Exhibition in commemoration of implementation of the new constitution	'28 The Japan Chamber of Commerce and Industry is established '31 The Manchurian Incident begins '39 The World War II begins '43 The Japan Stock Exchange is launched '47 The Japanese Constitution is enacted, The Labor Standards Act is announced officially
1950	'59 Established Yokkaichi Chemical Company Limited '60 Newly constructed Ohgata Plant. '69 Established Nippon Levulose Co., Ltd. '70 Launched the sucrose fatty acid ester "DK ESTER" '73 Established Gembu Co., Ltd. 	'53 Published "MONOGEN Story" '54 Joined the 1st world surfactant congress and business convention '66 Household synthetic detergents were completely converted to LAS (soft type) '68 Published "CELLOGEN Story" '72 Established "Pollution Prevention Rules"	'51 The Japan Oil Chemists' Society (JOCS) is established '55 The Japan Oil & Fat Industry '59 The Ise Bay Typhoon '64 The Tokyo Olympic, The Tokaido Shinkansen (bullet train) goes into operation '70 14 bills related to the pollution prevention are passed '73 The first oil shock
1975	'75 Launched the industrial refresher "AIR CHEM" '78 Acquired capital in CHIN YEE CHEMICAL INDUSTRIES, CO., LTD. '80 Launched the water-reducing agent for concrete "SELFLOW" '82 Established DAI-ICHI CLEAN CHEMICAL, INC.	'75 Introduced a five-day-week system '83 Introduced chemical fire trucks in our Ohgata Plant '84 Published "SUGAR ESTER Story"	'78 The New Tokyo International Airport opens '79 The "Ordinance relating to the Prevention of Eutrophication in Lake Biwa" is passed in the Shiga prefectural assembly, The United States and China renew diplomatic relations '82 The Tohoku Shinkansen and Joetsu Shinkansen go into operation
1985	'86 Established KYOTO ELEX CO., LTD. '87 Established K&D Fine Chemical Corporation '88 Established DAI-ICHI CERAMO Co., Ltd. '89 Established DAI-ICHI KENKOU CO., Ltd. '92 Established TIANJIN DAI-ICHI FINE CHEMICALS CO., LTD. 	'89 Introduced the special incentive leave system '94 Established "PL (Product Liability) Prevention Management Rules"	'85 The world science exposition opens '86 The Equal Employment Opportunity Law is enacted '89 The consumption tax (3%) is introduced The Tokyo stock exchange price reaches the highest (38,915 yen 87 sen)
1995	'96 Established P.T. Dai-ichi Kimia Raya 	'96 Awarded the Ozone Protection Award by the U.S. Environmental Protection Agency '98 Joined the Japan Responsible Care (RC) Council (JRCC)	'95 The Great Hanshin-Awaji Earthquake (M7.3) occurs The Product Liability Act (PL Act) is enacted '97 The Kyoto Protocol is adopted in COP3 '98 The Financial Services Agency is launched '99 The Europe's unified currency "Euro" is introduced (among 11 countries)
2000	'01 Merged Dai-ichi Kagaku Kogyo Co., Ltd. and renamed Shiga Plant '02 Established Elexcel Corporation Ltd. and CHIN YEE CHEMICAL TECHNOLOGIES (WUXI) CO., LTD. '04 Established DKS (Shanghai) International Trading Co., Ltd.	'01 Established "Environmental Protection and Occupational Safety Rules" '02 Acquired ISO14001 authentication in all plants '03 Acquired ISO9001 authentication in all plants '03 Published the 1st Environment & Safety Report '04 Established Code of Corporate Ethics '04 Introduced the cogeneration and solar power generation systems in the Ohgata Branch	'01 Government ministries and agencies is reorganized into one office and twelve ministries and agencies The 9.11 terrorist attacks occur in the United States '03 The Tokyo stock exchange price reaches its previous post-bubble low (7,606 yen 88 sen) '04 The Niigata Chuetsu earthquake occurs (M6.8)
2005	'05 Established SHUANG YI LI (TIANJIN) NEW ENERGY CO., LTD. '06 Constructed a new laboratory in Kisshoin and moved '09 Commemorated the 100th anniversary of the foundation 	'05 Established "Declaration of Action for Executives and Employees" '06 Set up the internal audit department '07 Introduced the cogeneration system in the Shiga Branch '08 Achieved no accident record for 3000 days in the Ohgata Branch	'05 The full deposit guarantee is removed, the Private Information Protection Law is enacted '06 The Companies Act and amended Industrial Safety and Health Act are enacted '07 The Niigata Chuetsu earthquake occurs (M6.8) '09 Influenza A (H1N1) breaks out and spreads The Minister of Consumer Affairs is launched
2010	'11 Acquired the ownership of Yokkaichi Chemical Company Issue of 100 year anniversary Company History Book	'10 Started approach of lecture delivery '11 Established the Senbon Training Institute '12 Achieved no accident record for 2000 days in the Yokkaichi Chemical Co., Ltd.	'10 The Shanghai International Expo opens '11 The Great East Japan Earthquake occurs (M9.0) The U.S. dollar currency exchange rate reaches its highest value (75.54 yen)

Main External Commendation and Evaluation (since 2005)

Month, Year	Description for Commendation and Certificate of Appreciation	Awardees	Organizers
05.05	The 29th Japan Chemical Industry Association (JCIA) Wins the "Safety Efforts Award" by the Japan Responsible Care (RC) Council (JRCC)	K&D Fine Chemical Corporation*	Japan Chemical Industry Association (JCIA) Japan Responsible Care (RC) Council (JRCC)
06.02	Wins the "Highest Award" for the 37th oil and fat industry article —The bio-plant concept towards the resource competition period—	TONEGAWA Akimitsu TAKAMURA Nachiro SUGINO Shingo	Oil & Fat Industry Kaikan
07.05	Wins the industrial technology award for the 57th Osaka Industrial Research Association —Establishment and Industrialization of Compound Technology for Powder Injection Molding—	Dai-ichi Ceramo Co., Ltd.*	Osaka Industrial Research Association
07.05	Wins the "Award of the Association for Safety of Hazardous Materials in Kanto Koshinetsu District" in 2007	Ohgata Branch	Kanto Koshinetsu District Association for Safety of Hazardous Materials
07.06	Wins the "Commendation by the Commissioner of the Fire and Disaster Management Agency for a Company with Excellence Related to Hazardous Materials" in 2007	Ohgata Branch	Fire and Disaster Management Agency
07.12	Wins the "Highest Award" for the article competition commemorating the 50th anniversary of establishment of Kyoto Industrial Association (2 articles)	SYOUSU Takeshi NODA Toshiaki	Kyoto Industrial Association
08.02	Wins the "Special Award by the Review Board" for the 39th oil and fat industry article —The Green Tourism Business Proposed by the Oil and Fat Industry—	KITAGAWA Takashi ARAI Takamitsu	Oil & Fat Industry Kaikan
09.03	Wins the "Article Special Awards" as group for the 26th Beacon Users' Symposium research presentation	YAMAMOTO Daigo	Beacon Users' Group
11.03	Receives a certificate of appreciation for participation in the "Environmental Study Business for Elementary School Students"	Dai-ichi Kogyo Seiyaku	Kyoto City
11.08	Receives a certificate of appreciation for contribution to development of the Red Cross business	Yokkaichi Branch	Japanese Red Cross Society
13.03	Wins the "Article Awards" as group in 2013	SUGIMOTO Toshinori, KIKUTA Manabu, HIGASHIZAKI Tetsuya, KONO Michiyuki	The Electrochemical Society of Japan

\* Affiliates





# Utilized in Various Fields

Our products will aid us in daily life as useful materials and through the members of various products. This section introduces some examples from scenes in everyday society and the environment.



## Our Products Useful in Daily Life

### 1 Surfactant Business

### 2 Amenity Material Business

- Non-ionic surfactant
- Anionic surfactant
- Cationic surfactant
- Amphoteric surfactant

- Sucrose fatty acid ester
- Cellulose type polymer
- Vinyl type polymer
- Acrylic acid type polymer

**Silicon wafer detergent**  
● DK BE-CLEAR CW

**Conductive paste for solar cells**  
● DD-1200C

**Rigid polyurethane foam for insulator material**  
● DK POLYOL

**Bed, cushion (Soft or semi-rigid polyurethane foam)**  
● HIFLEX  
● DK FLEX

**Optical sheets, Hard coating agent (Radcure resins)**  
● NEW FRONTIER

**Waterborne polyurethanes**  
● ELASTRON

**Flame retardants for plastics**  
● PYROGUARD

**Semiconductor sealant materials**  
● Allyl glycidyl ethers

**Sealing material for electric insulation (Gas water heater control units)**  
● EIMFLEX

**Polymerizable emulsifier(Paint)**  
● HITENOL

**Materials for cosmetics (Shampoo, rinse, hair gel)**  
● NEO-HITENOL  
● CATIOGEN ● CREEJUS  
● Phenoxyethanol

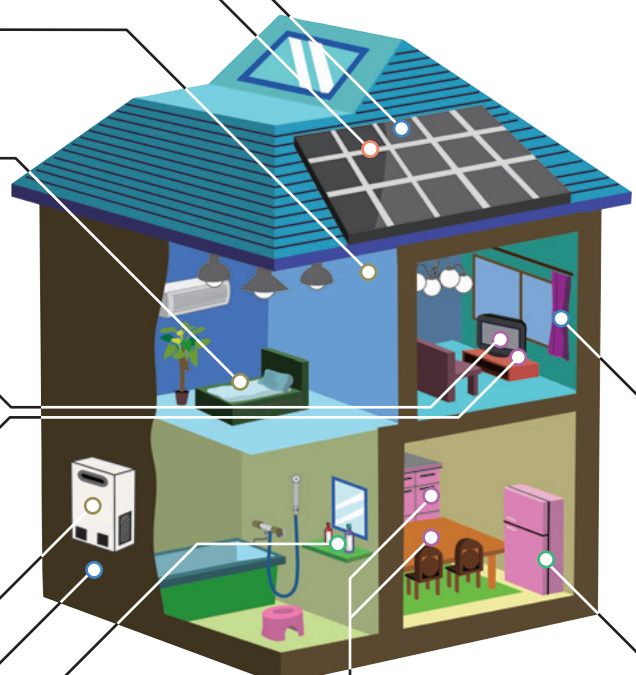
**Car seatbelts**  
● ELASTRON

**Epidermis material for car interior**  
● SUPERFLEX

**Hybrid vehicle electric components (Resistant polyurethane resins)**  
● EIMFLEX

**Paint resin for cars**  
● SUPERFLEX

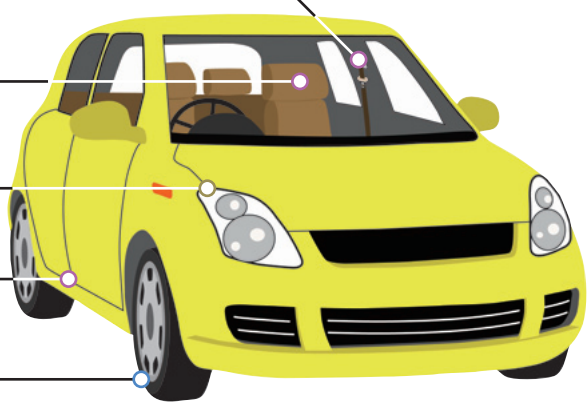
**Tire rubber(Emulsion polymerization emulsifier)**  
● LAVELIN



**Coating material for building material and furniture (Radcure resins)**  
● NEW FRONTIER

**Food additives**  
● DK ESTER  
● DK FOAMER ● CELLOGEN

**Flame retardants for textile**  
● PYROGUARD





### 3 Polyurethane Business

- Polyether polyol
- Urethane prepolymer
- Urethane system

### 4 Functional Material Business

- Materials used for radcure resin
- Water-borne urethane resin
- Flame retardants
- Amide-type lubricant, plastic additives

### 5 Electronic Device Material Business

- Conductive paste for electronic components
- Injection molding pellets

Detergent for linen supply  
● LINEN FINE

Detergent for cleaning  
● FINE SHOT

Binder for agrochemicals  
● CELLOGEN

Binders for rock consolidation  
● GANBAN

Injection water-stop material  
● POLYGROUT

Elastic pavement material  
● RUBBER STYTER

Heavy corrosion-preventing agent  
● PERMAGUARD

Spillage oil treatment agent  
● SEACLE

Feed additives for cultivation  
● CELLOGEN

Waterproof roofing material  
● POLYFLEX

Water reducing agent and fluidizer for concretes  
● SELFLOW

Optical fiber connector  
● Zirconia compound for ferrule

Buildings strengthening agent (Epoxy diluent)  
● EPOGOSEY





# Environmentally Friendly Products & Technology

We believe that developing environmentally friendly materials is the mission of an industrial chemical manufacturer. We develop a great number of products using chemical technology know-how accumulated over many years.

## Environmentally Friendly Products & Technological Development

### Our Products and Technology Development

Responding to environmental requirements including global warming prevention, energy and resource saving, environmental protection, and the prevention of environmental pollution, we are devoted to supplying environmentally friendly and compliant products and developing related technologies.

Environmental Requirements	Functions & Features	Our Product Line & Technology/Application		
Global Warming Prevention	Clean Energy	Development of DSC (dye-sensitized solar cell)		
		Lithium-ion battery		
		CELLBINDER Series	Binder for lithium-ion battery	
	Halogen-free type	DD-1200C Series	Conductive paste for solar cells (lead-free)	
		DK BE-CLEAR Series	Water-borne detergents	
Energy & Resource Saving	Energy Efficiency	DK POLYOL 3000 Series	Materials/insulators for non-CFCs (water-blown type) polyurethane foam	
		COLOURSOL CT-171D	Accelerating/leveling agents for polyester	
		NEW FRONTIER Series	Solvent-free UV/EB-curable monomers/adhesives, coating agents	
	Effective Resource Utilization Extension of Life Span	DK SYSTEM NF Series	System for non-CFC rigid polyurethane form · insulator	
		Anti-solidification agents for slag		
		ELEXCEL IL Series	Ionic liquids/energy device materials	
Environmental Protection and Prevention of Environmental Pollution	Environmentally Responsive	EIMFLEX Series	Polyurethane resins for electrical insulation · sealing material	
		NOIGEN TDS Series, NOIGEN XL Series	Nonionic surfactants/emulsifiers, cleaning agents	
	VOC* Reduction	SUPERFLEX Series	Polyurethane water dispersions/paints, coating, binders	
		EIMFLEX WF Series	Waterborne polyurethanes for electric insulating · sealing material	
		ELASTRON/ELASTRON BN Series	Thermal-reactive polyurethane water dispersions, binders, adhesives	
		COLORCOAT Series	Solvent-free urethane paints · waterproof material	
	Reduction of Environmental Impacts	NEW FRONTIER Series	Solvent-free UV/EB-curable monomers/adhesives, coating agents	
		HITENOL KH Series	Polymerizable surfactants/emulsifiers for emulsion polymerization	
Removal of Contaminants	SEACLE N-800	Spillage oil treatment agents for marine		
	DEOPELLET Series	Foul odor gas absorbents for absorption towers		

\* VOC: Volatile Organic Compounds

### Products Meeting Environmental Requirements

#### Superior Paste Coating and Stable Quality as Lithium-ion Battery Binder

##### Binder for lithium-ion battery/CELLBINDER series

Lithium-ion batteries (LiB) have advantages of high voltage and high energy density, and have become a popular power source for many electric and electronic devices including cellular phones, laptop computers, digital cameras and video camcorders. The applications of these batteries have also expanded to include electric vehicle batteries. During the manufacturing of electrodes, which are components of LiB, **CELLBINDER** is used as waterborne binders to bind active materials on electrode substrates. Functioning as carbon paste thickener and dispersion stabilizer, **CELLBINDER** is efficient in filtration processes, superior in binding properties and forming even coated layers on collectors, and contribute to stable quality.



The coating example of paste using CELLBINDER

#### Long-cultivated Surfactant Technologies Contribute to the Prevention of Marine Pollution

##### Spillage oil treatment agent for marine/SEACLE N-800

There has been a number of unexpected oil spills caused by ships at sea. **SEACLE N-800** is a spillage oil treatment agent that has been type approved (type approval number P-282) based on the stipulations of the 「Act on Prevention of Marine Pollution and Maritime Disaster」. The treatment agent is sprayed and stirred using high-pressure water to emulsify and disperse spillage oil to promote natural cleansing of oils without any adhesion to quay or rock surfaces, and without any sedimentation on the ocean floor. Low in toxicity, the agent quickly and effectively treats spillage oils for the preservation of the marine environment.





## Selected Products

Numerous product lines developed using chemical technology know-how accumulated for long years. We support many types of industries behind the scenes as a industrial chemical manufacturer that offers chemicals and intermediate materials used in industrial processes, and deliver "Products & Technology Friendly to the Environment and People."

### Polymerizable emulsifier that contribute to lowering the burden on the environment HITENOL KH series

#### ● Emulsion polymerization method and emulsifier

Emulsion polymerization is a method to create synthetic resin emulsion from polymer particles with emulsifier being a necessary ingredient. Monomers prior to polymerization are emulsified and solubilized to prepare for polymerization and to stabilize polymer particles after polymerization. The biggest advantage of synthetic resin emulsion is that it is waterborne. Since no organic solvents are used, benefits include prevention of atmospheric pollution, low impact on the environment (resource saving) and improvement of work environment, and is used in wide variety of fields including coating agents, adhesives, civil engineering, paper manufacturing, fibers, etc.

#### ● Polymerizable emulsifier

Although emulsifier is necessary for emulsion polymerization, there are negative effects caused by it following polymerization. These include foaming of the emulsion, drop in water resistance due to the emulsifier shifting to the coating film surface, and poor strength and appearance. To resolve these issues, the technology of applying reactive emulsifiers (surfactants) is becoming the most practical technology. Because a reactive emulsifier copolymerizes with monomers during emulsion polymerization, such issues can be resolved as there is very little presence of the reactive emulsifier within the emulsion. The **HITENOL KH** series is a reactive emulsifier developed using long-cultivated knowledge of surface chemistry and synthesis technologies. Our reactive emulsifier reacts well with various monomers for emulsion superior in mechanical stability and physical film properties. Since it reacts with monomers, it can also be used as resin modifiers.



Emulsion

Effect of HITENOL KH-10 on film's water resistance

polymerizable emulsifier HITENOL KH-10			conventional emulsifier		
3	4	5	6	7	8
10	11	12	13	14	15
17	18	19	20	21	22

monomer: styrene/butyl acrylate=50/50  
Compare the transparency of coating film after soaking 48 hours (at 25 °C) in distilled water

#### Applications of emulsion using polymerizable emulsifier (examples)

For adhesives



For paint



For paper



For coating





# Aiming to be a Trusted Company

We continue to maintain the corporate governance system in order to attain a level of high confidence from society. We also operate our control systems appropriately so that the company organization is properly managed.

## For CSR promotion

We believe that it is important to gain a high degree of confidence from all stakeholders including the society, customers and business partners, stock holders and investors, as well as employees through fair and transparent corporate activities based on corporate social responsibility (CSR). Our company group aims to become an important existence in the world by promoting CSR from

views of economy, society and environment. In order to realize our company motto and credo and to promote our CSR, we have established the "Code of Corporate Ethics" and "Declaration of Action for Executives and Employees" to practice and improve corporate governance, compliance, internal control, risk management, responsible care activities, human rights, labor, etc.

**Our company motto** Contributing to the nation and society through industry.

**Our Company credo** Quality First / Cost Reduction / R&D Efforts

## Corporate Governance

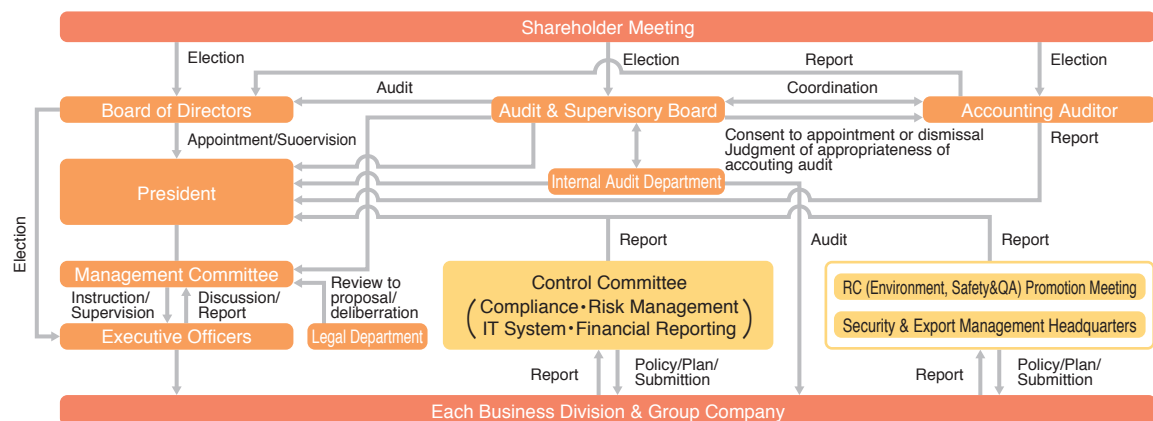
To establish a management base that gains the trust of society, our basic belief is to conduct corporate activities that are fair and transparent. In order to support these activities, we have established and will continue to strengthen our corporate management system and other corporate governance systems. All management decisions are made by the Board of Directors that includes outside directors. All matters that are brought up to the Board of Directors are first discussed at management committee so that decisions are rational and conform to the laws and articles of incorporation.

We have also established the executive officers system for executive officers to determine matters in need of decision by the Board of Directors as well as perform other business executions. Executive officers include the President, Managing Executive Officers, Senior Executive Officers and Executive Officers and are composed of Division Managers that are appointed and supervised by the Board of Directors. Executive officers bear the direct responsibility for the business results of the departments in charge and efforts are being made for the smooth and unified execution of business by reporting business results and

important matters at the Executive Officer Committee. Our auditors including outside auditors form the Audit & Supervisory Board. The Board demands from the Directors and employees reporting of necessary for auditing the execution of business including the progress of management plans, decisions made by the Representative Director, status concerning risk management of losses and changes in important accounting policies. In addition, the Audit & Supervisory Board Member conducts auditing on a daily basis by attending such meetings as management committee, Risk Management Control Committee meetings, Compliance Control Committee meetings, etc. Concerning important auditing issues, opinions are exchanged regularly between the Audit & Supervisory Board and Representative Director for mutual awareness and stronger relationship of trust. Auditing of accounts is conducted by KPMG AZSA LLC jointly attended by the Audit & Supervisory Board as needed.

We have also established the Internal Audit Department as a system to verify the internal control system concerning financial reports.

Corporate Governance System (in force as of June 25, 2013)



Reports on our corporate governance are available on the Tokyo Stock Exchange's website: <http://www.tse.or.jp/disc/44610/140120130604058172.pdf>



## Compliance

Our company established a Compliance Control Committee in 2004. This committee has been engaged in establishing our own compliance system and performing multiple activities to instill compliance practices within our company. We will continue to enhance further compliance practices.

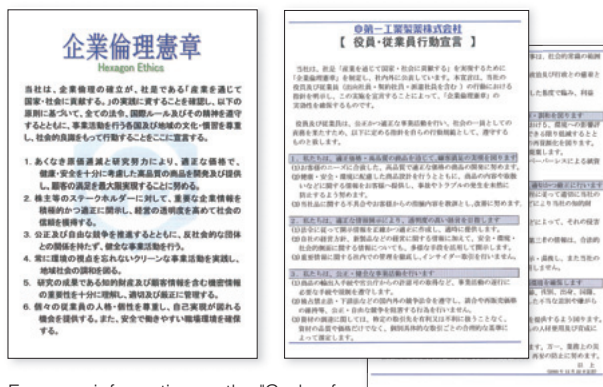
### Basic Policy

Our "Code of Corporate Ethics" was set up in July 2004. This clarified the ethical goal of our company. Our "Declaration of Action for Executives and Employees" was set up in December 2005. We specified the code of conduct for executives and employees to substantiate our "Code of Corporate Ethics" and to secure the effectiveness of the code. This "Declaration of Action for Executives and Employees" is also available in card form. The card has been already handed out to all of our board members and employees.

The Whistleblower Hotline was set up in 2006. This hotline is a contact point for any employee who has information about (alleged) violations of law and/or wants to report an actual violation of law. Whatever access mode is used (phone, e-mail, postal mail), the Whistleblower Hotline is directly connected to our Compliance Control Committee.

### Activities to Instill and Implement Compliance Practices

We have been conducting a "Research Questionnaire on Compliance Awareness" once a year, in order to check to what extent the compliance-based management philosophy is instilled in our employees. Compliance assessment has been undertaken on a sectoral basis. To allow anyone to acquire such knowledge, we have also established an information service database that can offer various kinds of



For more information on the "Code of Corporate Ethics" and the "Declaration of Action for Executives and Employees," please visit our company's website.

## Internal Control

We acknowledge that any enterprise must comply with laws and regulations, fulfill its obligations as a member of society through proper business activities to ensure stakeholders' interests are served, and make a positive contribution to society while gaining the confidence of said society.

In May 2006, the board of directors passed a resolution on "Systems for Ensuring the Proper Operation of the Dai-ichi Kogyo Seiyaku Group." We have been engaged not only in internal control in compliance with Japanese Corporate Law but also in performing periodic reviews of our internal control systems and their maintenance and operation, in order to ensure the credibility of financial reports in accordance with the Financial Instruments and Exchange Law. In addition to having

set up appropriate internal control committees, we have established our Information Security Rules.

Serving as the foundation of our economy and society, IT controls currently play a larger role than they used to. Thus, in order to reduce information system risks such as information leaks, we have developed information security policies and standards for risk measures and have defined procedures for information security practices to ensure the information security of our company.

In recognition of the importance of internal control systems, our Financial Reporting Control Committee and Internal Audit Department play a central role in various internal control matters.

## Risk Management

The risks companies face have become diversified and complicated, which may result in increased adverse impacts on shareholders. Our company places risk management as an important business challenge. In management meetings, we check and supervise the cross-sectional risk management system throughout the company. We also set up the Risk Management Control Committee consisting of representatives in each branch and department. To address potential and/or evident risks to our business activities, we prepare our Risk Management Procedures, Internal Audit Rules, Product Liability (PL) Prevention & Management Procedures, Information Security Rules, and Personal Information Management Rules, as well as

their corresponding criteria and manuals, which support supervisory departments to promote risk management.

In FY2012 we conducted continuous risk measurements in each sector and their progress management. In addition, we prepared concrete action guidance in an emergency according to the risk management procedures. Following the Business Continuity Plan (BCP) concerning earthquake countermeasures in production branches, we prepared the BCP in the Head Office. In the future, we intend to review the BCP preparation in each branch. We conducted company-wide safety confirmation training as an earthquake countermeasure and raised our risk consciousness on a regular basis for preparation in an emergency.



# Aiming for a Society that can Develop in a Sustained Manner

We make efforts to conserve global environment through Responsible Care (RC) activities with the aim of protecting the environment, safety, and health, as well as to establish a circulating society.



Executive Officer/Division Manager of the Production Control Division (In charge of environment Safety & QA)  
**MURAKAMI Osamu**

The Responsible Care (RC) activities are promoted by the chemical industry under self-management. Responsible Care commits companies to conduct environmental and safety measurements over the entire life cycle, from the development of chemical substances to their disposal, through processes of manufacture, distribution, usage, and final consumption, as well as to improve their performance. We joined the Japan Responsible Care Committee (Responsible Care Committee of the current Japan Chemical Industry Association (JCIA)) in 1998, and since then have strongly promoted RC activities that focus on environmental conservation, security and accident prevention, occupational health and safety, transport safety, chemicals and product safety, and communication with society for improving our activities. In addition, our plants are ISO14001 certificated, and put continuously make further efforts to improve our performance using the environment management system. In terms of our environmental conservation activities, we continually promoted to switch the fuel from heavy oil to natural gas, and completed this in all branches in FY2011. Furthermore, we continue to devote our efforts to reducing CO<sub>2</sub> emissions through energy saving activities by reviewing manufacturing facilities and production processes.

In terms of our security and accident prevention activities, we organize periodical emergency and evacuation drills to prepare for the event of an accident. In FY2012, we focused on the safety confirmation training for natural disasters, such as earthquakes and tsunami. In terms of our occupational health and safety activities, we focused on various safety activities with the goal of zero accidents resulting in absence from work, regular medical checkups, and mental health care. We put more efforts into improving our performance continuously through the RC activities and achieve our corporate social responsibilities (CSR) to gain confidence in society.

## Basic Philosophy, Basic Policies, and Corporate Principles for Environmental and Safety Practices

### Basic Philosophy

We have adopted the following business philosophy for all our business activities: "By providing quality products to ensure customer satisfaction, we not only strive to be a prosperous company while moving forward with our employees and serving local communities, but also contribute to creating an affluent society." Based on this philosophy, we adopt the following statement as our basic philosophy for environmental and safety practices: "Throughout the entire life cycle of our products, from development to disposal, we pay special attention to both human safety and health and environmental preservation, as well as contributing to sustainable development and the realization of our goal for an affluent society."

### Basic Policies

- 1 Throughout the entire life of our products, from development to disposal, we evaluate and reduce each product's load on the environment and do our best to ensure the protection of the environment.
- 2 We maintain no-accident and no-disaster operations to ensure safety for the employees and the residents of the surrounding areas.
- 3 We ensure the safety of raw materials and interim and final products, and prevent any health disorders of everyone concerned, such as employees, carriers, customers, and general consumers.
- 4 We not only obey relevant laws and regulations, but also actively and constantly examine and improve the environment and safety through self-management.

### Corporate Principles

- 1 We evaluate the effects of our business activities on the environment and human safety and, further, set and periodically review our environmental targets/goals and safety targets to ensure continuing improvement of both our environmental protection activities and occupational safety and health activities.
- 2 We obey any laws, regulations, and agreements related to both the environment and occupational safety and health issues to ensure coexistence with our local communities.
- 3 To reduce environmental impacts, we are devoted to performing all of our business activities in such a manner as to achieve resource and energy conservation, promotion of waste reduction and recycling, and improvement of occupational safety and protection of health.
- 4 When developing our products and technologies, we are devoted to providing safe products while paying special attention to environmental and safety matters, and fully understanding the extent to which the product will impact the environment.
- 5 We make our best efforts to help all of our employees to fully understand the environmental and safety policies and to improve their environmental and safety awareness by implementing environmental and safety training and workplace communication activities. For this purpose, we ask our affiliate companies for their continued understanding and support.

### What Does It Mean?

#### Responsible Care (RC) Activities

Responsible Care (RC) activities refer to activities voluntarily conducted by the respective companies handling chemical substances to ensure environment, safety, and health improvements. We also promote dialog and communication with the public by making the results of such activities publicly available throughout the entire process, from the development of a chemical substance to manufacturing, distribution, use, final consumption, and disposal/recycling.





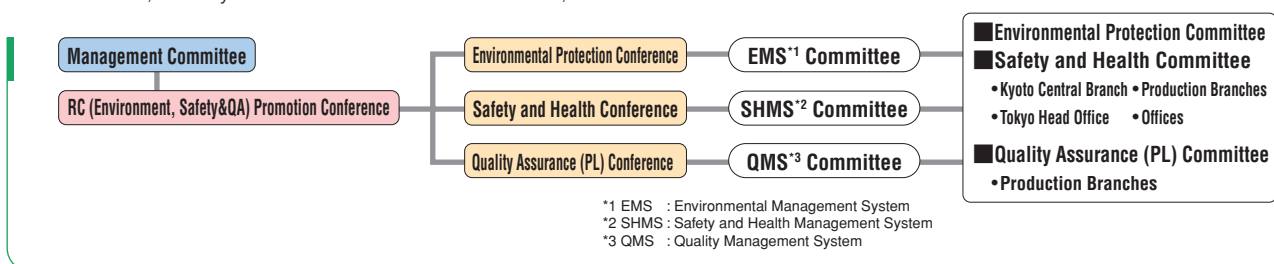
## RC Promotion System

We have established an RC (Environment, Safety & Quality Assurance) Promotion Conference with our president as its chairman. At the conference, we deliberate on and decide agenda items based on our Basic Philosophy, Basic Policies, and Corporate Principles for Environmental and Safety Practices. In order to effectively promote our RC activities, we have established three different conferences - the Environmental Protection Conference, Safety and Health Conference, and QA (PL) Conference - composed of branch managers and the heads of relevant departments and sections, and chaired by the person in charge of Environment, Safety & QA. At these conferences, our

company-wide targets and implementation plans and their results are deliberated on.

We have also established, as a sub-organization of our conferences, three company-wide committees - the EMS Committee, SHMS Committee, and QMS Committee - as well as three committees in each of our manufacturing branches - the Environmental Protection Committee, Safety and Health Committee, and QA (PL) Committee.

The conferences have been held periodically to formulate implementation plans for RC targets to manage the progress of these plans, and to summarize obtained results.



## Management System

We define our RC activities based on the RC Promotion and Management Regulations, Environmental Conservation and Safety and Health Management Regulations, and Quality Assurance Management Regulations to address and implement them. In each production base in Japan and overseas, we have acquired the ISO14001 and ISO9001 certifications for the environmental and quality management system international standards. We enhance environmental conservation and improvement of quality by utilizing those certifications as a tool for executing a PDCA cycle, and continue to improve our performance. Our ISO accreditation sector performs an internal audit once a year, and management review twice a year with the aim of system improvement.

### PDCA Cycle



### ISO Certification Status in DKS group

Business offices and affiliated companies			ISO14001		ISO9001	
			Acquisition of certification	Certification body	Acquisition of certification	Certification body
Domestic production branches	Our Departments	Yokkaichi Branch	June 2002	JCQA	January 2000	JCQA
		Ohgata Branch	July 2002	JCQA		
		Shiga Branch	March 2002	JCQA		
		Production Control Headquarters	—	—		
		Business Administration Div.	—	—		
		R&D Departments	—	—		
	Affiliates	DAI-ICHI CERAMO Co., Ltd.	—	—	February 2011	JQA
		Yokkaichi Chemical Company Limited	March 1999	JCQA	August 1998	JCQA
		KYOTO ELEX CO., LTD.	December 2001	JQA	June 2000	JQA
Overseas affiliates	TIANJIN DAI-ICHI FINE CHEMICALS CO., LTD.	December 2006	ZDHY	August 2001	ZDHY	
	CHIN YEE CHEMICAL INDUSTRIES, CO., LTD.	December 2006	BSMI	April 1995	BSMI	
	P.T. DAI-ICHI KIMIA RAYA	—	—	September 2009	BVI	
	SHUANG YI LI (TIANJIN) NEW ENERGY CO., LTD.	—	—	March 2007	CQC	



# Improving Activities Towards the Targets

We set up the specified activity targets each fiscal year, and conduct the Responsible Care (RC) activities as such. We also continue to launch investment in environmental-related systems and improve activities in this fiscal year.

## Targets and Performance (Dai-ichi Kogyo Seiyaku Group)

### ● Targets and Performance in FY2012

Evaluation ◎: Significant results, ○: Results according to targets, △: Targets remain unachieved

Target Items	Management Items	Targets in RC Activities	Performance in FY2012	Evaluation
Promoting energy saving	Energy consumption per unit	1 % reduction compared to FY2011	4.0 % worse compared to FY2011	△
Reducing GHG emissions	CO <sub>2</sub> <sup>(1)</sup>	23 % reduction compared to FY2005 on average from FY2008 to FY2012	23.5 % reduction compared to FY2005 on average from FY2008 to FY2012	○
Reducing industrial waste	Waste generation per unit	1 % reduction compared to FY2011	10.6 % worse compared to FY2011	△
	Recycling rate	Promoting recycling	89.9 % , 11.5 % improved compared to FY2011	○
	Final disposal amount	80 % reduction of final disposal amount in FY2015 compared to FY2000	75.4 % reduced compared to FY2000	△
	Final disposal rate <sup>(2)</sup>	1 % or less in FY2015	1.9 %	△
Reducing emissions of environmental impact substances	SOx emissions	Emission/discharge control of environmental pollutants in the air	14 % reduced compared to FY2011	◎
	NOx emissions		5 % reduced compared to FY2011	○
	Dust		19 % reduced compared to FY2011	◎
	COD		12 % reduced compared to FY2011	◎
	Water discharge	Emission/discharge control of environmental pollutants in water	6.3 % increased compared to FY2011	△
Proper management of chemical substances	PRTR Law-designated substances	Emission reduction of PRTR Law-designated substances	5.4 % increased compared to FY2011	△
Promoting green procurement		Promoting green procurement rate of office supplies	9.5 % increased compared to FY2011 in the green procurement rate	○
Eliminating disasters/accidents		No occupational accidents (days away from work)	One case occurred	△
		Eliminating severe accidents associated with production facilities	No accidents occurred	○
Environmental management system		Promoting environmental management system	Maintained	○

\*1 Derived from energy in production and management sectors. \*2 The rate of Final disposal amount to waste amount.

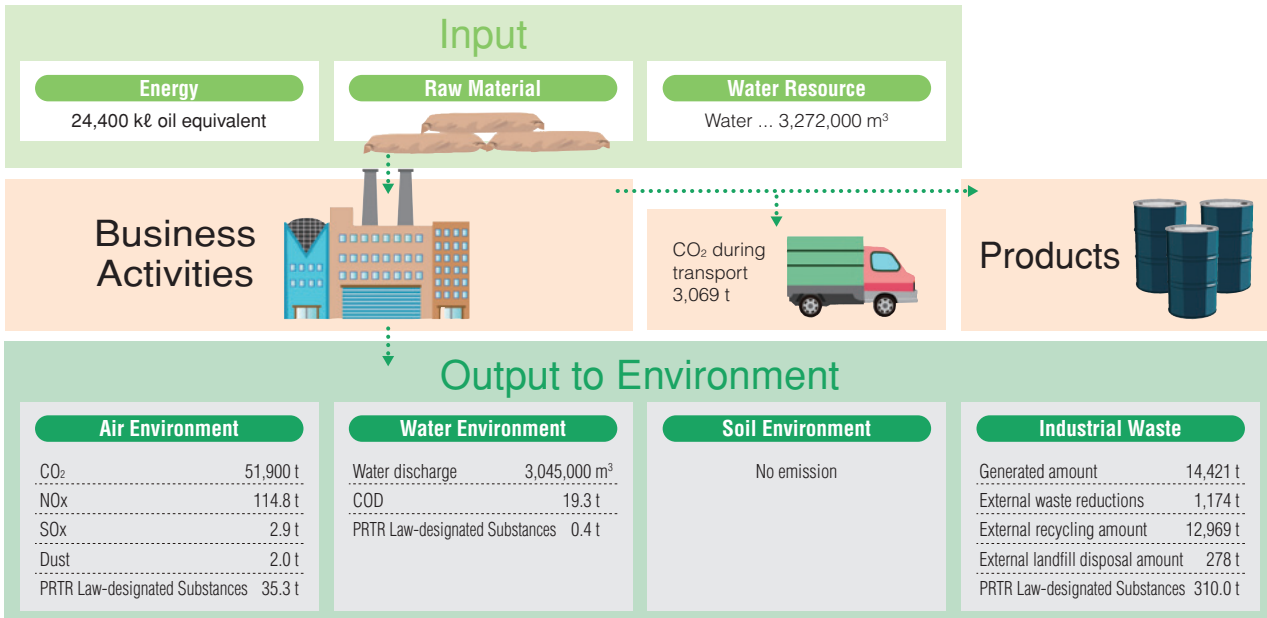
### ● Targets and Performance in FY2013

Target Items	Management Items	Targets and Performance in FY2013
Promoting energy saving	Energy consumption per unit	1 % reduction compared to FY2012
Reducing GHG emissions	CO <sub>2</sub> <sup>(1)</sup>	28 % reduction compared to FY2005 on average from FY2013 to FY2015
Reducing industrial waste	Waste generation per unit	1 % reduction compared to FY2012
	Recycling rate	Promoting recycling
	Final disposal amount	80 % reduction compared to FY2000 in FY2015
	Final disposal rate <sup>(2)</sup>	1 % or less in FY2015
Reducing emissions of environmental impact substances	SOx emissions	Emission/discharge control of environmental pollutants in the air
	NOx emissions	
	Dust	
	COD	
	Water discharge	Emission/discharge control of environmental pollutants in water
Proper management of chemical substances	PRTR Law-designated substances	Emission reduction of PRTR Law-designated substances
Promoting green procurement		Promoting green procurement rate of office supplies
Eliminating disasters/accidents		No occupational accidents (days away from work)
		Eliminating severe accidents associated with production facilities
Environmental management system		Promoting environmental management system

\*1 Derived from energy in production and management sectors. \*2 The rate of Final disposal amount to a waste amount.



## ● Environmental Impact Accompanied with Business Activities



## ● Environmental Accounting (Dai-ichi Kogyo Seiyaku Group)

In FY2011, investment for environmental-related systems was spent mainly for pollution control, promotion of energy conservation, and recycling of wastes. Environmental-related costs increased in the fields of energy efficiency and waste

recycling. The economic benefits herein include profits on the actual sales of valuable resources and the amount of cost savings and are not based on estimated economic benefits.

### ● Investment and Costs of Environmental Protection Activities

Category	Main Activity	Investment (yen in millions)	Costs (yen in millions)
Costs within the plant premises	Pollution control Air pollution control, water pollution control	42.7	329.7
	Global environment protection Energy saving	21.5	122.1
	Resource recycling Resource saving, waste treatment/disposal	7.8	260.6
Upstream/downstream cost	Lowering environmental impact in containers/packaging	3.7	0.8
Management activity cost	ISO acquisition/completing surveillance audit, greening each plant	0.3	50.1
R&D cost	Environmentally-conscious R&D	0.0	438.4
Social activity cost	Providing support grants for environmental protection to environmental protection groups or local communities	0.2	2.6
Environmental damage cost		0.0	0.0
<b>Total</b>		<b>76.2</b>	<b>1,204.3</b>

### ● Economic Effects Generated by Environmental Protection Measures

Items	Activity	Economic Effects (yen in millions)
Profit on sale of valuable resources	Profit on sale of metal scrap, waste oil, and waste alkali, etc.	4.5
Amount of cost savings through energy conservation	Amount of cost savings in electric power and fuels	4.7
Amount of cost savings through resource saving	Amount of cost savings through reduction of water use /waste	0.1
<b>Total</b>		<b>9.3</b>



# Promoting to Reduce Environmental Impact

We promote energy conservation towards global warming prevention.

We will also control emissions of pollutants and continue to make efforts to reduce them.

## Global Warming Prevention (Energy Conservation)

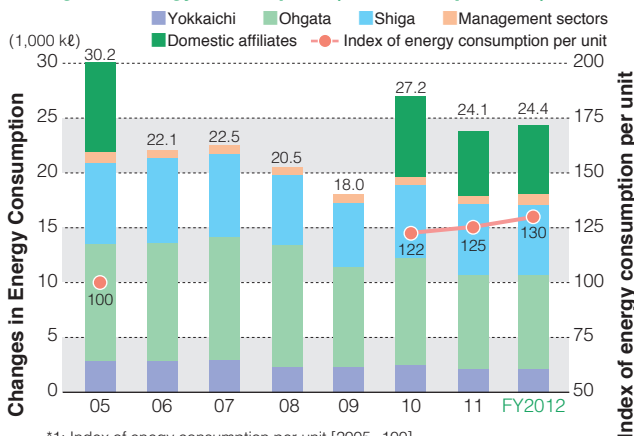
Environmental performance data is described based on the calculation with the Dai-ichi Kogyo Seiyaku Group (total values in all domestic affiliates, including Dai-ichi Kogyo Seiyaku Co., Ltd., and Yokkaichi Chemical Company Limited) because we acquired 100 % of Yokkaichi Chemical Company Limited in April, 2011.

### Changes in Energy Consumption and CO<sub>2</sub> Emissions

In FY2012, the Dai-ichi Kogyo Seiyaku Group recorded 24,400 kℓ of energy consumption, which resulted in a 1.2 % increase compared to the previous year. The energy consumption per unit, however, resulted in a 4.0 % increase to our target of 1 % reduction compared to the previous year due to a decrease in production amounts. CO<sub>2</sub> emissions were 51,900 tons, which increased 4.1 % compared to the previous year because the actual emission coefficient was increased per electric power supplier due to the operation

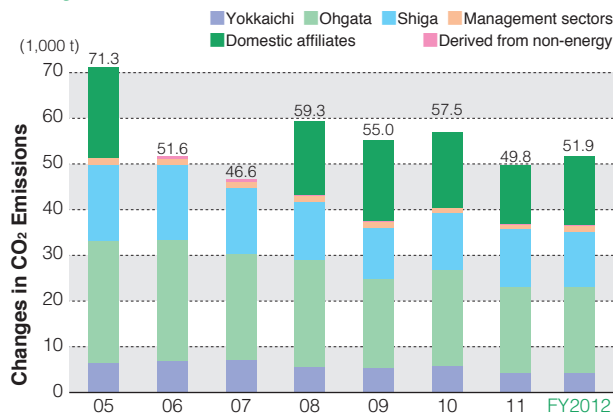
stoppage of the nuclear power plants. However, CO<sub>2</sub> emissions were reduced by an average of 23.5 % to our medium-term goal of an average of 23 % reduction compared to FY2005, from FY2008 to FY2012, which enabled us to achieve our goal. We continue to devote our efforts to reducing CO<sub>2</sub> emissions towards our medium-term goal of FY2013 to FY2015 through activities to improve energy efficiency.

#### Changes in Energy Consumption (Crude oil equivalent)



\*1: Index of energy consumption per unit [2005=100].  
\*2: Domestic affiliates, including Yokkaichi Chemical Company Limited KYOTO ELEX CO., LTD. and DAI-ICHI CERAMO Co., Ltd.

#### Changes in CO<sub>2</sub> Emissions



\*1: Carbon dioxide emissions derived from non-energy are described from FY2006.  
\*2: Carbon dioxide emissions in management sectors include fuels for company cars.

### Efforts in Logistic Sectors

We outsource our logistic business for our products to external freight companies. We transport products by truck, rail, and ship, but the truck transport is most frequently used because it can instantly respond to the customers' desired delivery date.

Related to environmental impact activities, we have been fulfilling our role as a specified consigner under the Energy Conservation Law to tackle the challenges of reducing impacts on the environment. The freight volume decreased by 0.9 % in FY2012, but we achieved a 1.5 % reduction of energy consumption and a 1.6 % reduction of GHG emissions by promoting modal shifting. Furthermore, we achieved a 1.0 % improvement in energy consumption per unit. Environmental impact reduction in logistic sectors plays an important role not only in the aspect of global warming countermeasures, but also in effects on air pollution and/or waste generation. In the future, we will continue to move forward with our activities by promoting further modal shifting, and by making efforts to achieve a 1 % improvement in the energy consumption per unit

### Efforts to Power Saving

We continued to make efforts on power saving in FY2012, in order to take measures against power shortages due to the influences of the Great East Japan Earthquake and the subsequent operation stoppage of the nuclear power plants. As for approaches for the entire company in general, during the "Cool Biz" campaign period (May to October), we suppressed the set temperature of air-conditioning equipment, reduced elevator service, and carried out thorough energy saving modes in office automation equipment, as well as improved operating hours

compared to the previous fiscal year, which is specified in the goals of the Energy Conservation Law, through increase of loading rate for reserved services, and reduction of transporting of returned products.

In addition, we share environmental impact activities with our logistics partners and continue to pursue better results year by year while implementing these activities by executing the PDCA cycle.

#### Environmental Impact to be Reported as a Specified Consigner

Items	FY2012	Comparison to the Previous Year
Freight Volume	31,232,000 ton · km	-0.5 %
Energy Consumption Amount	45,358 GJ	-1.5 %
Energy Consumption per Unit	1,452,000 GJ/ton · km	-1.0 %
CO <sub>2</sub> Emissions	3,069 t-CO <sub>2</sub>	-1.6 %

Calculated using the Improved Ton-Kilometer method, excluding the Yokkaichi Chemical Co., Ltd.

of production and research devices with the aim of reducing peak-hour electricity consumption. In our Yokkaichi Branch, we partially switched the heating system in winter from air conditioners to gas fan heaters. In our Shiga Branch, we made efforts to introduce high-efficiency equipment according to updates of the facilities. In our Osaka Branch, we reduced electricity consumption by 25 % compared to the previous year as a result of our efforts, for example, by scaling down the office space to decrease the amount of lighting. We continue to address power saving in FY2013.

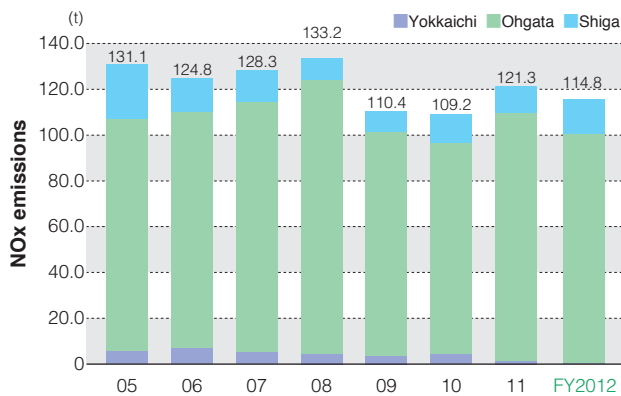


# Efforts to Reduce Emissions of Chemical Substances

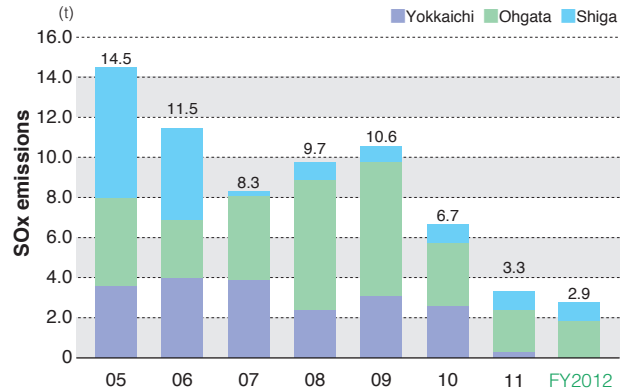
## Air Pollution Control

Related to reduction of air-pollutant emissions in FY2012, we achieved a 13.6 % reduction of SOx emissions, a 5.4 % of NOx emissions, and a 19.1 % of dust emissions compared to the previous year through operation adjustment of the facilities based on the efficient production plan. We will continue to pursue more energy efficient operation techniques. Note that the Yokkaichi Chemical Company Limited does not have any facilities related to SOx, NOx, and dust generation.

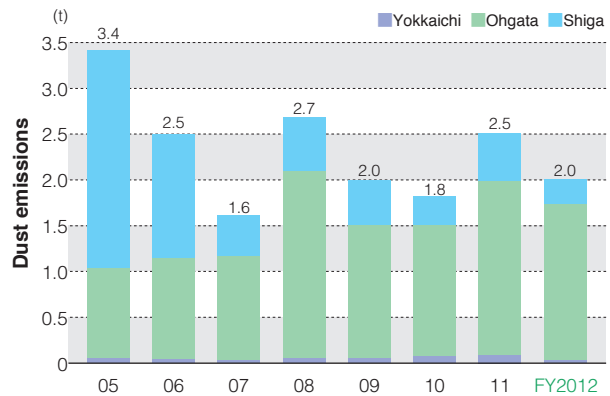
### Changes in NOx Emissions



### Changes in SOx Emissions



### Changes in Dust Emissions

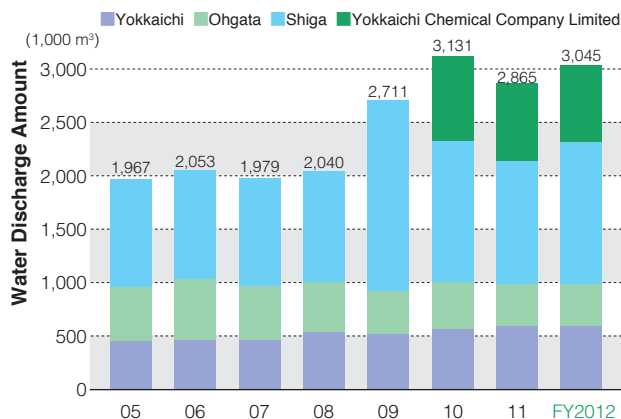


## Water Pollution Control

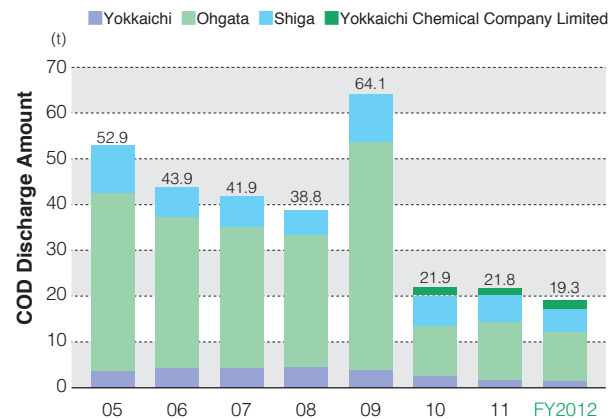
In FY2012, the Dai-ichi Kogyo Seiyaku Group recorded 3,045,000 m<sup>3</sup> in the amount of water discharge, which resulted in a 6.3 % increase compared to the previous year. The COD discharge amount was 19.3 tons, which was an 11.5 % reduction compared to the previous year. We will

continue to make efforts to reduce the water and COD discharge amount by improving our production processes and effluent treatment facilities, as well as reviewing the cleaning methods of production facilities.

### Changes in Water Discharge Amount



### Changes in COD Discharge Amount







# Reduction of Waste and Chemical Substances

We have been devoted to the reduction of waste and chemical substances.

We promote our activities based on the rules to regulate proper management of chemical substances.

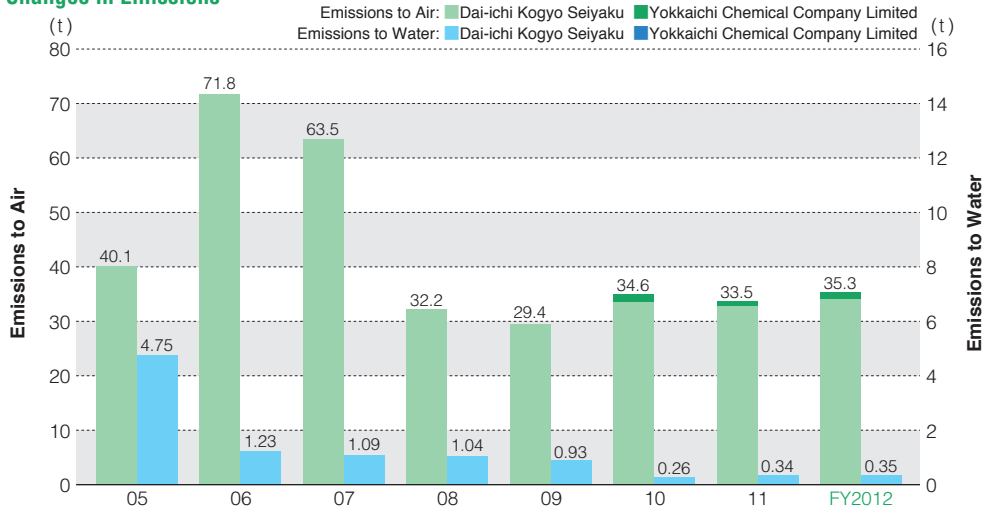
## Efforts to Reduce Emissions of Chemical Substances

### ● Emissions of PRTR Law-designated Substances

The Dai-ichi Kogyo Seiyaku Group had a total of 65 notification substances under the PRTR Law in FY2012. The total amount of emissions was 35.6 tons, which resulted in a 1.8 ton increase compared to FY2011. The breakdown was 35.3 tons to air, 0.35 tons to water, and none to land. The amount of waste transfer recorded was 310.0 tons, a 24.0 ton reduction compared to the previous year (7 % less)

owing to the use of recycled Toluene, as well as other factors. Through changes in production techniques, improvement of production processes and the introduction of recovery equipment, we will continue making efforts to reduce the emissions/discharge of PRTR substances into the environment.

#### Changes in Emissions

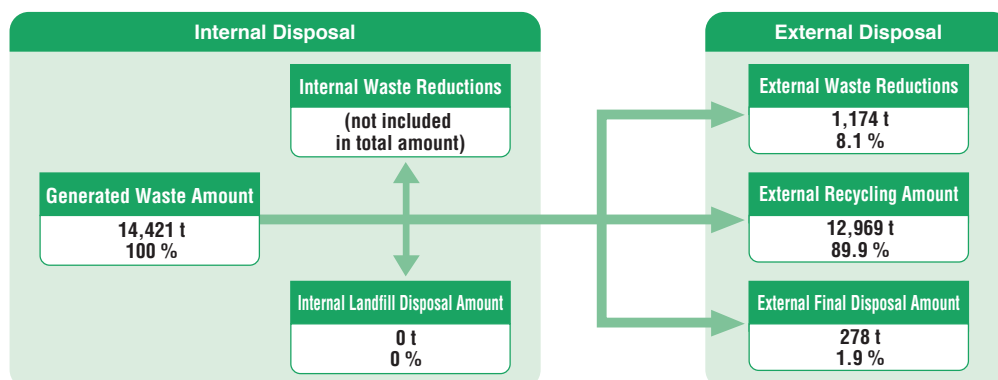


The results between FY2010 and 2012 show the total amount for the Dai-ichi Kogyo Seiyaku Group and the Yokkaichi Chemical Company Limited. For the emission amount of notification substances under the PRTR Law in FY2012 (among all notification coverage substances, those of which the emission or transfer amount was 0.01 tons or more), please visit our webpage. <http://www.dks-web.jp/english/download/rc.html>

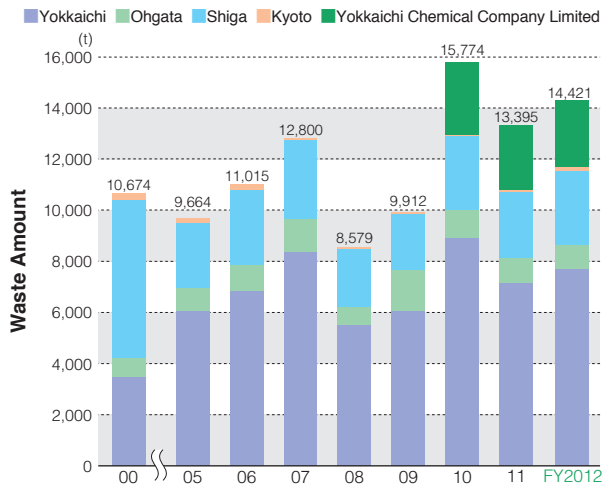
## Efforts to Reduce Waste

The amount of waste generation in FY2012 recorded was 14,421 tons for the Group, which was a 1,027 ton increase compared to FY2011 (7.7 % more). The waste generation per unit in production amounts (target: 1% improvement compared to the previous year) was increased by 10.6 % compared to the previous year by fall-off in production. The external recycling rate was 89.9 %, an improvement of 11.5 % compared to FY2011. The final disposal amount recorded was 278 tons (target: 80 % reduction compared to FY2000 in FY2015), equivalent to a 75.4 % reduction

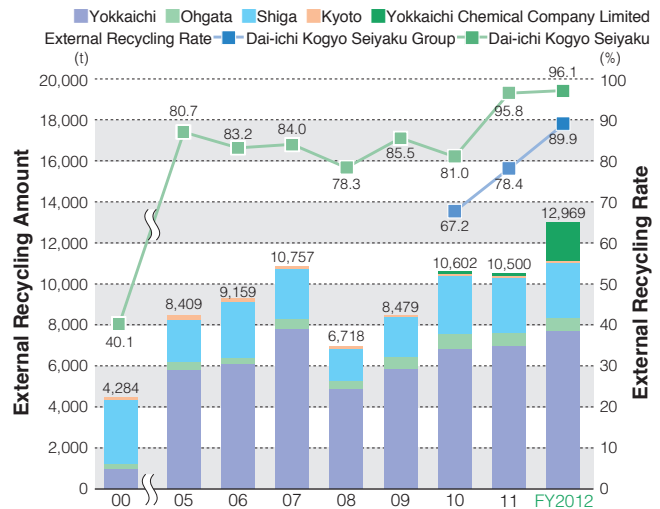
compared to FY2000. In addition, the final disposal rate to the amount of waste generation was 1.9 %. To achieve the target of the final disposal rate of 1 % or less as in FY2015, not only the Ohgata Branch, with a large amount of disposal, but each branch is examining measures to reduce the final disposal amount. Furthermore, we continue to push forward the 3R (Reduce, Recycle, Reuse) activities by improving our production processes and reviewing our treatment measures to use resources effectively.



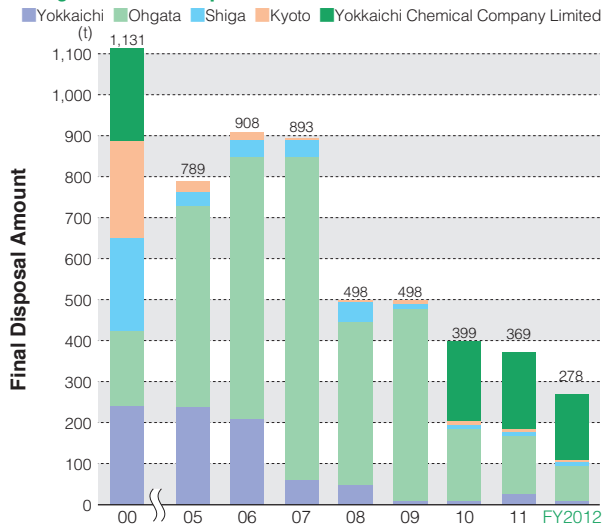
### Changes in Waste Amount



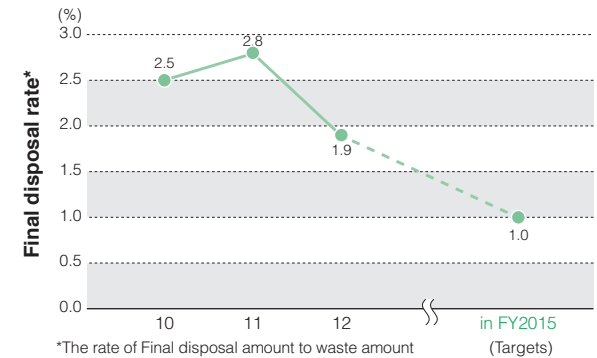
### Changes in External Recycling Amount & External Recycling Rate



### Changes in Final Disposal Amount



### Changes in final disposal rate\*



### Environment-related Complaints

During FY2012, we received four environment-related complaints: three for odor, and the other for noise problems. We took emergency measures and recurrence-prevention measures in each case.

## Chemical Substance Management

We set forth the "Chemical Substance Management Regulation" with the aim of global environment protection, accident prevention, occupational safety, health assurance, as well as product safety. Based on this regulation, we promote "proper management of chemical substances over the product life cycle." We have been making management regulations related to the understanding of chemical substances in use as well as their amount,

substitute/reduction of harmful chemical substances, improvement of ambient environments, and management of chemical substances contained in products (Green procurement). We categorize our chemical substances into three classes based on domestic and international laws, global agreements, and requests from customers, and we define the control descriptions for each class.

### Class and Description Related to Chemical Substances Management

Class	Description
Class A Substances to be prohibited	Chemical substances prohibited to use on products
Class B Substances to be reduced	Chemical substances for which complete abolishment would be preferable from an environmental aspect, and those for which the formula contained in products needs to be changed
Class C Substances to be controlled	Chemical substances for which the amount in emissions or transfer needs to be reduced, those that need to be recycled, and those for which the above substances in Class A and Class B are excluded



# Ensuring Safety, Process Safety and Disaster Prevention

We strive to secure a safe and comfortable working environment.  
We also engage in conducting emergency drills just in case of emergency events.

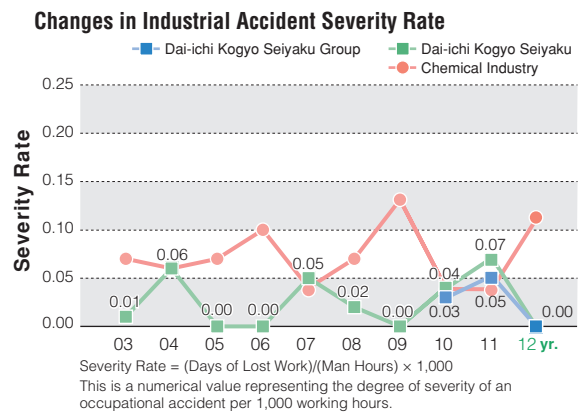
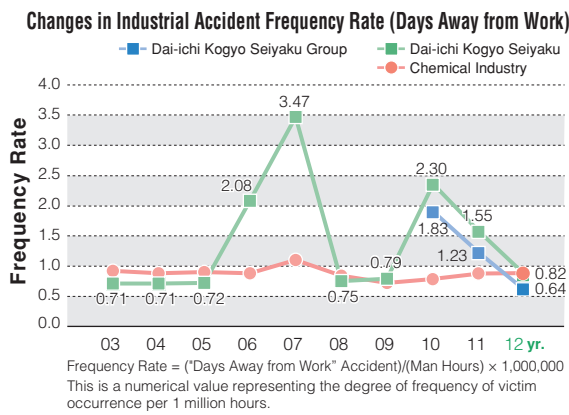
## Efforts to Occupational Safety

We recognize that ensuring security is the foundation for effective management and plays a fundamental role in any business activity. Taking safety first and the respect of human life and dignity as our basis, we have been making efforts to eradicate the potential for and occurrence of occupational accidents. Furthermore, in order to ensure a safe and comfortable working environment, we have been promoting the "5S" activities (Seiri, Seiton, Seiso, Seiketsu, and Shitsuke in Japanese). Regrettably, in FY2012, we had one "days away from work" cases and, therefore, failed to continue our company No Accident Record streak. For the case studies of

accidents, after analyzing the cause of the accident, we try to laterally disseminate the findings and solutions throughout all sectors and departments to prevent a similar case from occurring again. In addition, we have been placing significant emphasis on periodic implementation of preventative measures and safety patrols by the managers concerned in order to locate unsafe working conditions and operations that may exist. Moreover, we continue to conduct activities related to risk prediction, pointing and calling, risk assessment, and experience-based safety education, and we aim for the actualization of zero accidents.

### Industrial Accident Frequency Rate (AFR) & Industrial Accident Severity Rate (ASR) (From January 1 to December 31, 2012)

Compared to FY2011, the Dai-ichi Kogyo Seiyaku Group was able to improve the industrial accident frequency rate (days away from work) in FY2012. However, we had one "days away from work" cases in FY2012 and could not achieve our target of making the industrial accident frequency rate to zero. We continue to further enhance our conventional safety activities in order to achieve the industrial accident frequency rate of zero in 2013.



### ● Experience-based Safety Education

To prevent occupational accidents, there is an education method to develop workers' sensitivity and consciousness through an experience-based safety education that allows people to experience pseudo risk. According to the above method, we introduced pseudo experience devices to generate solvent and dust explosions in FY2010, and started to adopt the experience-based safety education. In FY2012, we

added pseudo experience devices to generate incidents of getting caught in rollers and piping pressure, and conducted safety education in each branch. We intend to introduce more pseudo experience devices, and continuously conduct the experience-based safety education to secure safe and stable operation in production and research sectors.

### Voice from the Person in Charge



Yokkaichi Branch  
NISHITANI Mitsutomo

### Approaches to occupational safety in our Yokkaichi Branch

As our Yokkaichi Branch located in the industrial complex deals with many hazardous chemicals, we promote various occupational safety activities. We not only organize periodical overall emergency and evacuation drills, and the safety confirmation training, but also introduce their original activities. For example, the production and indirect sectors evaluate each other's risk in the monthly risk assessment committee, and related to the common operation, employees who play the role of a lecturer conduct the experience-based education in an original way. In addition, we join the local associations, such as the disaster prevention committee of Yokkaichi industrial complex subcontractors, and make efforts to share information with our subcontractors based on the knowledge of actual disaster events, and occupational safety activities in the complex.



# Efforts to Process Safety and Disaster Prevention

## Preparation for Emergency

Just in case emergency events such as a fire/explosion, earthquake, leak, and/or power outage occur, we have established a Process safety and disaster prevention system for each branch, and conduct emergency drills according to the annual program. We also collaborate with local communities and organize joint emergency

drills, such as with local fire departments. In order to prevent accidents and disasters inherent in chemical manufacturers from occurring, we intend to take measures based on the risk assessment of hazardous properties, such as the potential hazard, and make efforts to prevent disasters, such as fire and/or explosions.



Kyoto Branch



Yokkaichi Branch



Shiga Branch

Yokkaichi Branch	Comprehensive emergency drill	November 2012 / February 2013
	Safety confirmation drill	January, March 2013
	Earthquake evacuation drill	April, May 2012
Ohgata Branch	Comprehensive emergency drill	October 2012
	Safety confirmation drill	January, February, March 2013
	Earthquake evacuation drill	May, October 2012
Shiga Branch	Comprehensive emergency drill	April, August 2012
	Safety confirmation drill	May, December 2012 / January, February, March 2013
	Earthquake evacuation drill	April, August, December 2012
Head Office/ Laboratory	Comprehensive emergency drill	December 2012
	Safety confirmation drill	January, February, March 2013
	Earthquake evacuation drill	December 2012
Osaka Office	Comprehensive emergency drill	December 2012
	Safety confirmation drill	January, February, March 2013
Tokyo Head Office	Comprehensive emergency drill	November 2012
	Safety confirmation drill	January, March 2013
Yokkaichi Chemical Company Limited	Comprehensive emergency drill	April 2013
	Earthquake evacuation drill	September 2012

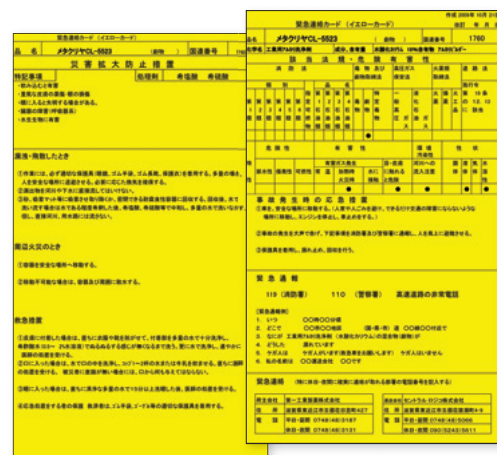
## Funding for Process Safety and Disaster Prevention Measures

The FY2012 funding for our process safety and disaster prevention measures was 96.7 million yen. This funding was mainly allocated to explosion, fire, and leak prevention measures; mitigation measures for aging facilities; and occupational safety and working environment improvement measures.

## Efforts to Distribution Safety

We outsource our transport business to external freight companies. Aiming to practice environmentally friendly transportation and eliminate transportation accidents including damage to or deformation of transport containers during transportation, we periodically hold conferences with our logistics partners. We use the following documents as useful tools to provide not only all available information but also proper education and instruction for our logistics partners: "Safe Driving and Maintenance of Traffic Order," "Revised Laws and Regulations," "Safety and Environmental Standards for Delivery Services," "For Professional Drivers," and "Transport Specifications." We also maintain our emergency network system during transportation.

We provide Yellow Cards for all relevant products and instruct tanker truck drivers to always keep the Yellow Card(s) with them during transportation. In addition, we have been working on developing a label-type Container Yellow Card system, which facilitates the sharing of safety information of a chemical substance by indicating the Emergency Response Guidebook (ERG) number and UN number on the Container Yellow Card label.



Yellow Card



# Activities Open to Local Communities

To show our efforts to the public, we transmit information via various media, make presentations in exhibitions, as well as actively engage in local activities based in each branch.

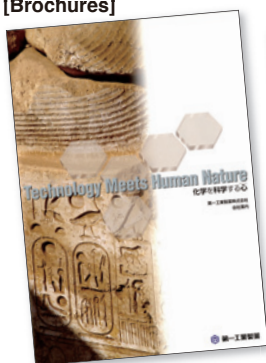
## Information Transmission Tools

### ● Transmission Information

For the purpose of providing our stakeholders with accurate and useful information on our company, we publish brochures such as our company's prospectus our Magazine for Public Relations titled "TACT", and our Social Activities Reports as "Environmental and Social Activities Report" (this document), for instance. Our web page also offers not only this information but information such as that of our technologies, products, and employment. In addition, we have offered a series of our Social Activities Reports as "Environmental and Social Activities Report" (this document) since FY2006 on our web page.



### [Brochures]



Corporate Profile



Environmental and Social Report



Magazine for Public Relations "TACT"



### ● FY2012 Exhibition Presentations

During FY2012, we made presentations at the following exhibitions.

June 2012	JPCA Show 2012 (The 42th International Electronic Circuits Exhibition) at Tokyo Big Sight Introduced products in the electronic/electric fields, and the EIMFLEX/DK BE-CLEAR Series
June 2012	The 18th research convention concerning groundwater/soil pollution and its prevention measures at Saitama Hall Introduced RENESAS COAT/AIR CHEM jointly by DAI-ICHI KENKOU CO., Ltd. and DAI-ICHI CLEAN CHEMICAL, INC.
October 2012	Nanocellulose Summit 2012 at Kyoto Terra Introduced cellulose single nano-fiber (CSNF)
February 2013	Leading Industry Exhibition Mie 2013 at Yokkaichi Dome Introduced cellulose single nano-fiber (CSNF)

### JPCA Show 2012

We introduced numerous product lines of industrial chemicals in the electronics/electrical fields, which were developed based on our technology and knowledge accumulated over many years. Many people visited our booth, and gave us their opinions and requests.



### The 18th research convention concerning groundwater/soil pollution and its prevention measures

This is the largest scale research convention in Japan on various issues concerning groundwater/soil pollution. We introduced two deodorizer-related products (deodorizer based on plant essential oils, dust-proof deodorizer) from our affiliates.





## Relations with Society & Local Communities

We are moving forward with contributions to society by making use of resources of our Group. We are devoted to various local activities including joint activities with industry groups, acceptance of plant visits, neighborhood cleanup activities and social activities such as participation in community events. Each branch holds a consultative meeting with other companies in order to promote local communication.

### Activities in Industry Groups

We mainly join the following industry groups and engage in various activities.

- Japan Chemical Industry Association (JCIA)
- Japan Soap and Detergent Association (JSDA)
- Japan Surfactant Industry Association (JSIA)
- Japan Food Additives Association (JFAA)
- International Pharmaceutical Excipients Council Japan (IPEC JAPAN)
- Oil & Fat Industry Kaikan
- Japan Oil Chemists' Society (JOCS)
- Osaka Industrial Research Association
- Kinki Chemical Society, Japan
- Japan Urethane Raw Materials Association
- The Electrochemical Society of Japan
- Kyoto Industrial Association
- Japanese Society of Cutaneous Health
- Advanced Materials Innovation Center (AMIC)



Award (March 2013)  
We received the electrochemistry paper award for 2013 from the public interest incorporated association, Electrochemical Society of Japan. (Dai-ichi Kogyo Seiyaku Co., Ltd. Elexcel Corporation)

### Communication with local communities

As part of information disclosure and communication with local people in the neighborhood, we create opportunities to explain our approaches and business activities concerning environmental conservation and safety measures in our branch, to local people in the neighborhood community

association. We also make use of this opportunity to listen to their opinions and proposals about risks associated with the chemical plant, as well as information exchange. In addition, we explain our approaches to the administration, as well as implementing joint activities with local committees.



Shiga Branch:  
Plant visit by people from Higashi-omi city Life Environment div. and the local community association



Yokkaichi Branch:  
Local disaster prevention committee of the industrial complex



Ohgata Branch:  
Takada labor standard cooperation board meeting

### Neighborhood Cleanup Activities and Participation in Community Events

We actively participate in local events as activities that are close to the local areas. Our Yokkaichi Branch joins the Yokkaichi Minato Festival every year, and Shiga Branch joins the local marathon relay race tournament. In addition, we regularly engage in cleaning activities in the neighborhood as volunteers.



Yokkaichi Branch:  
Yokkaichi Minato Festival



Shiga Branch:  
Gokasho Ekiden Relay Race Tournament



Kyoto Central Branch



Ohgata Branch



Shiga Branch





# Fulfilling Our Social Commitments

We develop our activities to bring up and support children, the leaders of tomorrow, through activities such as lecture delivery to elementary and junior high school students, and acceptance of students for internship.

We build and operate the Quality Assurance system, as well as provide product information to customers.

## Relations with Society & Local Communities

### Lecture Delivery for Local School Students

For the purpose of offering opportunities to gain interest in the fun of chemistry and/or global environment problems, we give lecture delivery on the theme of "Experiments of Familiar Chemical Products in Daily Life" as part of our regional contribution activities. We encourage each student to make an interesting experiment using detergent and experience the fundamental effects of surfactants. We hope that they would understand why detergent can remove dirt and consider the importance of water through our lecture. In cooperation with the business promoted by the Kyoto City and Yokkaichi City Education Boards, we conducted lectures to the sixth grade students at

Mukaijima Fujinoki Elementary School (Kyoto City) in November 2012, and fifth grade students at Tokiwa Elementary School (Yokkaichi City) in January 2013. We joined some events, such as the Yokkaichi child scientific workshops (organized by the city education committee), and the Kyoto industry festival (organized by the Kyoto Chamber of Commerce and Industry) and helped people experience science through experiments. We practice the class in an easy to understand way for people to enjoy studying their familiar chemical products, using our know-how and experience accumulated through our business.



Yokkaichi child scientific workshops



Lecture Delivery in Kyoto city



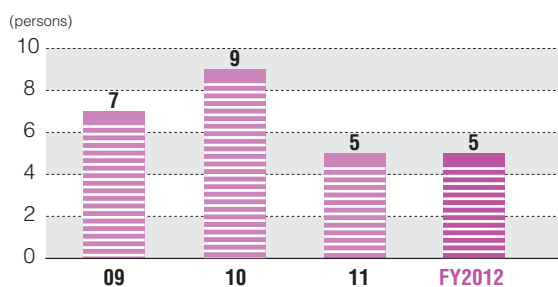
Lecture Delivery in Yokkaichi city

### Internship & Learning through Work

We have accepted technical college students for internships for a long time. So far, many students have participated in our internship programs. During their summer holidays, participants take their own time to complete one or two-week internship program, during which they have a practical work experience in any of our workplaces (such as our laboratories, quality control section of each branch, etc.) so that they can understand our actual business operations and services. We are devoted to reviewing and improving each of our programs so that they can really feel "the meaning of work." We

believe that accepting students for internships will help them not only to expand their occupational awareness and improve their business ability, but also to promote their understanding of workplace relationships and effective information exchange while communicating with their schools. As a part of our CSR activities, we will continue to offer these internship programs. In addition, we accept requests from junior and senior high school students in regards to occupational interviews and experience learning at the workplace.

Experience learning at the workplace



Ohgata Branch: Workplace Experience



Internship in Kyoto Central Branch



Yokkaichi Branch



Shiga Branch

## Relations with Our Customers & Business Partners

### Quality Assurance (QA) System

We have acquired the ISO9001 certification through a third party and introduced the quality management system based on the required standards. Under this system, we build and operate the QA system. We establish the quality-related management standards in each department over the whole of the processes, from product planning to customer service via design/development, manufacturing, and sales. Keeping "Customer First," which is one of our management principles, in mind, we define our Quality Policy as follows:

(1) We will strive to design a product with high quality to meet customers' expectations and to supply a highly reliable and safe product before the due date requested by

the customer, and at a reasonable cost.

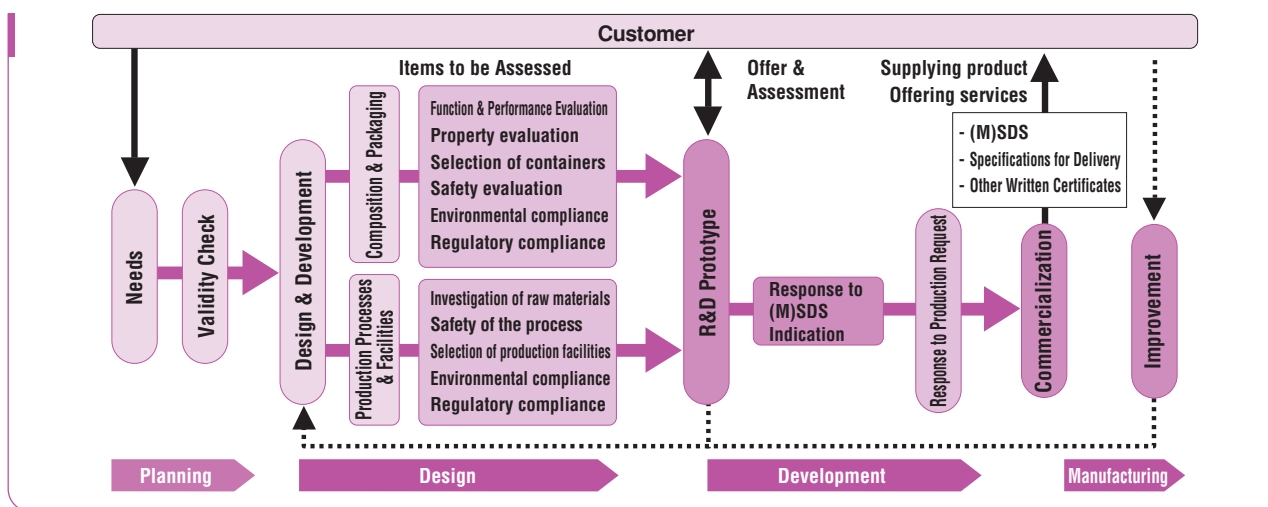
(2) We will pursue higher quality in our products and continue to improve the effectiveness of our Quality Manual in order to maximize customer satisfaction.

We constantly strive to clarify the quality assurance process, as well as assigned roles, duty and authority in each QA department under our QA system in order to implement in-depth quality control (QC) and provide accurate product information while responding to product complaints in a quick and faithful manner. We have always been devoted to providing products that are safe for use.

### Process for New Product Development

When trying to develop products, suppliers must take into account a variety of aspects of the customers' needs in an accurate manner. We perform QA activities by checking and assessing the progress from multiple viewpoints, so that

regulatory requirements, environmental and security requirements, and production and distribution can be secured for all of the following processes: planning, designing, developing, and manufacturing.



### Provision of the Product Information

We provide product information as an opportunity for (prospective) customers to better understand our products. In addition, we always respond to requests and inquiries from our customers quickly and adequately in good faith. For the purpose of providing product information, especially at the stage of introducing our existing products and/or developing new products, we strive to be in close communication with customers and business partners, not only through our everyday business negotiations, but also with our brochures and technical documents.

We have been providing material safety data sheets ((M)SDS) for chemical substances of all our products and answering inquiries about the latest information on environmental burden substances and/or the relevant laws and regulations. We have completed the procedures to update our (M)SDS and label indications, and to prepare the GHS-compliant (M)SDS according to the revisions of the Industrial Safety and Health Law and the Pollutant Release and Transfer Resister (PRTR) Law. In addition, we are currently updating SDS according to the revisions of the Japanese Industrial Standards (JIS) and GHS-compliant label indications sequentially.



Product Brochures



## Social Activities

# Aiming for Management that Responds to the Expectations of the People

We conduct quality management, and respond to product complaints in a quick and faithful manner.

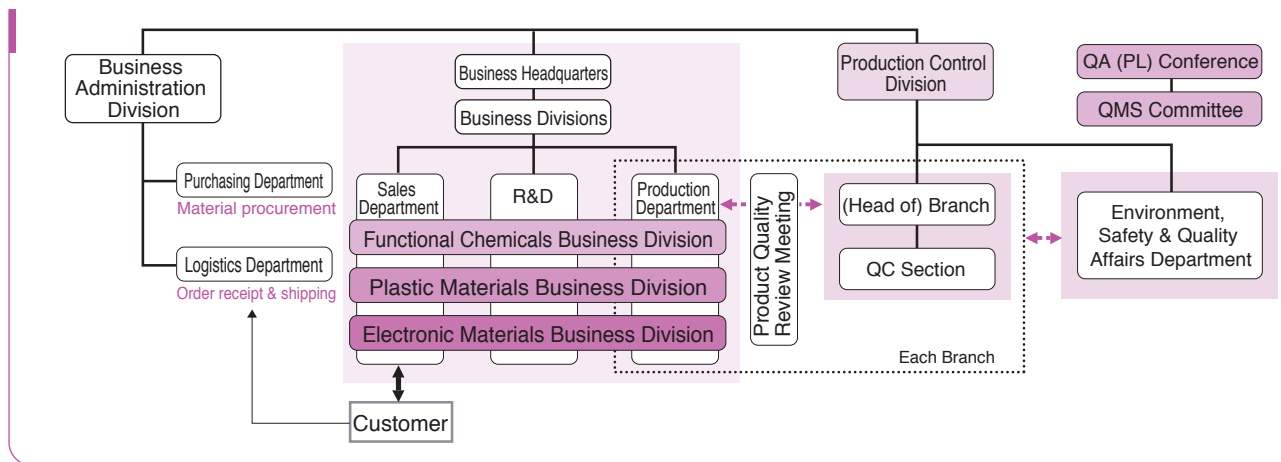
We regard the shareholder meeting as an important opportunity for meaningful communication.

## Relations with Our Customers & Business Partners

### Quality Management System

We operate our quality management activities in accordance with ISO9001. We accept all information related to quality, from customers through sales representatives, and/or directly in the QC section of each branch. Under this system, we unify management and promptly respond to quality-related information. Every month we implement quality control in the product quality

review meeting with our production departments. We use our PDCA cycles in the quality assurance management system to promote improvement and/or advancement measures. In the Quality Assurance (PL) conference, we deliberate the issues brought up from the QMS Committee, and review how the quality management system is appropriate, applicable, and/or effective.



### Response to Complaints and Quality Defects

Product quality complaint management is our top priority to assure stable product quality. Therefore, we have established our internal Procedures for Handling Product Complaints. We specify procedures to deliver information from the sales department which receives information from customers to the QC section and relative departments in each branch, and deal with quality-related complaints according to these procedures. Our policies for handling product complaints focus on the following practices: maintaining credibility by responding quickly and in good faith, thoroughly probing the cause of the complaint, and

taking preventive measures and recurrence prevention measures. We share quality defect and complaint information through the network, and conduct progress management while setting the goals to reduce the number of complaints and quality defects. When an abnormal event occurs, we clarify the root cause using our analyzing method ("Naze-naze analysis") and implement recurrence prevention measures. In addition, each branch conducts a product quality inspection patrol on a monthly basis and reminds employees to promote awareness concerning the field validation and quality.

### Product Liability (PL) Policy

We established our Product Liability (PL) Prevention & Management Procedures and PL Accidents Prevention System to ensure the safety of our products and to prevent product safety accidents from occurring. Our fundamental policy is to secure the maximized product safety over the

whole processes consisting of R&D, manufacturing, and consumption, and the final disposal, as well as to develop, manufacture, and sell products with higher safety and reliability, and to offer customer services for them.

### Partnership with Our Sales Agents and Distributors

In order to offer products that respond to market trends and needs and to promote the sale of such products, our sales department has been devoted to developing new marketing practices in cooperation with our sales agents and distributors.

Our company has a group of sales agents and distributors known as "Zenkoku Ichi-Ko Kai," composed of our major sales agents and distributors. The Zenkoku Ichi-Ko Kai (DKS National Dealers Meeting) annually holds a general assembly. At the assembly, we explained our company performance, as well as the medium-term management plan: "Change 100 Plan" stage II. Besides, as our "new challenge," we introduced the cosmetics online sales company, SUZAKU MICHl Co., Ltd. as well as the portable battery. We promote communication activity with our dealers, such as information exchange, in order to realize mutual prosperity based on our trusting relationship.



Zenkoku Ichi-Ko Kai (DKS National Sales Agents and Distributors Meeting) in Osaka



# Relations with Our Shareholders & Investors

## Shareholder Meeting

We regard the shareholder meeting as an important opportunity to foster communications between shareholders and management. 90 shareholders attended the annual shareholder meeting on June 25, 2013. Our President, Dr. Oyanagi, chaired the meeting and presented an annual business report and an explanation of each agenda item. We always try to provide a clear explanation of our report using narration and slide presentations, so that all of our

shareholders can understand the points well. It ended in about 36 minutes after five resolution matters were deliberated and approved. After the meeting, Chairman, Mr. Sakamoto, had the briefing session titled "To our shareholders of chemistry to respond to people's needs", followed by a shareholders get-together with top management. We had meaningful exchanges of opinions with our shareholders in a relaxed and friendly atmosphere.



Shareholder Meeting



Shareholders Get-Together

## Information Disclosure

We disclose a variety of information, including our company overview and investor relations, on our web page to our investors at the time of need. After official disclosure, we promptly post timely disclosure documents, an earnings summary, notice of calling of shareholder meetings, shareholder letters (to our shareholders) and news releases.



Shareholder letters in FY2012



Our company's website  
<http://www.dks-web.jp/ir/index.html>



# Fostering Full-Fledged Employee/Corporate Member of Society

We organize our employment system in response to the demands of the times so that all employees can progress respectively, and launch enhanced programs related to human resource development and education.

## Relations with Our Employees

Our company recognizes that our employees are our greatest asset and that the growth of each individual employee will support the growth of our company. To assist each of them in becoming a full-fledged employee/corporate member of society and gaining a sense of accomplishment and satisfaction from their work, we have been devoted to protecting the human rights of our employees and improving various human resource systems, human resource development and education, and working environment development.

### Our Company's Human Resource Philosophy

Our fundamental human resource philosophy is rooted in the idea that our people are our greatest asset and must be nurtured and treasured. We believe that by putting our belief into practice the growth of each individual employee will support the growth of our company and will allow our employees to be active, to grow, and to realize their potential in each workplace. This will help them in not only achieving their self-actualization but also serving as a driving force for further developing of our company, as well as making the company's presence permanent.

### Human Resource Development Policies

In order to foster people who can fully understand our company's management philosophy and the management policies based thereon and can contribute to the realization of such philosophy and policies, we require that our employees have the following basic skills and attitudes:

- 1. Profound expertise, technique, and broad vision
- 2. Energetic attitude and behavior
- 3. Flexibility in thinking
- 4. Fruitful in terms of creativity

### General Business Owner Action Plans

Our company has established General Business Owner Action Plans, which are intended to help our employees balance their careers and child-rearing. These action plans have been shared with the public and within the organization.

#### General Business Owner Action Plans (summary) (From April 2010 to March 2015)

- Target 1:** Familiarizing our employees with our child-rearing support system and enlightening them
- Target 2:** Implementing measures to reduce overtime work
- Target 3:** Implementing measures to promote taking annual paid leave
- Target 4:** Performing community contribution activities related to children and child-rearing practices
- Target 5:** Expanding opportunities to obtain working experience including internship

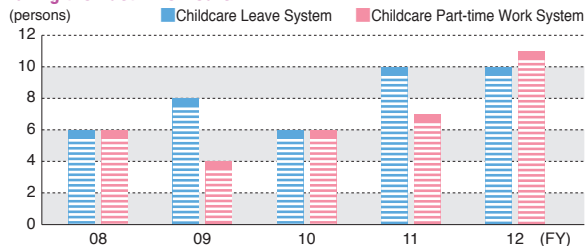
### Our Personnel System

#### Employment System

In response to the declining birthrate and aging society, and in order to promote a healthy work/life balance, we have developed the following personnel systems, each of which takes into account employees' child-rearing and nursing care. In FY2012, we discussed the period extension of child-rearing short-time work in the union-management consultation, and decided to implement it in FY2013.

- Childcare Leave System
- Childcare Part-time Work System
- Nursing Care Leave System

#### Number of Employees Who Have Used the Personnel Systems During the Last Five Years



#### Retiree Reemployment System

We have introduced a reemployment system for our company's retirees since FY2006. By drawing on their many years of skills, techniques, and experience, they still remain active as "senior challenge staff." In FY2012, we considered our approach according to the law revision in the union-management consultation, and changed our system at the beginning of FY2013.

#### In-house Achievement Award System

Through our employee incentive programs, we have been running not only a performance incentive system such as patent and personal achievement awards, (twice per year) but also Division Manager's and length of service awards.



FY2012 First Half Achievement Award Winners

#### Efforts to Prevent Harassment

As for activities to prevent (sexual, power, and moral) harassment, we provide related education programs in hierarchical training courses, and take care of any (alleged) harassment incidents by established contact points.

### Human Resource Development & Education

We recognize that the growth of employees lead to the advancement of our company. To realize this human resource philosophy, we are promoting human resource development and education programs. In programs for our employees, we focus on three pillars of in-house education (OJT) through work, external education (OFF-JT) of skills and abilities necessary for performing tasks and self-enlightenment

support. In addition, we are dedicated to supporting voluntary capacity building of our employees by providing them with in-house lectures and briefing sessions. In FY2011, we renovated the former Head Office in Shichijo Sembon, where the company was founded, as a training facility to provide education.

### Education training system

Since FY2011, we have reviewed our past training programs and contents to improve managerial skills and human resource development. Then we established the new

education training system. In order to enrich our programs, we have especially added programs for our hierarchical training and department training for external education.

On the Job Training (OJT)		Off the Job Training (OFF-JT)								
		Department training						Self-development support program		
		Research	Sales	Production	Management	Common				
Director	Management workshop									
The management	Corporate manager development training	Development training for research management post								
	Fifth-year management post training									
	Third-year management post training									
	Accounting training									
	Coaching practice training									
	New manager training									
General staff	Advanced professional training	Engineer training	Safety and health education	Logical thinking training	Presentation training	Experiment planning method				
	Professional training									
	Third-year training									
	New employee						Follow-up training			
							Workshop practice			
							New employee training			

※1 Brother and sister system: The system which a young senior colleague and a new employee make a pair, and a young senior colleague undertakes the guidance of the way of advancement of the work one-to-one.



Corporate manager development training



Third-year management post training



Experiment planning method

### Voice from the Person in Charge



Plastic Materials Sales Department  
KIRYU Yamao

### Utilizing the childcare leave system.

I used the childcare leave system when giving birth to my second child. I felt at ease as I was notified of company situations even during the leave. My workplace is especially busy with many male employees but everyone was thoughtful even after my return, allowing me to comfortably work and raise my children. Full use of the childcare leave system is impossible without the understanding and cooperation of the workplace. In that sense, I am grateful for the favorable environment of our company. For those thinking about requesting a childcare leave, I would like to say, "There is no need to worry."





# Expanding Opportunities of Our Own Activities

We promote such employee-centered efforts as meeting for presentation of research results, and improvement activities with the participation of all employees. Furthermore, we conduct regular health checks and have mental health care programs to support our employees' health in both body and mind.

## Relations with Our Employees

### DKPM Activities

DKPM (Dai-ichi Kogyo Productive Maintenance) activities based on the 5S (Seiri, Seiton, Seiketsu, Seisou and Shitsuke) are activities for improving productivity, business efficiency, quality control and safety awareness that are the key elements of a manufacturer. These activities are also the base that supports the strategies of new medium-term management plan stage II and the purpose of these activities is to strengthen the corporate culture and build a foundation for control and improvement. Targeting the management, these activities originally started in FY2011 under the guidance of consultants. Following the declaration by the President in April 2012, all employees including top management were asked to participate. Quarterly execution plans, quarterly performance reports and on-site diagnosis by the top management became mandatory with the best teams being rewarded. The activities are also being held at affiliates. Especially Yokkaichi Chemical Company Limited has been conducting the activities for more than 20 years starting in 1990.



DKPM Diagnosis by Top Management (Yokkaichi Branch)

### In-house Seminars and Briefings

In FY2012, the following in-house seminars and briefings were held:

#### Seminars (by a visiting lecturer)

- "Fostering Technology Human Resources that Achieve Results: Mental Attitude of Those Providing Education and Receiving Education"
- "Research and Development for Surviving Global Competition"

#### Briefings

- "About the Operation of the Security Export Control Business Acknowledge System"
- "Assessments Concerning the Sales Department: Anti-Monopoly Act and Information Control System"



In-house seminar in January 2013

### Meeting for Research Presentation

We hold meeting for research presentation twice every year, which provides company-wide technical forums for our researchers to present and discuss their latest findings in R&D and production technology developments. Meeting for Research Presentation are composed of three sections: a special seminar presented by a visiting lecturer, verbal presentations, and poster presentations. In FY2012, we held the 76th and 77th meeting for research presentations in July and January, respectively. At a convivial meeting following the meeting for research presentation, participants vote on the best meeting for research presentation and a winner is awarded.



The 77th Meeting for Research Presentation

### In-house Magazine

We publish the in-house magazine "DKSCOM" every other month to introduce various articles including messages from top management, regarding management policy, and covering our employees' performance.

Our editorial policy is as follows:

- (1) Convey management policies and information to each employee and share them.
- (2) Promote communication between managers and employees.

Every year, each employee creates a challenge card and posted in the in-house magazine. Each card represents the challenge of each employee for the year and is posted at the workplace.



The Feb. - Mar. 2013 issue



Challenge Card

## ● Healthcare & Occupational Safety and Health

### ■ Health Checkup

As a result of encouraging and motivating all our employees to get regular medical checkups, their checkup-participation rate in FY2012 increased to 100 % of our goal. To achieve early detection of cancer and ensure the promotion of good health for our employees, we conducted medical checkups including X-ray examination of the stomach, abdominal chocardiology, dental checkup, fundus examination and echo mammography in all our branches. We also place importance on follow-up measures after checkups, especially in regards to any abnormal findings in the results. Since FY2010 we have recommended reexamination and second checkup participation for employees who received results with abnormal findings in order to ensure that they do not fail to attend reexamination, and help them understand the clinical results. Consequently, the rate of reexamination and second checkup-participation was 85 % in FY2011, and 62 % in FY2012. We will also make further efforts to achieve 100 % participation in FY2013. We will continue to promote this activity in order to prevent any current symptoms from leading to serious illness and/or keep any illness or other problems from increasing in severity.



Kyoto Central Branch

### ■ Mental Health Care

As for approaches to medical health care in FY2012, we conducted occupational and stress coping tests. As follow-up instruction, we explained to each manager how to review personal interviews and group analyses after tests. We continue to promote our activities in order to improve occupational environments, and secure strong mental health to cope with stress.



Mental health seminars (Kyoto Central Branch)

### ■ Blood Donation

Our company annually conducts a blood donation campaign upon the request of the Japanese Red Cross Society. With the cooperation of employees, the branch appeals to each person to donate 400 ml of blood. The number of blood donors was 50 this year. In the Kyoto Central Branch 12 employees, the Yokkaichi Branch 25 employees, and the Ohgata Branch 13 employees became donors.



Yokkaichi Branch



Kyoto Central Branch

### ■ Lower back pain prevention

Lower back pain is one of the injuries many workers are vulnerable to in workplaces. As for a new approach to this issue, we held a workshop for lower back pain prevention in our Kyoto Branch. The workshop included a lecture, followed by actual practices based on working actions for clerical and research jobs. We hope our employees will learn the causes of lower back pain and prevention measures and be able to prevent the pain on an individual basis. In order to put it into practice, we intend to hold the workshop in other branches, too.





## Yokkaichi Branch

Located in the coastal area of northern Mie Prefecture, our Yokkaichi Branch is blessed with natural surroundings that include the lush, green Suzuka Mountain Range, the water-filled Kiso Three Rivers, and Ise Bay. In order to protect this nature-rich region and its richly endowed environment, we strive to integrate environmental consciousness into all our business activities and continue to implement environmental protection practices.

Following air pollution reduction through fuel conversion two years ago, in December 2012, we introduced electric vehicle as part of company activities with a focus on environmental consciousness and energy conservation. We organize periodical emergency and fire drills to prepare for the event of earthquakes and/or plant accidents that have recently increased. In addition, we actively carry out local emergency drills, and promote our activities with the goal of being the branch coexistent with the local community. We adopted our annual slogan "Yokkaichi - Power" at this branch in 2013. We strive to conduct activities in a positive manner and with the aim of the reduction of environmental impact while raising the level of power in the field, and continue to work on improvement with relation to the environment.



Branch Manager of Yokkaichi Branch  
**TANAKA Hiroshi**



Panoramic View of Yokkaichi Branch

**Address:** 7 Chitose-cho, Yokkaichi City, Mie Pref.

**Area of the Site:** 17,647 m<sup>2</sup>

**ISO Certification Status:**

14001: Certified in June 2002 (Certification body/ JCQA)

9001: Certified in January 2000 (Certification body/ JCQA)

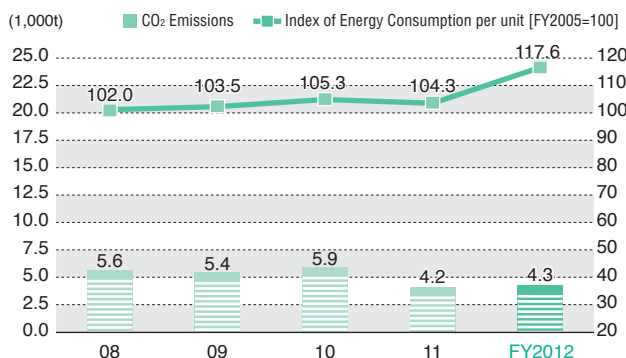
**Main Products:**

Polyether polyol, urethane prepolymer, UV-curable monomers/oligomers, anionic surfactant, oiling/finishing agent, cationic surfactant

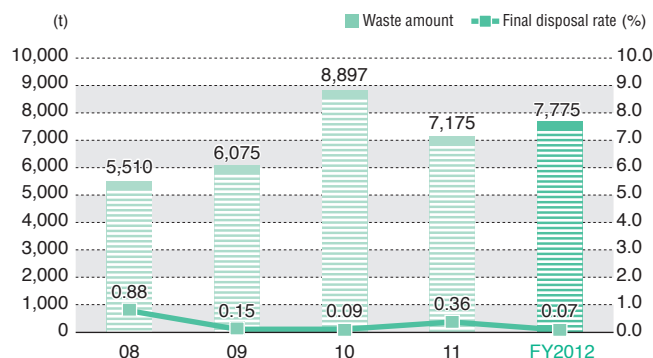
**Environmental Impacts in FY2012**

Energy Consumption (Crude oil equivalent)	(kℓ)	2,114
CO <sub>2</sub> Emissions	(t-CO <sub>2</sub> )	4,295
Generated Waste Amount	(t)	7,775
Final Disposal Amount	(t)	5.1
PRTR Emissions	(t)	34.08
Water Discharge Amount	(1,000 m <sup>3</sup> )	543.1
COD Emissions	(t)	1.1

**Changes in CO<sub>2</sub> Emissions and Energy Consumption per unit**



**Changes in waste amount and the final disposal rate**



**Efforts in Environmental and Social Activities**

This branch located in the industrial complex has promoted communication with local communities through activities concerning environmental conservation and security and accident prevention, as well as active participation in local events. As for activities concerning environmental conservation, we joined a cleanup work for driftage on the coast at the Toshi Island in Mie Prefecture, which was organized by the Mie Prefecture industrial waste disposal promotion association. As for activities concerning security and accident prevention, we participated in meetings with the local association of independent disaster prevention organizations, and took part in disaster drills. We also cooperated with the public fire department and conducted joint drills in preparation for a contingency. Through those activities, we promoted collaboration with local residents. In addition, we have devoted ourselves to helping bring up children by joining the "Yokkaichi science seminar for children", giving delivery lectures, and donating newspapers for elementary students. The "Yokkaichi children science seminar" is organized by the Yokkaichi city education committee based on the idea of making full use of the characteristics of the city's industrial location, which helps children develop their intellectual curiosity and inquiring minds for science.



Cleanup activities in TOUSHIJIMA



# Ohgata Branch

Endowed with lush green natural surroundings, our Ohgata Branch is situated in Niigata Prefecture and faces the Sea of Japan. While enjoying the blessings of this region, we are devoted to the production of a wide range of products, including CMC, water-borne urethanes, various surfactants, and inorganic materials. "Throughout the entire life cycle of our products, from development to disposal, we will pay special attention to both human safety and health and environmental preservation and also contribute to sustainable development and the realization of an affluent society." We adopt the above statement as our basic philosophy for environmental and safety practices. In recent years, we have made efforts to promote greater use of energy conversion and implement waste reduction practices. The Ohgata Branch will continue to actively participate in environmental protection energy programs and energy-saving activities, while looking forward to the realization of a more livable planet and a spiritually affluent society.



Branch Manager of Ohgata Branch  
**TSUJI Hironobu**



Panoramic View of Ohgata Branch

**Address:** 230 Saigata, Ohgata-ku, Joetsu City, Niigata Pref.

**Area of the Site:** 86.963 m<sup>2</sup>

**ISO Certification Status:**

14001: Certified in July 2002 (Certification body/ JCQA)

9001: Certified in January 2000 (Certification body/ JCQA)

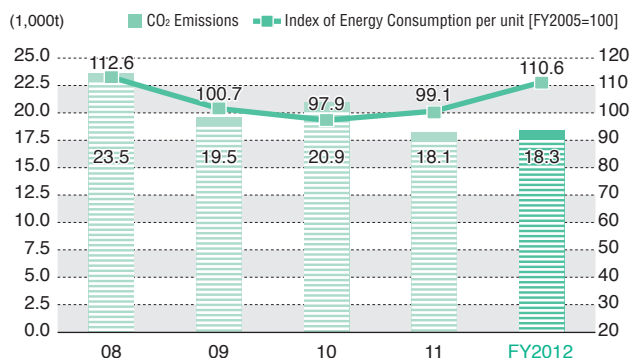
**Main Products:**

CMC, waterborne polyurethanes, polyvinyl pyrrolidone, industrial detergents

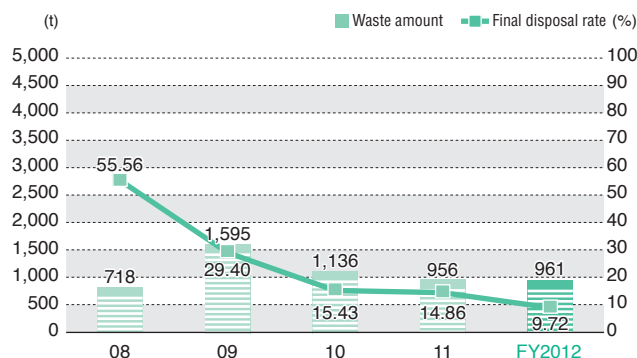
**Environmental Impacts in FY2012**

Energy Consumption (Crude oil equivalent) (kℓ)	8,339
CO <sub>2</sub> Emissions (t-CO <sub>2</sub> )	18,322
Generated Waste Amount (t)	961
Final Disposal Amount (t)	93.4
PRTR Emissions (t)	0.47
Water Discharge Amount (1,000 m <sup>3</sup> )	443.1
COD Emissions (t)	10.0

**Changes in CO<sub>2</sub> Emissions and Energy Consumption per unit**



**Changes in waste amount and the final disposal rate**



**Efforts in Environmental and Social Activities**

The Ohgata Branch sets the environmental goals in the environment management system and continue to make efforts to reduce environmental impact, etc. We aim to promote 3R (Reduce, Reuse and Recycle) of industrial wastes and converting some of the wastes to valuables through segregation. Concerning wastewater treatment, we aim to save resources by preserving and improving the water quality and using activated sludge as fuel. We also have a plan to utilize renewable energy of methane gas emitted during anaerobic treatment as heat. We will also improve the relationship with the local community through communication. In order to conduct corporate activities that are appreciated, we will further deepen our communication with the local community by participating in local events and waste collection, emergency drills with the fire department and association of disaster prevention, and meetings with local residents.



Plant visit



## Shiga Branch

Nestled to the west of Mt. Kinugasa, our Shiga Branch lies in the green Higashi-Ohmi area known to be one of the birthplaces of Oumi merchants, and looks out over Japan's mother lake, Lake Biwa. We have been paying close attention to the environmental aspects of all our business activities and implementing environmental protection practices through continual improvement of our business activities.

Up to now, we have made efforts to practice environmental preservation such as reducing carbon dioxide emissions through fuel conversion and by introducing a cogeneration system, and improving wastewater treatment to reduce impact of COD. In recent years, we have engaged in promotions to maintain company owned forests as part of in-house volunteer activities by our employees. In addition, we succeeded in changing a part of the overall waste to valuables through complete segregation, thereby resulting in significant reduction in terms of final disposal. We will continue to emphasize compliance to gain further trust from the local community.



Branch Manager of Shiga Branch  
**KAWAMOTO Wataru**



Panoramic View of Shiga Branch

**Address:** 427 Gokasho Hiyoshi-cho, Higashi Ohmi City, Shiga Pref.

**Area of the Site:** 105,753 m<sup>2</sup>

**ISO Certification Status:**

14001: Certified in March 2002 (Certification body/ JCQA)

9001: Certified in January 2000 (Certification body/ JCQA)

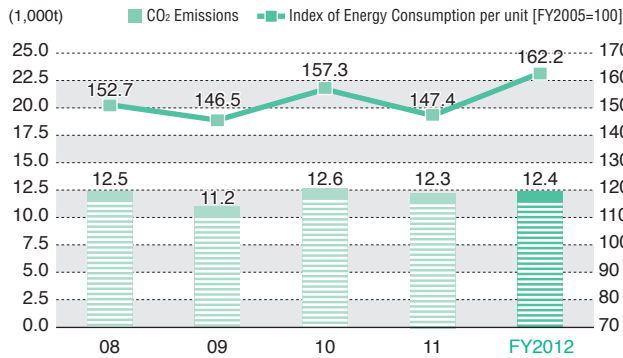
**Main Products:**

Sucrose fatty acid esters, food additives, metal surface treatment agents, surfactants, water-soluble polyester polyol, solvent-substitute waterborne/non-waterborne detergents

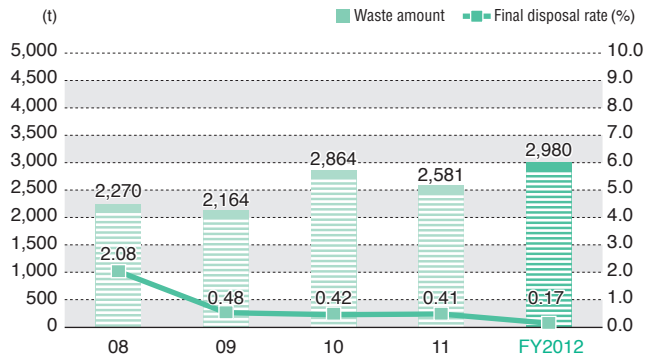
**Environmental Impacts in FY2012**

Energy Consumption (Crude oil equivalent) (kℓ)	6,429
CO <sub>2</sub> Emissions (t-CO <sub>2</sub> )	12,374
Generated Waste Amount (t)	2,980
Final Disposal Amount (t)	5.0
PRTR Emissions (t)	0.35
Water Discharge Amount (1,000 m <sup>3</sup> )	1,336.0
COD Emissions (t)	6.5

**Changes in CO<sub>2</sub> Emissions and Energy Consumption per unit**



**Changes in waste amount and the final disposal rate**



**Efforts in Environmental and Social Activities**

Due to the shortage of electric power in FY2012, we were asked by the electric company to conserve on electricity during summer and winter. For this year, our branch focused on measures to save electricity. In detail, we increased the operation rate of our non-utility generator (cogeneration system) during electricity saving hours and installed energy-saving air conditioners. As a result, we were able to cut down 15 % of the maximum electric power consumption compared to the summer of FY2011. We also made efforts to save energy by cutting back the load of air conditioners as well as lowering the sensible temperature by using heat insulation paint on the roof of the cafeteria as well as using circulation fans. As a measure in the case planned blackouts would take place, we made modifications so that the cogeneration system would operate independently so that the main facilities would continue to operate.



Cafeteria building coated with heat insulation paint

# Yokkaichi Chemical Company Limited

Yokkaichi Chemical Company Limited was established in 1959 in Yokkaichi City, as a manufacturer of ethylene oxide derivatives centered on non-ionic surfactants. The company has acquired certification for the environmental management system international standards in 1999. In 2002 we announced our implementation of the RC (Responsible Care) activities, and continue to develop activities based on our corporate philosophy and safety, environmental, and quality policies, as well as the cultivation policy of human resources. We strive to integrate environmental consciousness into all our business activities and continue to implement environmental conservation practices through R&D that covers product life from design to disposal, thorough waste management, waste reduction, and more effective energy and resource utilization in production processes. We are devoted to further conducting fair and transparent business activities and fulfilling social responsibilities while emphasizing compliance with stringent attention to environmental requirements, and enhancing thorough safety and coexistence with the global environment.



Yokkaichi Chemical Company Limited President  
**HONJO Shuichi**



Headquarters of Yokkaichi Chemical Company Limited

**Address:** Headquarters/Yokkaichi Plant:  
2-1, Miyahigashi-cho, Yokkaichi City, Mie Pref.  
Rokuromi Plant:  
710, Rokuromi, Oaza, Yokkaichi City, Mie Pref.

**URL:** <http://www.yg-chem.co.jp/>

**Area of the Site:** approx. 30,000 m<sup>2</sup> (Headquarters/Yokkaichi Plant), approx. 26,000 m<sup>2</sup> (Rokuromi Plant)

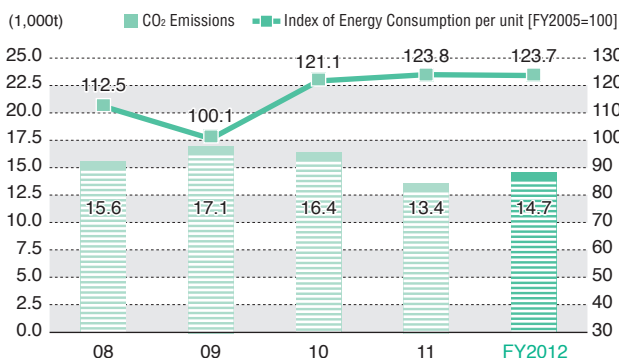
**ISO Certification Status:**  
14001: Certified in March 1999 (Certification body/ JCQA)  
9001: Certified in August 1998 (Certification body/ JCQA)

**Operations:** Manufacturing, processing and sales of various chemical products made from Ethylene oxide and other petrochemical industry products

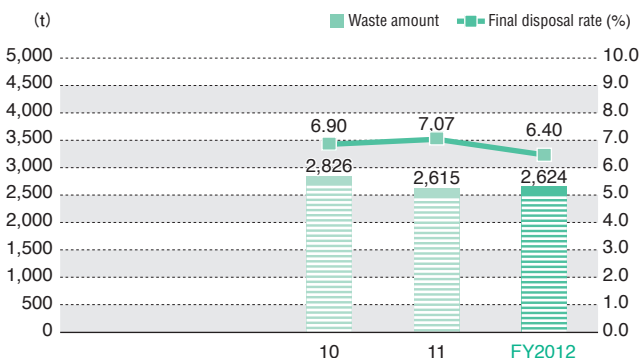
### Environmental Impacts in FY2012

Item	Unit	Value
Energy Consumption (Crude oil equivalent)	(kℓ)	6,486
CO <sub>2</sub> Emissions	(t-CO <sub>2</sub> )	14,700
Generated Waste Amount	(t)	2,624
Final Disposal Amount	(t)	168.0
PRTR Emissions	(t)	0.73
Water Discharge Amount	(1,000 m <sup>3</sup> )	722.6
COD Emissions	(t)	1.7

### Changes in CO<sub>2</sub> Emissions and Energy Consumption per unit



### Changes in waste amount and the final disposal rate



### Efforts in Environmental and Social Activities

In FY2012, we implemented measures focusing on hazardous substances during the event of a major earthquake. In detail, these include reviewing of preventive regulations that incorporated measures for tsunami based on the Act on Special Measures concerning Advancement of Countermeasures against Disasters of Tonankai and Nankai Earthquakes and DIG (Disaster Imagination Game) concerning large-scale earthquakes and tsunami that is predicted to follow. During DIG, group discussions were held on what may happen in the event of an earthquake and the actions we must take. In March, we held comprehensive disaster prevention training under the guidance of the fire department and in September, the training was held again by adding evacuation training to secure the safety of employees so that they can evacuate to the appropriate evacuation site. We will continue to improve the awareness concerning earthquakes and tsunami for all employees and create more effective measures that incorporate social responsibility.



Disaster Imagination Game of Tsunami





## KYOTO ELEX CO., LTD.

### Company Overview

Our company was established in July 1986 for the development, manufacturing and sales of conductive pastes mainly using precious metals (silver, white gold and copper) as raw materials by applying the dispersion technologies of Dai-ichi Kogyo Seiyaku and metal powder technologies of DOWA Electronics. By providing various pastes, we contribute to the improvement of quality and functionality of electronic devices and components used in solar batteries, smart phones, LED and medical devices.

### Environmental and Social Activities

While environmental and safety concerns continue to rise, environmental regulations such as REACH of Europe are becoming stricter each year in the field of electronic materials. Our company focuses especially on the development of products that contribute to the field of environmental protection. We have succeeded to commercialize the world's first silver paste for solar batteries that do not contain lead which is considered to environmentally hazardous. Not only is the paste used in Japan, it is used all over the world. As the demand for natural energy increases, we will continue our development to improve the performance of lead-free solar batteries that are more environment-friendly.



President  
**SHIBA Yasukiyo**



**Address:** 1 Ogawara-cho, Kisshoin, Minami-ku, Kyoto 601-8391, Japan

**URL:** <http://www.kyoto-elex.co.jp/>

**Operations:** Production & sales of electronic materials

### ISO Certification Status:

14001: Certified in December 2001 (Certification body/ JQA)  
9001: Certified in June 2000 (Certification body/ JQA)

## DAI-ICHI CERAMO Co., Ltd.

### Company Overview

Our company started as Dai-ichi Ceramo in 1988 when Ceramics Research Group separated from Dai-ichi Kogyo Seiyaku. We mainly develop, manufacture and sell PIM (power injection molding) compounds. Currently, we also sell our products to overseas. We supply optimized compounds by working closely with customers and conducting injection molding assessments. We are working hard on a daily basis to contribute to the growth of customers and the industrial world by carrying forward technological reform based on our accumulated knowledge.

### Environmental and Social Activities

Since we are located within the premises of our Shiga Branch, we are also conducting environmental preservation activities by working with the Branch. We are also working to reduce wastes through complete segregation and converting some of the wastes to valuables. We are devoted to further improving the natural and social environments while emphasizing compliance with stringent environmental requirements.



President  
**URAOKA Hidetaka**



**Address:** 432 Gokasho Hiyoshi-cho, Higashiomi, Shiga 529-1403, Japan

**URL:** <http://www.dai-ichi-ceramo.co.jp/>

**Operations:** Production & sales of materials for ceramics and injection molding

### ISO Certification Status:

9001: Certified in February 2011 (Certification body/ JQA)

## Elexcel Corporation

### Company Overview

We have been refining our lithium battery technologies in order to answer to the current demands for the development of lithium-ion batteries of high safety and technologies for lithium polymer batteries. Other than independent research, we use our accumulated battery technologies and battery production technologies to manufacture prototype batteries and evaluate materials and components of lithium-ion batteries for other companies.

### Environmental and Social Activities

As part of our business, we are contributing to the electrical storage of green energy such as PV generation as well as energy saving and resource saving technologies by developing lithium batteries that use safer and cheaper iron phosphate as electrode material. Located at the Keihanna Plaza of the Kansai Science City, we aim to contribute to the society by interacting with venture firms and participating in Keihanna EV conferences.



President  
**OHMIYA Masato**



**Address:** 13th Floor, Laboratory, Keihanna Plaza, 1-7 Hikaridai, Soraku-gun Seikacho, Kyoto 619-0237, Japan

**URL:** <http://www.elexcel.co.jp/>

**Operations:** Development of Lithium-ion power batteries/Solar cells

## P.T. DAI-ICHI KIMIA RAYA

### Company Overview

Our company was established in 1996 as a fiber processing agent manufacturer. Overcoming many obstacles including the monetary crisis and riot in Jakarta, we are also carrying forward business that fits the diversifying needs of the Indonesia market through manufacturing and sales of resin additives, synthetic water retention agents for paper making and food additives besides fiber processing agents.

### Environmental and Social Activities

Through the neighborhood council of the KIIC industrial district where we are located, we are conducting volunteer activities for the location community. We provide baby foods every month to babies living nearby and donate goats and cows to five of the nearby villages during Muslim festivals.



President  
**KITANI Fumihiko**



**Address:** Jl. Maligi II LotG-2 Kawasan Industri KIIC, Karawang Barat, Jawa Barat, Indonesia

**Operations:** Production & sales of textile agents, plastic additives, paper processing agents, and food additives

#### ISO Certification Status:

9001: Certified in September 2009 (Certification body/BVI)  
22000: Certified in May 2011 (Certification body/BVI)

## CHIN YEE CHEMICAL INDUSTRIES, CO., LTD.

### Company Overview

Our company was established in 1975, mainly manufacturing and selling fiber and chemical surfactants for the market of Taiwan. Since then, we have been contributing to the field of the electronics industry through manufacturing and sales of lubricants for plastics, printed circuit board flame retardants and heat-resistant hardeners. Recently, we have also been providing high-frequency materials for printed wiring boards and heat-resistant resin that demand high transmission performance.

### Environmental and Social Activities

At our company, we are appropriate carrying out safety and sanitation risk measures according to ISO-9001 and ISO-14000. As environmental measures, we have been reducing and reusing wastes by improving manufacturing processes.



Vice-President  
**AOYAMA Tatsuo**



**Address:** 11F Lidye Commercial Building, 22 Nanking West Road, Taipei, Taiwan

**Operations:** Production & sales of surfactants & plastic additives

#### ISO Certification Status:

14001: Certified in December 2006 (Certification body/BSMI)  
9001: Certified in April 1995 (Certification body/BSMI)

## SHUANG YI LI (TIANJIN) NEW ENERGY CO., LTD.

### Company Overview

Our company was established in the 2005 as a manufacturer manufacturing and selling lithium-ion batteries in the Tianjin Economic-Technological Development Area of Tianjin City, China. We have been selected as a high-tech company in the Tianjin Economic-Technological Development Area as well as recognized for our social contributions.

### Environmental and Social Activities

We are making efforts to save energy by conserving electricity used for air conditions, plant lighting, dry room and warehouse as well as economize the use of heater steam. We have also reduced the amount of paper used to conserve paper. We are also making efforts to segregate and reuse industrial wastes.



President General Manager  
**Liu Xiaoyan**




**Address:** No.11 Building, Fenghua Industrial Park, Phase 2, No.80 the Ninth Street, TEDA, Tianjin, P. R. China

**Operations:** Production & sales of Lithium-ion power batteries

#### ISO Certification Status:

9001: Certified in March 2007 (Certification body/CQC)

 **DAI-ICHI KOGYO SEIYAKU CO.,LTD.**



**Cover: Yunoyama Aodaki Falls**

Yokkaichi City, where the second production site following Kyoto was established in 1938, faces the Ise Bay with smooth plains expanding from the Suzuka Mountain Range all the way to the Ise Bay. From the rich mountain range blessed with nature to the east of the Ise Bay, a number of rivers pass providing water to fields. The water from Aodaki, the source of one of the Mitakigawa River located at the depths of Gozaishodake cascades down 50 m along the rock surfaces with tremendous force shattering the silence with the sound of falling water.

For inquiries about this document, please contact:

**Environment, Safety & Quality Affairs Department**

**Dai-ichi Kogyo Seiyaku Co., Ltd.**

5 Ogawara-cho, Kisshoin, Minami-ku, Kyoto 601-8391 Japan

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**[www.dks-web.co.jp](http://www.dks-web.co.jp)**

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