



### **Chairman's Message**

Realizing a Sustainable Society with the Power of Chemistry



Japan's chemical industry has grown through today while pursuing the development of revolutionary materials and technologies and contributing to a wide range of industries and an abundant lifestyle in every era. The roles played by the chemical industry are becoming even greater along with the diversification of consumer needs, the increasing complexity and sophistication of manufacturing, and the need to respond to food, resources and energy, the environment, and other global-scale issues.

It is also important to address chemicals management, which is becoming increasingly stringent worldwide, the aging of facilities, the shortage of experienced workers, the issues pertaining to international trade, and to advance the chemical industry's positions in industrial policy, and to otherwise have the entire chemical industry collaborate in approaching common issues and

themes that would be difficult for individual enterprises to resolve. We believe that these efforts will increase the value we provide to society.

Japan Chemical Industry Association (JCIA) is advancing various measures for the further development of the Japanese chemical industry and for greater contributions to society. With my appointment as chairman, I have given priority to the following three themes considering the surrounding conditions.

#### **Efforts to Secure Safety**

The repeated occurrence of severe safety incidents over the past several years cause serious concerns, and we intend to continue strengthening countermeasures under the basic policy of "securing safety is the chemical industry's highest priority issue." Last year, *Safety and*  Accident Prevention Guidelines and Best Practices of Safety and Disaster Prevention, Industrial Health and Safety were used at the Mizushima district and other locations together with other organizations for the education of frontline personnel. JCIA now plans to expand these activities to other regions and industries, and to strengthen our support for safety measures.

Additionally, we will adopt the more advanced perspective that "efforts to secure safety generate new value," and examine new approaches to safety such as applying the IoT for plant safety management while reinforcing the measures already being implemented.

#### **Efforts for Chemicals Management**

The Global Product Strategy (GPS), a voluntary initiative to manage chemicals appropriately on a risk basis, is aimed at minimizing the harmful effects from chemicals on health and the environment. GPS is an international approach which the global chemical industry has agreed to implement, so the Japanese chemical industry—which aims at global development—is expected to advance this strategically. JCIA has actively promoted the Japan Initiative of Product Stewardship (GPS/JIPS), which is the Japan version of GPS, and has provided diverse types of support including efforts to upgrade and expand the functions of the JCIA BIGDr portal site which supports information collection and risk assessment. We now plan to spread and gain understanding of GPS/JIPS throughout the supply chain, hold more Chemical Risk Forum meetings in accordance with needs, raise the awareness of responsible parties, support the acquisition of skills, and otherwise contribute to raising the level of chemicals management.

Furthermore, in responding to examinations toward revising the Act on the Evaluation of Chemical Substances and Regulation of their Manufacture, etc. (the Chemical Substances Control Law), JCIA is working toward rationalization, identifying the issues under the present conditions, and continuing to offer concrete proposals to the authorities. JCIA will also continue to support global business activities by grasping the regulatory trends in the US, Asian

countries and other states, and providing information to our member companies.

# Contribution to Realizing a Sustainable Society

In addition to producing revolutionary products using sophisticated technology, the Japanese chemical industry also builds up ingenious approaches and innovations in manufacturing processes, facilities management, safety and quality control, environmental preservation, and other diverse fields related to production. We feel it is increasingly important for the industry to utilize the knowledge and know-how we have accumulated to date to make wide-ranging contributions toward the realization of a sustainable society.

Specifically, inside Japan, JCIA will work to have the concept of Responsible Care (RC) activities to voluntarily secure the environment, safety and health in all the processes from development through to disposal of chemicals widely understood and recognized beyond the boundaries of the chemical industry, and to contribute to manufacturing. Overseas, we will continue to develop the RC Integrated Program—which integrates educational assistance know-how on RC activities, chemicals management, safety and disaster prevention—in Asia and the ASEAN, positively manifest leadership in the activities of the International Council of Chemical Associations and in other international frameworks such as the Japan-China Chemical Industry Conference and the Japan-ASEAN Economic and Industrial Cooperation Committee, and contribute to efforts to address global warming and other environmental issues and to upgrade the level of safety measures.

Also, by promoting "Chemistry Day" on October 23 and through other activities, JCIA will work to convey the usefulness and appeal of chemistry to people in all walks of life, and to increase public awareness of the chemical industry.

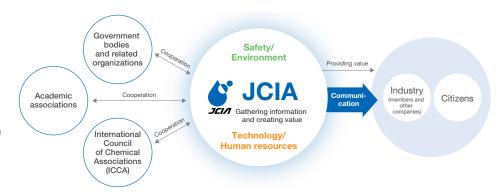
O. Shitoli
Osamu Ishitobi

Chairman

Japan Chemical Industry Association

### About the Japan Chemical Industry Association

The Japan Chemical Industry Association (JCIA) engages in various activities with the aim of contributing to the sustainable development of human society. It does this by providing value to its members and the public, while at the same time monitoring changes in the environment surrounding the Japanese chemical industry and working with government bodies, related organizations, academic associations, and the International Council of Chemical Associations (ICCA).



#### JCIA at a glance

#### Name

Japan Chemical Industry Association (JCIA)

#### Established

April 1948—JCIA formed as a voluntary association June 1991—Incorporated as a legal entity April 2011—Shifted to a general incorporated association

#### Mission

JCIA seeks to promote the healthy development of the chemical industry through the research and study of production, distribution and consumption of materials relating to the chemical industry. JCIA also focuses on the research and study of various issues relating to technology, labor, environment and chemical safety of the industry, and on planning appropriate measures and actions to the economic prosperity of Japan and the betterment of the national standard of living.

#### Activities

- Research and study on the production, distribution and consumption of chemical products.
- Research and study on issues concerning technology, labor, environment, chemical safety, etc., as well as planning and promoting measures and actions.
- Commendations for outstanding achievement in new technologies and safety records.
- Collection and dissemination of information, communications and cooperation with related organizations in Japan and overseas.
- 5. Public outreach and advocacy activities, workshops and seminars.
- Other operations besides the above that are necessary to achieve JCIA's mission.

#### Fiscal year

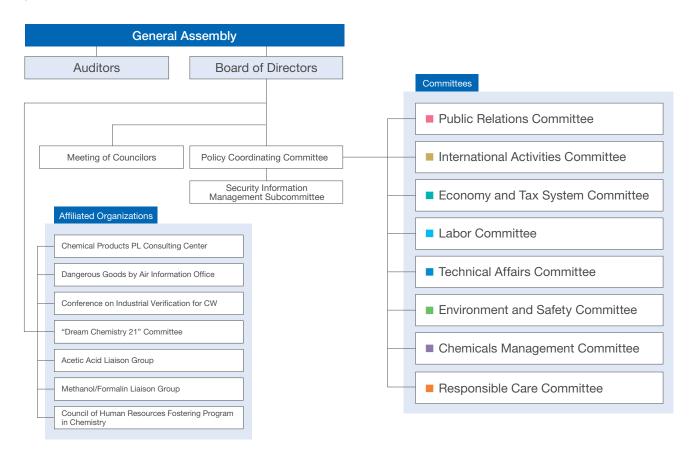
From April 1 to March 31 of the following year

#### Members of the Japan Chemical Industry Association (as of June 30, 2016)

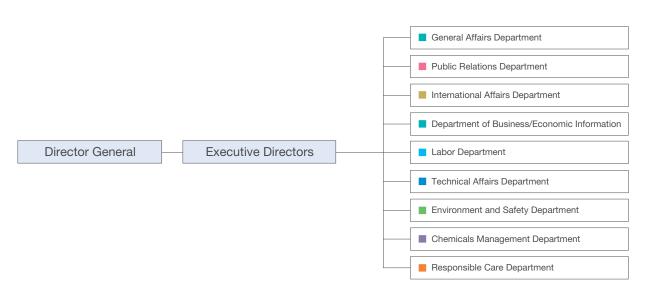
| Chairman (Representative Director)   | Osamu Ishitobi      | (Sumitomo Chemical Co., Ltd., Chairman of the Board & Executive Chairman)                             |
|--|---------------------|---|
| Vice Chairman (Representative Director)<br>Vice Chairman (Representative Director) |                     | (Mitsui Chemicals, Inc., President & CEO)<br>(Kao Corporation, President and Chief Executive Officer) |
| Vice Chairman (Representative Director)  | Shinsuke Yoshitaka  | (Denka Co. Ltd., Representative Director, President & CEO)  |
| Vice Chairman (Representative Director)  | Masanori Ikeda      | (NIPPON SHOKUBAI CO., LTD., Member of the Board, President)   |
| Director   | Hideki Kobori       | (Asahi Kasei Corporation, President & Representative Director)  |
| Director   | Kazuhiko Ishimura   | (Asahi Glass Co., Ltd., Chairman & Representative Director)   |
| Director   | Yuzuru Yamamoto     | (Ube Industries, Ltd., President & Representative Director)   |
| Director   | Mamoru Kadokura     | (KANEKA CORPORATION, President & Representative Director)   |
| Director   | Hideo Ichikawa      | (Showa Denko K.K., President & CEO)   |
| Director   | Teiji Koge          | (SEKISUI CHEMICAL CO., LTD., President & Representative Director)                                     |
| Director   | Misao Fudaba        | (Daicel Corporation, President & CEO)   |
| Director   | Yoshiyuki Nakanishi | (DIC Corporation, Representative Director, President & CEO)   |
| Director   | Toshinori Yamamoto  | (TOSOH CORPORATION, President)  |
| Director   | Masanobu Suzuki     | (Nippon Kayaku Co., Ltd., President & CEO)  |
| Director   | Kenji Sukeno        | (FUJIFILM Holdings Corporation, President & COO & Representative Director)                            |
| Director   | Hitoshi Ochi        | (Mitsubishi Chemical Holdings Corporation, Representative CEO, President & CEO)                       |
| Director General   | Hiroshi Watanabe    | (Japan Chemical Industry Association)   |
| Executive Director   | Kaoru Sato          | (Japan Chemical Industry Association)   |
| Executive Director   | Fumiaki Shono       | (Japan Chemical Industry Association)   |
| Executive Director   | Yutaka Haruyama     | (Japan Chemical Industry Association)   |
| Executive Director   | Shigeru Hara        | (Japan Chemical Industry Association)   |
| Auditor  | Mitsunobu Koshiba   | (JSR Corporation, Representative Director & President)  |
| Auditor  | Akiharu Kobayashi   | (NOF CORPORATION, President & CEO)  |

#### Organizational Chart of JCIA

The Japan Chemical Industry Association (JCIA) is organized into the General Assembly, the Board of Directors, Auditors, the Policy Coordinating Committee, the Meeting of Councilors, business-specific committees and the Secretariat. The General Assembly, which is composed of all JCIA member companies and organizations, is the supreme decision-making body. The Assembly resolves important issues related to JCIA management, as well as the business plan, budget and financial statements. The Board of Directors consists of the Directors and Executive Directors elected from among the member companies and resolves issues related to JCIA business and activities.



#### Organizational Chart of the JCIA Secretariat



# **Activities of JCIA: FY 2015**

The following summarizes the main activities of the JCIA in FY 2015. We develop activities both in Japan and overseas.



# Apr.

- RCLG meeting / USA / ■RC Dept.
- Hazard Asia Pacific / Malaysia / ■RC Dept. ■Env't & Safety Dept.
- Japan-EU sector-to-sector meeting / Brussels / ■Int'l Affairs Dept.
- •The 1st JCIA seminar / Tokyo / ■Business & Gen. Affairs Dept.

# May

- The 1st children's science experiment class / Science Museum (Tokyo) / ■PR Dept.
- •The 2nd GSSMaker demonstration seminar / JCIA / ■Chem. Mgt. Dept.
- The 1st Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- Publication of "Responsible Care NEWS, Spring Edition" / ■RC Dept.
- JCIA General Assembly & Symposium / ■Business & Gen. Affairs Dept.

### Jul

- The 4th JACI/GSC Symposium
   Poster presentation at the 7th GSC Tokyo International Conference / Tokyo / Tech. Dept.
- ●The 2nd children's science experiment class / Science Museum (Tokyo) / ■PR Dept.
- Interaction and study meeting for members / Osaka / ■RC Dept.
- The 1st promotional lecture on importance of standardization 2015 / Tokyo / ■Tech. Dept.
- Send-off party for the Japanese delegates to the International Chemistry Olympiad / Chemical Society of Japan (Tokyo) / ■PR Dept.
- Information security seminar / Chemical Society of Japan (Tokyo) / ■Info. Tech. Office
- •The 3rd Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- Publication of the "JCIA Annual Report 2015" / ■PR Dept.
- Publication of the "Chemical Industry of Japan 2015 in Graphs" /
   PR Dept.

# Aug

- Summer vacation chemical-experiment show for children / Science Museum (Tokyo) / ■PR Dept.
- •LRI research report meeting / Tokyo / ■Chem. Mgt. Dept.
- ●The 3rd JCIA seminar / Tokyo / ■Business & Gen. Affairs Dept.
- Publication of "Responsible Care NEWS, Summer Edition" / Se
   RC Dept.
- Publication of "Handbook on Labeling Based on the Revised Industrial Safety & Health Act" /
   Chem. Mgt. Dept.

Aug.

Jul.



2015

May



Jun.

- Publication of "GPS/JIPS to Promote Risk-based Management (synopsis)" / ■Chem. Mgt. Dept.
- Lecture at a Singapore chemical conference / Singapore /
   Int'l Affairs Dept.
- Introductory course of the Chemical Risk Forum / Osaka / 

  Chem. Mgt. Dept.
- The 3rd GSSMaker demonstration seminar / JCIA / Chem. Mgt. Dept.
- ◆APRO meeting / Cambodia / ■RC Dept.
- ●The 2nd JCIA seminar / Tokyo / ■Business & Gen. Affairs Dept.
- ●The 2nd Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.

# Sep.

- The 3rd children's science experiment class / Science Museum (Tokyo) / ■PR Dept.
- Process Safety WS / Indonesia / ■Env't & Safety Dept. ■RC Dept.
- Risk communication workshop / Chiba / ■RC Dept.
- Chemistry Grand Prix award ceremony / Chemical Society of Japan (Tokyo) / ■PR Dept.
- ●The 4th Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- Research team on labor conditions in chemical industries overseas / Myanmar & Thailand / Labor Dept.



### Oct.

- •Interaction and study meeting for members / Yamaguchi / ■RC Dept.
- QSAR seminar for chemicals management 2015 (basic) / JCIA /
   Chem. Mgt. Dept.
- Industry-academia exchange meeting / Tokyo / Labor Dept.
- Information security seminar / Osaka / ■Info. Tech. Office
- RCLG meeting / South Africa / ■RC Dept.
- GPS/JIPS seminar for practice / Tokyo / ■Chem. Mgt. Dept.
- Chemistry Day chemical-experiment show for children / Kyocera Dome Osaka / ■PR Dept.
- The 1st Japan-China Chemical Industry Conference / Tokyo / ■Int'l Affairs Dept.
- •The 5th Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- ●The 4th JCIA seminar / Tokyo / ■Business & Gen. Affairs Dept.
- The 47th labor and management talks in the chemical industry / Tokyo /
   Labor Dept.
- Briefing on the revised Worker Dispatch Law / Tokyo / Labor Dept.
- Industrial safety course: sessions 1 to 4 / JCIA / ■Env't & Safety Dept.

Nov.

**2016** 

### Nov

- APRO meeting /
- Philippines / ■RC Dept. ■Env't & Safety Dept. ■Chem. Mgt. Dept.
- APRCC
- Philippines / ■RC Dept. ■Env't & Safety Dept. ■Chem. Mgt. Dept.
- Process Safety WS /
- Philippines / ■RC Dept. ■Env't & Safety Dept.
- Seminar on Security Export Control / Tokyo /Dept. of Business/Econ. Info.
- The 4th children's science experiment class / Science Museum (Tokyo) / ■PR Dept.
- Seminar on anti-dumping and "Report on Compliance by Major Trading Partners with Trade Agreements" / JCIA / ■Int'l Affairs Dept.
- Consumer dialogue meeting / Wakayama / ■RC Dept.
- Local dialogue meeting / Yamaguchi / ■RC Dept.
- Safety management workshop on dangerous substances transportation / Tokyo & Osaka / ■Env't & Safety Dept.
- GPS/JIPS seminar for practice / Osaka / ■Chem. Mgt. Dept.
- ●Industrial safety course: sessions 5 to 7 / JCIA / ■Env't & Safety Dept.
- ●The 6th Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- Publication of "Responsible Care NEWS, Fall Edition" / ■RC Dept.
- Renewal of the JCIA website for members / JCIA / ■PR Dept.

### Dec.

- Seminar on Security Export Control / Osaka /
   Dept. of Business/Econ. Info.
- RC activity report meeting / Tokyo & Osaka / ■RC Dept.
- The 6th JCIA-KOCIC Annual Meeting / Busan / ■Int'l Affairs Dept.
- Consumer dialogue meeting / Tokyo / ■RC Dept.
- •The 5th JCIA seminar / Tokyo / ■Business & Gen. Affairs Dept.
- ●The 7th Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.

### **Jan**

- The 2nd promotional lecture on importance of standardization 2015 / Tokyo / ■Tech. Dept.
- The 5th children's science experiment class / Science Museum (Tokyo) / ■PR Dept.
- ●The 8th Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- Joint New Year party of the chemical industry (50 organizations) / Tokyo / Gen. Affairs Dept.
- Workshop on third-party verification / Taiwan / ■RC Dept.
- JCIA explanatory meetings / Tokyo & Osaka /Gen. Affairs Dept.
- Local dialogue meeting / Kawasaki / ■RC Dept.
- Industrial safety course: sessions 11 to 13 / JCIA /
- ■Env't & Safety Dept. Feb.

#### Jan.

### Feb.

- Industrial safety course: sessions 14 to 15 / JCIA /
   Env't & Safety Dept.
- GPS/JIPS seminar on risk assessment of mixtures / JCIA /
   Chem. Mgt. Dept.

Mar.

- The 9th Chemical Risk Forum / JCIA / Chem. Mgt. Dept.
- Student-company exchange meeting / Tokyo & Osaka /
   Labor Dept.
- The 48th labor and management talks in the chemical industry / Tokyo / ■Labor Dept.
- The 6th JCIA seminar / Tokyo / Business & Gen. Affairs Dept.
- Introductory course of the Chemical Risk Forum / Chiba /
   Chem. Mgt. Dept.
- Publication of "Responsible Care NEWS, Winter Edition" / ■RC Dept.
- Local dialogue meeting / Osaka, Yamaguchi, Toyama & Oita ② / ■RC Dept.
- Interaction and study meeting for members / Tokyo / ■RC Dept.



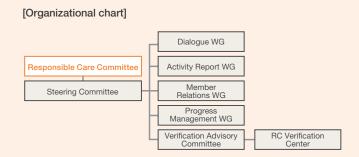
### Mar.

- Children's chemical experiment class in Fukuoka / Fukuoka City Science Museum for Children / ■PR Dept.
- RCIP workshop (process safety) / Vietnam / ■Env't & Safety Dept. ■RC Dept.
- Seminar on rules of origin by Tokyo Customs / JCIA / ■Int'l Affairs Dept.
- Seminar on the call for comments regarding development of comprehensive accounting standards pertaining to revenue recognition / Tokyo /
   Dept. of Business/Econ. Info.
- The 6th children's science experiment class / Science Museum (Tokyo) /
   ■PR Dept.
- QSAR / in silico seminar for chemical substances 2015 / Tokyo /
   Chem. Mgt. Dept.
- •The 10th Chemical Risk Forum / JCIA / ■Chem. Mgt. Dept.
- Industrial safety course: final session / JCIA / ■Env't & Safety Dept.
- Local dialogue meeting / Niigata / ■RC Dept.

### **Activity Report: Responsible Care Committee**

[Responsible Care Department]

The goals of the Responsible Care (RC) Committee are to support RC activities of our members in order to contribute to improving the public standing of the members and the chemical industry and to the sustainable development of the chemical industry and society as a whole. To this end, the committee focuses its efforts on continuous improvement of RC activities, raising public awareness of such activities, and provision of support to promote and expand RC activities.



#### Focus

### Consumer dialogue meetings to gain widespread understanding of the chemical industry







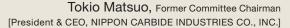
#### Voice Building collaborative relationships with local residents through dialogue

While the chemical industry has earned the trust of local residents over the course of many years, maintaining their sense of safety requires continuous efforts to be undertaken in consideration of changes in business conditions and the global environment. To this end, it is important for companies to disclose information on safety and environmental measures, let people know about their activities through such programs as factory tours and local events, and engage in ongoing communication by responding to local concerns as much as possible. The Dialogue WG supports such efforts to build collaborative relationships between companies and local communities.

Masatsugu Kitamoto, Assistant Leader, Dialogue WG [General Manager, Ecology & Quality Management Division, CSR Division, FUJIFILM Corporation]

#### Promoting continuous improvement of Responsible Care (RC) activities, raising public awareness, and active participation in international activities

The RC Committee has engaged in continuous improvement and is continuing to raise public awareness pertaining to RC activities, as well as actively participating in international activities. In Japan, we would like to improve the quality of our activities through ongoing educational programs, mainly for our members, and dialogues with society. Internationally, we would like to offer leadership, particularly in Asia, as well as promoting and expanding RC activities through effective support for each country.





Topic 1

#### Continuous efforts to obtain support for the revised the Responsible Care Global Charter (2014)

As of the end of FY 2015, the JCIA has secured signatures from 56 Japanese companies to support the Responsible Care Global Charter. While continuing this effort, we will also work with these companies to help them incorporate the Charter into their RC activities.

#### Topic

#### Reporting process safety data to the ICCA

The Board of Directors of the International Council of Chemical Associations (ICCA) approved (in June 2015) the process safety metrics (PSM). In response, the JCIA also discussed this issue, mainly within its task force made of representatives of 11 companies. It has decided to collect and report process safety data in accordance with the PSM.



#### Regular interaction and study meetings for members

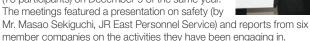
Interaction and study meetings for members were held in July 2015 in Osaka, October 2015 in Yamaguchi, and February

2016 in Tokyo. At the Tokyo meeting, all participants discussed one theme using a new method called the World Café.

Topic 4

#### Responsible Care activity report meetings

RC activity report meetings were held in Tokyo (154 participants) on December 2, 2015, and in Osaka (76 participants) on December 9 of the same year. The meetings featured a presentation on safety (by





#### Support for RC activities in Asian countries

We supported RC activities in Asian countries through various initiatives, such as hosting a meeting in Cambodia and organizing process safety and other workshops in Indonesia, the Philippines, Taiwan, and Vietnam.



#### Topic 6

#### Verification activities

Verification activities are aimed at improving the quality and reliability of RC activities. In FY 2015, we verified 10 reports and one activity, and have now examined a total of 185 cases.

Awards

#### The 10th Responsible Care Awards

These awards, which are conferred on individuals or groups that have contributed to spreading and expanding RC activities, are aimed at further motivating and energizing the people engaged in RC activities.

| Awards              | Members   | Awarded themes   |  |
|---------------------|---|--|--|
| RC Grand Prix Award | Kao Transport & Logistics Co., Ltd.   | Initiative to reduce traffic accidents and environmental impacts in delivery                                   |  |
| RC Jury's Special   | Safe Corporate Climate Cultivation Working Group, DIC Corporation                                     | Reduction of work-related accidents through activities by the Safe Corporate Climate Cultivation Working Group |  |
| Award               | Success Project Team, Sumitomo Chemical Co., Ltd.   | Further enhancement of safety management of chemicals at the global level                                      |  |
| RC Outstanding      | Daicel Logistics Corporation  | Striving for distribution safety and quality to satisfy customers: employees sharing their experiences         |  |
| Award               | Ichihara Works, Mitsui Chemicals, Inc.  | "Activities that contribute to the local community" by Ichihara Works, Mitsui Chemicals, Inc.                  |  |
|                     | Safety & Environment Department and General Affairs Department,<br>Fuji Plant, Polyplastics Co., Ltd. | Maintaining trust of local residents: continuous communication activities                                      |  |
| RC Award for Effort | Environment & Safety Promotion Department, Production-Logistics HQ, Toyo Ink SC Holdings Co., Ltd.    | Ongoing safety training for environmental and safety managers at overseas affiliates                           |  |
|                     | RC Promotion Department, Sakaide Plant, Mitsui Chemicals, Inc.  | Risk reduction through comprehensive risk assessment   |  |
|                     | HD Division, Showa Denko K.K.   | Initiative to save energy at HD plants   |  |



Representatives of Kao Transport & Logistics Co., Ltd., the winner of the RC Grand Prix Award (May 2016)

#### Developing active and open efforts to enhance the presence of the chemical industry

Based on the idea of further strengthening communication with society, we will promote active and open efforts to enhance the presence of the chemical industry. More specifically, we will further promote and expand RC activities by continuously improving them and raising public awareness of them, as well as launching full-scale comprehensive RC Integrated Programs (RCIPs) in Asian countries while providing such countries with effective support according to needs and encouraging Japanese companies to participate in the efforts.

Shigeru Ueyama [Executive Officer, Business Support Department, Kao Corporation]



### **Activity Report: Environment and Safety Committee**

[Environment & Safety Department]

Overview of the activities

The committee keeps track of the latest domestic and international trends concerning issues related to process safety and disaster prevention, the environment, and occupational safety. It also disseminates such information to members, being sure to incorporate the views of the chemical industry. The committee also strives to put the RC philosophy into practice through the promotion of voluntary activities. In FY 2015, with a goal to prevent process safety incidents and work-related accidents, the committee undertook an ongoing campaign to promote related measures among members and relevant organizations using the "Safety and Accident Prevention Guidelines."

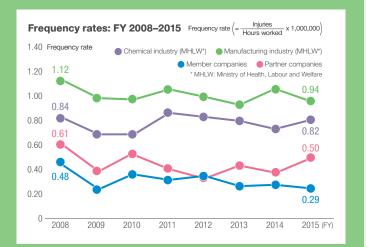
#### [Organizational chart]

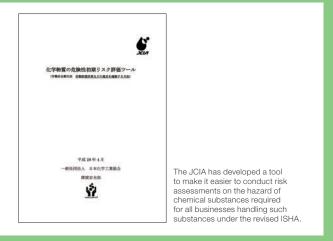


#### **Focus**

# Risk assessment to prevent health damage, explosions, and fire caused by chemical substances

The revised Industrial Safety and Health Act (ISHA), enforced in June 2016, requires risk assessments to be performed on the hazards and toxicity of chemical substances whose SDSs need to be submitted. In response, regarding substances that carry a risk of explosion and fire under the GHS classification and are stipulated in the laws and regulations related to ISHA, we have developed a risk assessment system to confirm these rules through a checklist. Under the Occupational Health and Safety Subcommittee, we held several study groups on the reduction of work-related accidents to discuss this issue, the results of which were finalized and released in April 2016. Along with JCIA BIGDr, a web portal to support risk assessment on the toxicity of chemical substances, we are enhancing the initiative to promote sound management of chemical substances based on actual risk assessment results. We strive to further prevent work-related accidents and process safety incidents with the use of such materials as the "Safety and Accident Prevention Guidelines."







#### Voice A sound environment is the foundation of sustainable business activities

The Environment Subcommittee strives to: maintain close contact with regulatory authorities regarding water, the atmospheric environment, and soil contamination; keep track of regulatory trends; provide information to member companies; compile the opinions of members; and incorporate such opinions into outputs. We will keep promoting our independent initiatives and work closely with our members for the sustainable development of the chemical industry while monitoring such issues as wastewater treatment using bioresponse and the revision of the Soil Contamination Countermeasures Act based on the review of the current measures against soil contamination, as well as trends in relation to measures against particulate matter (PM2.5) and photochemical oxidants.

Toshihide Maruyama, Environment Subcommittee Chairman [Manager, Responsible Care Division, Daicel Corporation]

Making safety and security the highest priority of the chemical industry, we should collaborate with other associations to expand safety activities and contribute to society. Stay safe!

In FY 2015, while continuing to make safety and security the highest priority of the chemical industry, we shared and applied best practices for safety, striving to establish a solid foundation for safety activities. Following the first and omnibus editions of the "Safety and Accident Prevention Guidelines," we also published the second edition and made it available to members. In FY 2016, we will expand safety activities to the entire industry and contribute to society through the further use of the guidelines as well as collaboration with other industrial and academic associations.

Junichi Misumi, Committee Chairman [Managing Executive Officer, Ube Industries, Ltd.]



## Topic Safety activities to reduce work-related accidents

Industrial accidents have been increasing recently, and the number of serious accidents has shown no sign of slowing down since as far back as 1989. In order to change this situation, we need to ensure that the skills of experienced workers who are about to retire are passed on, that facilities are properly managed, and that information about accidents is shared. To this end, the Occupational Health and Safety Subcommittee is promoting information exchange and activities regarding prevention of work-related accidents, including in the area of mental health. In particular, we disseminated information on measures for reducing risks associated with chemical substances, fall prevention, heat stroke, and mental health. As a result, the 2016 Survey on Industrial Safety and Health (results of 2015) shows a decline in work-related accidents compared with the data from 2014, demonstrating an improvement in safety activities.

# Topic Responding to regulations relating to water quality, atmosphere, and soil

In response to the discussions by the Ministry of the Environment's specialist panel on the environment and the Central Environment Council, which represented a first step toward the establishment of laws and regulations, we, mainly through the Environment Subcommittee, exchanged opinions with people connected to major industry groups, compiled the opinions of members, and actively presented proposals to regulatory authorities. Main themes:

Water

Soil

... Developing environmental standards on bottom dissolved oxygen, the 8th Total Pollutant Load Control, introduction of WET method ... Collateral measures for the control of mercury

Atmosphere ...

emissions
... Review of the existing systems

Activities of each subcommittee in relation to "Process safety and disaster prevention," "Occupational health and safety," and "Environment"

This year, we also held subcommittee meetings on process safety and disaster prevention, occupational health and safety, and the environment. Regarding various discussions, statistical documents, domestic and international information, and revisions to environment and safety legal frameworks by regulatory authorities as well as domestic and international bodies, the committee kept track of the contents, disseminated information, and incorporated the opinions of members.

# Topic Responding to the requirement for risk assessment of chemical substances

The revised ISHA requires risk assessments regarding both the hazard and toxicity of chemical substances. In response to the revised Act as well as recent cases of explosion and fire, we have developed the "Initial Risk Assessment Tool for Chemical Substances." In addition to ensuring legal compliance, this tool aims to help readers understand the hazard of chemical substances, check how to handle such substances, check conditions of facilities, and reduce risks in an organizational manner as part of the risk management system.

# Topic 5

#### Industrial safety course

We started running the industrial safety course in 2014, with the aim of promoting safety education in the oil and chemical industries. This fiscal year, in collaboration with the Japan Petrochemical Industry Association and Petroleum Association of Japan, we ran the program continuously from October to enhance the process safety capabilities of member companies. The 30 graduates of the course

have formed an alumni group to organize various activities, such as factory tours, and build a network.



# Topic Exchanging information and cooperating with other groups in the area of security and safety activities

Using the "Safety and Accident Prevention Guidelines" (first edition, omnibus edition, and DVD in Japanese and English), we continuously disseminated information to members, relevant organizations, and individual companies in Japan and overseas. We also continued working with the Japan Environmental Management Association for Industry and Japan Society for Safety Engineering to exchange information and collaborate for safety and security activities.

Awards

#### The 40th Annual Safety Awards

These awards are conferred on chemical facilities that have a strong track record in ensuring safety and are implementing excellent safety initiatives that can serve as a model for the industry. The facilities that received the awards in FY 2015 have maintained zero accidents for periods ranging from 1.7 million to 13.6 million hours.

|                                      | Members   |
|--------------------------------------|---|
| JCIA Annual Safety Award Grand Prize | Mizushima Plant, Mitsui Chemicals, Inc.           |
| JCIA Annual Safety Award First Prize | Nobeoka Plant, Asahi Kasei Microsystems Co., Ltd. |
|                                      | Shinryo Corporation                               |
|                                      | Omuta Plant, Showa Aluminum Can Corporation       |
|                                      | Utsunomiya Plant, Sumitomo Bakelite Co., Ltd.     |



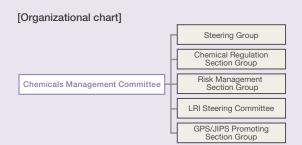
Each of the facilities earned high marks for their proactive efforts to ensure occupational health and safety

### **Activity Report: Chemicals Management Committee**

[Chemicals Management Department]



The committee cultivates close ties with regulatory authorities and other administrative bodies to actively gather, analyze and communicate information pertaining to domestic and overseas regulatory trends for chemicals management that members truly require and find helpful. In addition, we gather members' opinions and requests, and submit them to regulatory authorities. As part of its independent initiatives in the industry, the committee is proactively promoting GPS/JIPS activities, tackling new issues, and supporting research and technology evaluations related to chemical risk assessment methods.



#### **Focus**

#### Recent trends in chemicals management in Japan and overseas

To promote sound chemicals management, the 2002 World Summit on Sustainable Development (WSSD) set the goal that chemicals should be used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment by 2020. In order to achieve this WSSD goal, the Strategic Approach to International Chemicals

Management (SAICM) was formulated in 2006. Every three years, the International Conference on Chemicals Management (ICCM) is held to promote this approach. The idea of risk-based chemicals management has been gradually incorporated into laws and regulations in various countries.

#### [ICCM4 in Geneva]

The fourth session of the International Conference on Chemicals Management (ICCM4) took place in Geneva (Switzerland) from September 28 to October 2, 2015. The meeting approved the Overall Orientation and Guidance (OOG) to achieve the WSSD goal for 2020 and discussed chemicals management after 2020, including the Sustainable Development Goals (SDGs). From the International Council of Chemical Associations (ICCA), 11 industry associations and 12 companies participated, including the JCIA. We actively disseminated information from the chemical industry, such as hosting a side event. As a result, the chemical industry was internationally recognized as a solutions provider.



#### [Incorporating the WSSD goal into laws and regulations on chemicals management in different countries]

The movement to revise laws, mainly to introduce risk-based chemicals management, has been strong particularly in Asia. In 2014, the Toxic Chemical Substance Control Act (TCSCA) was enforced in Taiwan. In 2015, the Act on the Registration and Evaluation of Chemicals (ARECs) was enforced in South Korea. Meanwhile, in the United States, the revised Toxic Substances Control Act (TSCA) was enacted in June 2016 after long discussion of its reform. Details of the rules will be determined

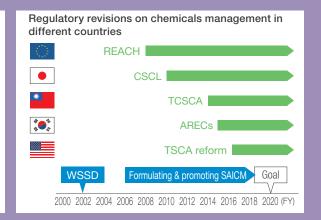
later. In ASEAN countries, legislation on SDSs and labeling based on GHS is being developed.

The JCIA kept track of regulatory amendments regarding chemicals, provided the latest information to members in a timely manner, and submitted members' opinions to local authorities in collaboration with relevant local associations. As a result of these activities, the JCIA's opinions were partly reflected during the revision of laws, orders, regulations, and guidance materials.

#### [Initiatives in Japan]

In 2010, risk-based chemicals management was introduced to Japan with the revision of the Chemical Substances Control Law (CSCL). In 2015, discussion started on further revisions for streamlining in the future. The JCIA, based on the collected views and requests from members, actively offers opinions to relevant authorities.

Moreover, since June 2016, the revised Industrial Safety and Health Act (ISHA) makes risk assessments mandatory regarding 640 substances that are subject to SDS issuance. The JCIA assists members in responding to the revised ISHA by enhancing the functions of JCIA BIGDr, a web portal to support risk assessment.



#### Establishing chemicals management as a part of business strategy

We have set the fundamental policies to strengthen support for chemicals management in business as well as to promote and expand voluntary contributions by the industry. Based on these, we responded to revised laws and regulations in the relevant fields, promoted GPS/JIPS, participated in international activities, built a system to share information and communicate for risk management, and enhanced the functions of JCIA BIGDr, a portal site to support risk assessment.

Osamu Maruyama, Former Committee Chairman [Director General, Sumika Chemical Analysis Service, Ltd.]

# Topic Publication of "Handbook on Labeling Based on the Revised Industrial Safety & Health Act"

The revised ISHA expands the scope of chemicals that are required to be labeled. In response, the JCIA discussed reasonable labeling methods after the enforcement of the revised law to help businesses accommodate the revision. We developed a handbook based on these discussions and have made it available to the public on the JCIA website.



# Promotion of GPS/JIPS based on the revised ISHA

The revised ISHA makes risk assessment for workers mandatory for the chemical substances. In response, we focused on enhancing practical supports in risk assessment, including the promotional campaign held from April to June, seminars to which we invited an officer from the Ministry of Health, Labour and Welfare (see the photograph), release of a guidance material for risk assessment of



mixtures, development of a risk assessment tool (BIGDr.Worker) for the revised ISHA and consortium activities. These efforts aimed to help members readily deal with the revised ISHA as part of GPS/JIPS.

## Topic Results of LRI activities

Eight out of 18 themes were terminated in the third phase of LRI. The outcomes will be available for use through external presentations and release of the tools. The fourth phase is in progress with 15 themes, including three new themes adopted through the open application process and two designated themes. One of the newly launched projects under the designated themes is an integrated project of AIST-MeRAM (by Senior Researcher Lin, AIST), and Active QSAR (by Professor Takahashi, Toyohashi University of Technology), both of them were terminated in the last phase. Through the integration of the high-quality database of AIST-MeRAM and QSAR functions, JCIA is striving to build a system that leverages the strength of both while complementing each other.



AIST-MeRAM workshop hosted by the Federation of Thai Industries

#### Awards

#### The JCIA LRI Award

The JCIA LRI Award established at the Japanese Society of Toxicology (JSOT) in FY 2015 was given in FY 2016 to Professor Yasumitsu Ogra from the Graduate School of Pharmaceutical Sciences, Chiba University. The award recognized his outstanding achievement in "Development of novel speciation analysis of metal-containing biomolecules and its application to toxicology." The award's ceremony was held on June 30, 2016 at the 43rd JSOT annual meeting (held at the main hall of Wink Aichi).

In FY 2016, JCIA has established the JCIA LRI Award at the Japanese Society for Alternatives to Animal Experiments (JSAAE). The award's ceremony is scheduled to be held in November at the 29th JSAAE annual meeting (at Kyushu University).



Award's ceremony at the JSOT annual meeting

#### Voice of the New Committee Chairman

#### Striving to minimize the risks posed by chemicals

In FY 2016, we will, maintaining the fundamental policies of FY 2015, continue to further enhance dissemination of information communication and improve the quality of information. In particular, promoting more effective and efficient operations while focusing on support for regional enterprises and SMEs is priority.

Masanori Karatsu [Senior Managing Corporate Executive Officer, Mitsubishi Chemical Holdings Corporation]



#### Topic 4

#### Release of "JIPS Guidance for Risk Assessment of Mixtures"

In response to the strong requests from members regarding guidance on risk assessment of mixtures, risk assessment methods based on the internationally used standards (GHS) was developed and released in October 2015. GPS/JIPS seminar on risk assessment of mixtures was held in February 2016 to promote the guidance.



#### Topic 5

#### Establishment of a new information sharing committee in Europe



Minister Omote giving a lecture

The Japan Chemical Companies Council in Europe (JCCE) was dissolved in July 2015 as it was determined to have accomplished its initial goal. In November 2015, the committee for sharing information on European Chemical Regulations (with 26 member companies) was newly established to provide direct support to local companies while maintaining compliance with the competition law. The committee held its first meeting in February 2016, inviting Minister Omote of the Mission of Japan to the European Union.

#### Topic 6

#### The introductory courses of the Chemical Risk Forum in Osaka and Chiba

JCIA organized introductory courses of the Chemical Risk Forum to provide basic knowledge on chemicals management to those who had just started working in this field in the private sector. The program was held in two locations: in Osaka City (June 2015) and in Ichihara City, Chiba (February 2016).



### Topic

#### Promotion of GPS in ASEAN countries

In FY 2015, the final session of planned GPS workshop was organized in the Philippines and Thailand. This workshop had been running since 2009. A new network called the ASEAN GPS Leadership Meeting consisting of local chemical industry associations was established to maintain and update knowledge on GPS at each association. Its first meeting was held in January 2016



#### Topic

#### **ASEAN Regulatory Cooperation project**

Alongside the development of the global regulatory cooperation framework, a new project was launched regarding ASEAN regulatory cooperation. The core leading members of this project are from JCIA, American Chemistry Council, and Singapore Chemical Industry Council. A workshop for the industry was held in January 2016 in Thailand. A number of participants from chemical industry associations in ASEAN countries reported that it was very helpful. We are planning to have a next workshop, which will invite government officials.



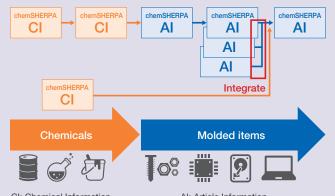
# Chem**SHERPA**

Society today demands that chemical substances be properly managed throughout their life cycles. In order to achieve this, it is essential to share information across supply chains regarding hazardous chemicals that are present in products. In connection with this, it is very important to communicate the information accurately and efficiently regarding chemical substances in products.

In Japan, with support from the Ministry of Economy, Trade and Industry, the electrotechnical and chemical industries have been collaboratively working to develop chemSHERPA, an information transfer scheme for use within supply chains on chemicals in products. Tool was officially released in October 2015.

We hope a great number of companies will make use of this scheme in near future.

#### Information transfer with chemSHERPA



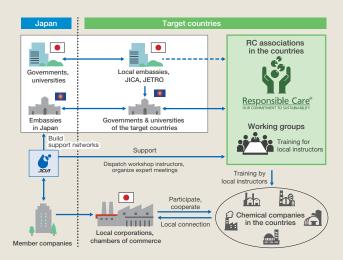
CI: Chemical Information

Al: Article Information

# JCIA's cross-functional initiatives in international support RCIP (Responsible Care Integrated Program)

Since 2013, the JCIA has launched capacity building activities (educational support and infrastructure development) for local chemical industry associations and companies (including Japanese companies) in Asia, particularly in the ASEAN region. In late 2015, this activity was named the "Responsible Care Integrated Program" (RCIP), representing the framework of collaborative support through RC activities, in order to better respond to changes in the global situation and to enhance the transparency of the activities. The RCIP will address the needs of member companies as a JCIA cross-functional initiative among RC, Environment and Safety, Chemicals Management, and International Affairs Departments. Also, while following the new capacity building strategy promoted by the International Council of Chemical Associations (ICCA), it will provide better fit programs according to the needs and situation in each country.

In FY 2015, workshops were held in the Philippines, Thailand, Vietnam, Indonesia, and Malaysia to train local trainers. Moreover, in order to help members understand the value of this activity, we visited the Japanese headquarters of major member companies that have business in ASEAN countries, introducing this activity as well as requesting



active participation and cooperation of their local companies. Information exchange was done with local chemical industry associations, government agencies, Japanese government agencies, and Japanese companies in order to disseminate this activity. The detailed activity reports of RCIP are available on the website of each committee.



Visit to a local fertilizer plant (Vietnam)



GPS workshop and its instructors (Thailand)



Equipment for safety experience training (Indonesia)

#### Innovative features at local workshops

In preparation for workshops in local communities, we added Indonesian and Vietnamese subtitles to the JCIA's DVD for industrial safety education so that it could be used in safety education for local workers. In Vietnam, the local association (VRCC) translated the English textbook, which we had provided, into Vietnamese, effectively establishing the program in local communities. We also introduce and demonstrate chemicals management tools, such as JCIA BIGDr (a web portal to support risk assessment) and AJCSD (the ASEAN-Japan Chemical Safety Database), in each country to promote them.





### **Activity Report: Technical Affairs Committee**

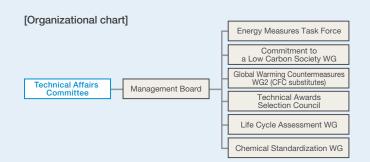
[Technical Affairs Department]

Overview of the activities

As part of the initiatives to halt global warming and use energy more efficiently, we participated in the Keidanren's Commitment to a Low Carbon Society and reported the activities of the chemical industry in FY 2014.

We provided members with information regarding discussions on and formulation of the Nationally Determined Contributions (NDCs) for COP21 in a timely manner. We also solicited the chemical industry for contributions to greenhouse gas (GHG) reduction.

Moreover, we gathered information on standardization, intellectual property, and trade secret protection and provided it to members



#### **Focus**

# COP21\* and the chemical industry's initiatives to reduce greenhouse gas emissions

#### [COP21]

COP21 was held at the end of 2015 to formulate a new international framework that would succeed the Kyoto Protocol after 2020 to halt global warming. The Paris Agreement was adopted at COP21.

The biggest feature of the Paris Agreement is that it requires all parties, including both developed and developing countries, to bring together their "Nationally Determined Contributions" (NDCs), report their progress, and submit to review afterward. This scheme is called "pledge and review."

Ongoing negotiation will be required in order for all the countries including the United States and China, to stay in this initiative and realize a genuine, fair and effective framework.

\* COP21: the 21st United Nations Framework Convention on Climate Change

#### [In Japan]

The government draft of Japan's NDCs for the target year FY 2030 was formulated in May 2015.

The ambitious yet feasible target is a 26.0% GHG reduction compared to FY 2013 (25.4% reduction compared to FY 2005), based on a bottom-up calculation with concrete policies, measures and individual technologies adequately taken into consideration.

Moreover, the Cabinet approved the Plan for Global Warming Countermeasures, the first comprehensive plan in Japan regarding

global warming countermeasures, including long-term goals (in May 2016). This plan was developed to promote efforts between the adoption of the Paris Agreement and the next COP.

In addition to the mid-term goals for FY 2030, the plan specifies an 80% reduction as the long-term goal for 2050 and the direction for its strategic measures.

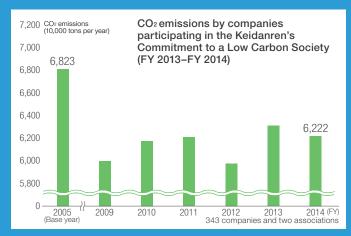
The biggest keyword to achieve the long-term goal is "innovation."

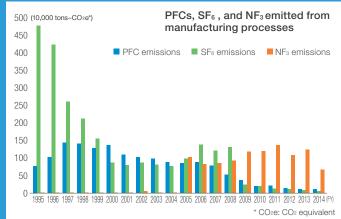
#### [In the chemical industry]

Toward 2020, the JCIA has participated in the Keidanren's Commitment to a Low Carbon Society with member companies and has promoted activities to reduce CO<sub>2</sub> emissions and to halt global warming, mainly through the following four pillars:

- (1) Reduce CO<sub>2</sub> emissions from domestic operations
- (2) Reduce CO<sub>2</sub> emissions throughout Japan with contributions of chemical products
- (3) Reduce CO<sub>2</sub> emissions overseas through Japanese chemical products and technologies
- (4) Reduce CO<sub>2</sub> emissions in the long term through innovative technologies

We also participated in the second phase of the Keidanren's Commitment to a Low Carbon Society and set a CO<sub>2</sub> emission reduction target for the chemical industry for FY 2030. This target plays a significant role in the formulation of Japan's NDCs.





#### Chemical industry becoming a solutions provider to solve global warming problems

The global community is facing urgent problems related to global warming. At COP21, Japan presented its NDCs to the world, with the target of a 26% GHG reduction compared to FY 2013 by FY 2030.

As for the long-term goal, we strive for even more significant reduction.

In order to achieve this goal, innovations such as energy-saving products and technologies is essential. The chemical industry in Japan will provide means to solve this global agenda through its technological strengths.

Hideki Matsuo, Former Committee Chairman [Managing Executive Officer, Mitsui Chemicals]

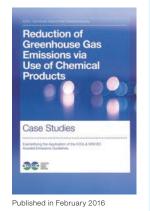
# Topic Reduction of PFCs, SF<sub>6</sub> and NF<sub>3</sub> emissions from manufacturing processes

Perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>), the alternatives to CFCs, have 10,000 times the warming potential of CO<sub>2</sub>; that is, the effect of the same volume of gas is 10,000 times larger than for CO<sub>2</sub>. We have significantly reduced emissions of these substances from manufacturing processes. In addition, we have also started initiatives to reduce emissions of nitrogen trifluoride (NF<sub>3</sub>) from manufacturing processes.

# Topic 2

## Dissemination and promotion of cLCA (carbon Life Cycle Analysis) 1

The International Council of Chemical Associations (ICCA) put together a report on nine cases across the globe with three aims: (1) to solicit contributions of chemical products to the reduction of GHG emissions and to raise awareness among stakeholders, (2) to introduce how to use the global guidelines and to promote their use in the chemical industry, and (3) to promote the life cycle approach. From Japan, we provided three cases of companies and associations actively engaging in the LCA WG.



# Dissemination and promotion of cLCA (carbon Life Cycle Analysis) 2

In October 2013, the ICCA and the Chemicals Sector of the World Business Council for Sustainable Development (WBCSD) jointly published global guidelines titled, "Addressing the Avoided Emissions Challenge." At the 4th JACI/GSC Symposium and the 7th International Conference on Green and Sustainable Chemistry (GSC-7) in Tokyo (July 6 to 8, 2015), we presented a poster that summarized nine cases in Japan that had been reported based

on calculation in accordance with these guidelines.





# Activities regarding standardization, intellectual property, and trade secret protection

Standardization of the market system (social system), which covers a wide range of fields and industries, is becoming more important. In response, we organized two lectures regarding the trends in standardization of the social system. We also provided the latest information on standardization strategy and the trade secrets.

#### Awards

#### The 48th Annual JCIA Technology Awards

JCIA Technology Awards commend companies that have contributed to the progress of the chemical industry and the economy through the development and industrialization of outstanding chemical technologies. The JCIA awards the Grand Prize, Special Technology Prize, and Environmental Technology Prize for selected excellent achievements.

| Awards                         | Members                           | Awarded themes  |
|--------------------------------|-----------------------------------|---|
| Grand Prize                    | Mitsubishi Gas Chemical Co., Inc. | Development of special polycarbonate resin with high refractive index and low birefringence                         |
| Special Technology Prize       | FUJIFILM Corporation              | Development of thin double-sided sensor films for touch panels using photographic technology                        |
|                                | Mitsui Chemicals, Inc.            | Development of the world's first "practical nonwoven fabrics with excellent flexibility and sustainable elasticity" |
| Environmental Technology Prize | N/A                               |   |



Members of Mitsubishi Gas Chemical Co., Inc., the winner of the Grand Prize (May 2016)

## Voice of the New Committee Chairman Initiatives by the chemical industry

Takayasu Ide is newly appointed as a chairman of the Technical Affairs Committee. We will strive to promote the Commitment to a Low Carbon Society and to raise social awareness of the contributions made by the chemical industry to halt global warming. We will also work together to address the shared challenges of the chemical industry.





### **Activity Report: Labor Committee**

[Labor Department]



The committee conducts various seminars and working group activities, including a seminar for training personnel and labor affairs staff. To address labor-related policies, laws and regulations, the committee collaborates with the Keidanren and other industry organizations to offer opinions. Furthermore, the committee works to maintain good relations with labor unions through the chemical industry labor and management talks.

#### [Organizational chart]

**Labor Committee** 

Management Board

#### **Focus**

#### Dispatching a team to research labor conditions in chemical industries overseas

From September 6 to 11, 2015, the 27th research team was dispatched to Myanmar and Thailand to study labor conditions in the local chemical industries, with seven member companies participating in the program. The research team mainly studied industrial policies, labor conditions, and industrial human resource development in both countries under the theme, "The current state of labor conditions and high-level human resource development in the Greater Mekong Subregion." In Myanmar, where the number of foreign firms is increasing dramatically, the team visited the Thilawa Special Economic Zone, where Japanese capital has been invested



hilawa Special Economic Zone

to see the progress of construction work there. Executives of the Union of Myanmar Federation of Chambers of Commerce and Industry also gave presentations on education and the labor force in the country. In Thailand, the team

visited the Thai-Nichi Institute of Technology and learned that the institute produces a number of graduates who work for Japanese companies, based on its educational policy "to study Japanese ways of manufacturing." This study tour was the first to take place in seven years, since 2008. We will continue to organize activities to address needs of member companies.



At the Thai-Nichi Institute of Technology

#### Message

#### Promoting support for member companies in human resource development

In FY 2015, we dispatched a research team to Myanmar and Thailand for the first time in seven years (since 2008) to study labor conditions in chemical industries overseas. We also launched working group activities under the theme, "Future human resource strategies in chemical companies." In FY 2016, we will continue to promote support for member companies in human resource development by compiling the results of the working group activities in the form of recommendations for the chemical industry and organizing a new training program to develop production site leaders at chemical plants.



Soichiro Hashizume, Committee Chairman [Lead Executive Officer, Asahi Kasei Corporation]

#### Topic

#### Working group activities on key issues

A new working group was established in October 2015 with the theme, "Future human resource strategies in chemical companies." The group will discuss the directions of and measures within human resource strategies that the chemical companies should take from a long-term perspective, and it will compile the results in the form of recommendations for the chemical industry.



## Training program to develop production site leaders at chemical plants

In FY 2016, we will launch a training program for production site leaders at chemical plants. The aim of the program is to develop leadership and technical skills. We hope many people will take this opportunity to learn about process safety and disaster prevention, occupational health and safety, and risk assessment at chemical plants as well as build a network with other production site leaders.

# Fostering Program of Human Resources in Chemistry

The fostering program of human resources in chemistry was established in October 2010 based on a proposal by the Chemical Vision Study Group, which was set up by the Ministry of Economy, Trade and Industry in 2009. The purpose of this program is to develop young personnel that will contribute to the strengthening of the global competitiveness of Japan's chemical industry and industry promotion. In the program, we express the needs for human resources with doctoral degrees required by the chemical industry, and support doctoral courses that can implement an advanced curriculum responding to the needs and its students. A council for the program to foster human resources in chemistry, consisting of 38 JCIA member companies that endorse its aims, extends particular support to doctoral students in chemistry by holding networking events for them to connect with the member companies, assisting them with job hunting activities, and offering scholarships.

The chemical industry is ahead of others in launching a human resource development program to support doctoral courses and their students. We will further enhance this program to support more graduate programs and students.

# Program Selecting majors that will receive support

In FY 2015, we conducted the sixth screening to select which courses of study would be given support. In addition to the 25 majors that we have provided aid to thus far, the committee decided to provide support to the Department of Material Chemistry at the Graduate School of Engineering, Kyoto University. (Currently there are 26 majors at 15 graduate schools that are receiving support.)

Examples of outstanding activities carried out under each major can be found on the JCIA website.

#### **Program**

#### Industry-academia exchange meeting

As a collaborative event at the 5th CSJ Chemistry Festa, hosted by the Chemical Society of Japan (CSJ), we held an exchange meeting between industry and academia 2015 on October 13 at Tower Hall Funabori.

The program included a keynote lecture on "Ideal human resource development for young talent" by Dr. Kohei Tamao, a science advisor at RIKEN, research presentations by 13 students who received support under our program, and presentations on activities by four young researchers who completed doctoral degrees and took jobs at the member companies. The program attracted almost 100 people, including



students as well as representatives of universities and chemical companies, providing fantastic networking opportunities.

#### Fostering Program of Human Resources in Chemistry

Common vision of the high-level human resources required by the chemical industry

Symposium

Support chemical industry education at universities

Lectures on chemical industry/career education

Majors that will receive support

Student-company exchange meeting/ research presentations

Chemistry

Chemistry

Chemistry

Chemical personnel network

Support through information exchange with students who received support and completed their majors

#### Required personnel ▶▶▶

- Well-versed, specialized knowledge in a designated field and comprehensive basic scholastic ability
- Possesses management capabilities, including being skilled in identifying issues, building hypotheses for solutions, and execution
- Superior leadership and communication capabilities
- Global awareness

# Program Student-company exchange meeting

In February 2016, we held the student-company exchange meetings in Tokyo and Osaka for doctoral students who received support under our program. The events aimed



to provide information to help these students gain an accurate understanding of the chemical industry and related companies and design their career path.

The meeting in Tokyo attracted 29 member companies and 63 students while the Osaka event was attended by 23 companies and 28 students. This program is gradually establishing a presence as a unique event that provides career support to doctoral students in chemistry.

#### Program



#### **Scholarships**

For doctoral courses with particularly outstanding activities in terms of human resource development, we grant scholarships to students recommended by each course. A scholarship of 200,000 yen per month for a period of three years is granted to each student. In FY 2015, 35 students from 13 different majors at 10 graduate schools were granted scholarships.

#### Program

Chemical industry education

The Chemical Industry Education Working Group was established in March 2015 with the aim of supporting chemical industry education at universities. The group has discussed the planning and implementation of lectures on the chemical industry and is currently working on preparations to start the lectures in FY 2017.

### Activity Report: Economy and Tax System Committee

[Department of Business/Economic Information]



The government is easing up on various regulations, revising the tax system, and addressing laws and ordinances to achieve a brisk economic cycle for the development of Japan's economy. Amid this environment, with the aims of dealing with changes and ensuring the further growth of the chemical industry, we collect and share information related to the economy and tax systems and make policy recommendations and requests. In particular, we are cooperating with other industries to strengthen our activities to promote revisions to the tax system.

#### [Organizational chart]

Tax Administration Subcommittee

Economy and Tax System Committee

Economic Strategy Subcommittee

Security Trade Control Investigative Subcommittee

#### **Focus**

# FY 2016 activities to bring about revisions to the tax system

As the new three arrows of economic policy are presented and the growthoriented tax reform is under way, we put together the chemical industry's requests on the tax reform and lobbied regulatory authorities. We also issued joint requests along with other industry organizations. While the effective corporate tax rate will continue to be reduced two years in a row, the trend in securing alternative funding remains. We will need to continue our efforts to substantially enhance the competitiveness of companies.



#### [Key request in FY 2015]

- Cut the effective corporate tax rate
- Radical review of climate change taxes
- Maintain and enhance tax programs to promote capital investment
- Expand tax programs to promote R&D
- Exemption on the main rules of gasoline tax and petroleum and coal tax for raw material used in manufacturing petrochemical products

#### Message

# Initiatives to improve the business environment for the chemical industry and to contribute to its growth

As we enter the second stage of the Abenomics growth strategies, reforms are taking place in various fields, not only in economic policies but also in the ways people work, IoT, and regional revitalization. Meanwhile, commercial terms with other countries are also changing, including international taxation and the TPP agreement. In this changing environment, we strive to further improve business conditions and contribute to the further development of the chemical industry, mainly in relation to basic conditions such as taxation and relaxation of regulations, by understanding and communicating the latest updates on the chemical industry, and sometimes collaborating across the industry.

Masumi Fukuda, Former Committee Chairman [Director & Senior Managing Executive Officer, Daicel Corporation]



#### Topic

#### Briefing on security trade control

The committee collaborates with the relevant department at the Ministry of Economy, Trade and Industry to hold briefings on the importance of security trade control and key points in building a voluntary export control system. The program focuses on basic and fundamental matters and is actively used by companies engaging in export business. In FY 2015, the program was provided in Tokyo (November 2015) and Osaka (December 2015).



#### **Voice of the New Committee Chairman**

#### Striving for stronger competitiveness and the development of the chemical industry

As business management becomes harder and harder due to the uncertain external environment, it is becoming more important than ever to put together and communicate information on the business environment surrounding the chemical industry and on required economic policies. Of particular importance is equal footing in the international business environment; we will strive to ensure this essential condition.

Hiroyuki Ninomiya [Executive Officer in charge of Finance and Accounting Division, DIC Corporation]



### **Activity Report: Public Relations Committee**

[Public Relations Department]

Overview of the activities

The Public Relations Committee is responsible for PR activities aimed at enhancing the profile of the chemical industry and raising awareness, particularly among younger people, on the importance of chemistry. The committee actively shares with the public details of initiatives carried out by Japan's chemical industry and the JCIA to protect the environment, maintain safety and health, and develop human resources. The committee also conducts various other activities to raise young people's interest in chemistry and promote Chemistry Day throughout society.

#### [Organizational chart]

**Public Relations Committee** 

Chemistry Day Promotion WG

#### **Focus**

# Fostering an interest in chemistry in young people

Exploring chemistry through engaging experiments and demonstrations and learning how and why some of the world's marvels work is one of the most important roles of JCIA.

In FY 2015, JCIA and other organizations, including academic societies, co-organized two major Kids' chemistry experiment demonstration shows and a chemistry Kids' Lab, which encourages children to discover the dynamic world of science and its wonders.



All these events proved to be a great success, with the children seen to be enjoying and showing enthusiasm for and interest in the experiments.

The Chemistry Grand Prix, which is organized annually and

| Date                | Event   | No. of participating companies/ organizations | Location | No. of participants     |
|---------------------|---|---|----------|-------------------------|
| Six times<br>a year | Children's science experiment class                       | JCIA Public Relations<br>Department           | Tokyo    | Approx. 400<br>in total |
| Jun.                | Children's science experiment class in Sapporo            | JCIA Public Relations<br>Department           | Sapporo  | 120                     |
| Aug.                | Summer vacation chemical-<br>experiment show for children | 15 companies<br>4 organizations               | Tokyo    | Approx.<br>6,700        |
| Oct.                | Chemistry Day chemical-<br>experiment show for children   | 9 companies<br>7 schools and<br>organizations | Osaka    | Approx. 4,300           |
| March<br>2016       | Children's chemical experiment class in Fukuoka           | 4 companies                                   | Fukuoka  | Approx. 1,150           |

operated under the support of JCIA, attracted a record-high attendance o over 3,500 junior and senior high school students from all over Japan who were keen to compete on their knowledge of chemistry.

Among them, four students were chosen to represent Japan at the International Chemistry Olympiad.

This year, the Japan Team competed against 292 students from 75 countries and won two gold medals and two silver medals at the 47th International Chemistry Olympiad in Azerbaijan.

#### Message

#### Shaping Ideas for the Fun of Chemistry

In FY 2015, the Public Relations Committee raised its activities to a new level by intensively promoting Chemistry Day (October 23) and enhancing the scale and quality of science/chemistry experiment classes demonstrating strong and broad appeal. With the aim of raising public awareness of Chemistry Day, we also started new activities based on new ideas gained from the Chemistry Day Promotion Working Group, which consists mainly of young PR personnel from member companies. We will continue to give shape to ideas for conducting a wide range of activities that make chemistry more accessible to the public.

Masaru Amano, Committee Chairman

[Representative Director & Senior Managing Corporate Officer, Showa Denko K.K.]



#### Topic

#### Introducing Japan's chemical industry and JCIA activities

Each year, "Chemical Industry of Japan in Graphs," a booklet targeted at the public that explains Japan's chemical industry in an easy-to-understand manner using figures and graphs is published, as is an annual report on the JCIA's activities. The JCIA online PR email magazine is also issued for members once a month.









Topic

Promotion of Chemistry Day



In FY 2015, the Chemistry Day Promotion Working Group created a display banner for the JCIA website, giveaway promotional items (clear file holders, wet wipes), and other tools to promote Chemistry Day and used these tools in cooperation with member companies and organizations.

Topic 3

DVD teaching aid for teachers

The DVD teaching aid, "Plastics and Our Life," developed for junior high school science teachers is rated highly and utilized not just by junior high school teachers but also by senior high school teachers and even university academics.

### **Activity Report: International Activities Committee**

[International Affairs Department]

Overview of the activities

The International Activities Committee is responsible for addressing international issues, with its duties including identifying and tracking commerce and trade issues, disseminating information, and strengthening relationships with overseas chemistry-related organizations.

More specifically, the committee: works to call on the authorities to reflect the intentions of Japan's chemical industry in decision-making on the rules of origin of chemicals, anti-dumping rules, and other issues; shares information with member companies; reinforces relationships with chemical industry societies in China, South Korea, and other countries through a chemical industrial policy dialogue and other occasions; and participates in the operation of the International Council of Chemical Associations (ICCA).

#### [Organizational chart]

International Activities Committee

Management Board

#### Message

### Collecting information and offering opinions on global commerce and trade issues

In FY 2015, we represented Japan's chemical industry at a Japan-EU secter-to-secter meeting and on other occasions, and proposed a revision to the anti-dumping scheme promoted by the government. In FY 2016, since we are expecting the Trans-Pacific Partnership (TPP) to be ratified and the Economic Partnership Agreement (EPA) to be signed in the near future, we will keep ourselves updated on developments and offer our views to prevent adverse impacts on the Japanese chemical industry. We will also deepen our partnership with the China Petroleum and Chemical Industry Federation (CPCIF) as well as the ICCA to ensure the mutually beneficial development of the industry.

Toshinori Yamamoto, Former Committee Chairman [Representative Director, President, Tosoh Corporation]



#### Topic

#### Sixth JCIA-KOCIC Annual Meeting

The sixth regular meeting between Japan and South Korean associations was held in Busan, South Korea in December 2015. The meeting was hosted by the Korea Chemical Industry Council (KOCIC) and attended by 15 participants from the Korean side, including the Secretary General of the KOCIC and representatives of the Ministry of Environment and other government agencies and KOCIC member companies, as well as by seven delegates from JCIA. The two sides reported on how they each implement chemicals management, Responsible Care, and process safety and address issues of energy and climate change, and then exchanged questions.



### Topic

### First Japan-China Chemical Industry Conference

JCIA and the Japan Petrochemical Industry Association jointly organized the first Japan-China Chemical Industry Conference in Tokyo in October 2015 in order to meet their Chinese counterpart, the China Petroleum and Chemical Industry Federation (CPCIF). Headed by Vice Chairman and Secretary-General Zhao Jungui, the CPCIF's delegation of 29 representatives proved keen to engage in active discussions with the Japanese side. In the plenary session, the two sides reported the current status of their home country's chemical

industry. The Chinese representatives also explained, among other topics, the outline of their 13th five-year plan, the impact of the shale gas revolution and declining oil prices on the Chinese chemical industry, and the supply-demand situation regarding chemicals in the country, and answered questions from the Japanese attendees. In the breakout session, the participants exchanged opinions regarding automotive weight reduction technologies and each country's chemical regulations.





# Voice of the New Committee Chairman Leading the JCIA's international activities

We will gather, analyze and share information with members regarding the development of legislation necessary for the ratification of the TPP, negotiations for EPAs and FTAs that are expected to be conducted globally, trends regarding trade friction problems and geopolitical risks, and other issues. We will also represent Japan's chemical industry in expressing our opinions to relevant authorities and organizations in Japan and abroad. In addition, we will participate in the operation and organization of conferences run by the ICCA, bilateral meetings, and other events and proactively deal with various issues.

Kenji Ueki [Managing Executive Officer, Mitsui Chemicals, Inc.]



### **JCIA's International Initiatives**

### Activities as part of the International Council of Chemical Associations (ICCA)

#### Participating in ICCA activities and organizing a Chemical Policy & Health Leadership Group meeting

ICCA Board meetings were held in Colorado Springs, the United States in June 2015 and in Brussels, Belgium in October the same year to discuss common issues facing the chemical industry across the globe.

The major agenda items were: (1) promotion of cooperation across the value chain and sharing of information regarding global regulatory cooperation; (2) promotion of the signing of the revised version of the Responsible Care Global Charter by CEOs of chemical companies around the world; (3) dissemination of carbon Life Cycle Analysis (cLCA) guidelines; and (4) promotion of Responsible Care activities in China, India and Africa.

In March 2016, an ICCA Chemical Policy & Health Leadership Group meeting was held in Tokyo. About 30 participants from Japan, the United States, Europe and South Korea met to discuss how capacity building in chemicals management should be conducted in developing countries, how global regulatory cooperation should be enhanced, and how ICCA and the United Nations Environment Programme (UNEP) can cooperate with each other. For the discussion on how information on chemicals should be communicated throughout the value chain, the meeting took advantage of its Tokyo setting to invite representatives from Japan's automotive industry and electrical and electronics industry to make presentations on their practices and actively exchange opinions with participants.



Mr. Shigenori Otsuka, then Chair of the Energy & Climate Change Leadership Group, reporting at the ICCA Board meeting in October 2015



ICCA Chemical Policy & Health Leadership Group meeting in March 2016



Co-chairs of the Chemical Policy & Health Leadership Group and Dr. Fumiaki Shono, JCIA Executive Director (second from right)



ICCA Capacity Building Task Force, reporting at the meeting

#### ICCA (International Council of Chemical Associations)

This organization was established by the chemical industry associations of the U.S., Canada, Europe, and Japan in 1989. The number of member countries and regions is approximately 50 including the chemical industry associations of North and South America, Europe, Asia, Oceania, and the Gulf countries and also including observer countries such as China, Russia, and India. ICCA thus contributes to the development of sustainable society through its engagement in voluntary and other activities of which "Responsible Care" is the most representative one.

The organization is comprised of four main leadership groups which implement and promote strategic initiatives toward the solution of challenging issues in the respective fields, and engage in communication, notably offering opinions to policy decision makers. For more information, refer to ICCA website.

http://www.icca-chem.org

#### ICCA Organizational Chart

CEO Group

Strategy Group)

**Energy and Climate Change** Leader: Osamu Ishitobi (Sumitomo Chemical) Chair: Bunro Shiozawa (Sumitomo Chemical) Vice-chair: Russel Mills (Dow Chemical)

#### Chemical Policy and Health

Leader: Andrew N.Liveris (Dow Chemical) Co-chair (Europe): Martin Kayser (BASF) Co-chair (US): Michael E.Witt (Dow Chemical)

#### Responsible Care®

Leader: Jean-Pierre Clamadieu (Solvay) Chair: Hans-Jürgen Korte (Solvay) Vice-chair: Sohei Morita (Mitsui Chemicals)

#### Communications

Chair: Anne Womack Kolton (ACC)

Trade Policy Network

### **Activity Report: Security Information Management Subcommittee**

[General Affairs Department]



The Security Information Management Subcommittee is responsible for comprehensively addressing issues related to the information security of JCIA members through collaboration with the Information-technology Promotion Agency (IPA). It conducts a wide range of activities, including keeping members updated on information security, providing education, and promoting interaction and networking among members. It also organizes seminars for all JCIA member companies, including those not represented on the subcommittee, to raise the level of information security across Japan's entire chemical industry.

#### [Organizational chart]

Security Information
Management Subcommittee

Security information liaison meeting

#### **Focus**

Raising the level of information security across Japan's entire chemical industry



Information technologies such as those surrounding big data and the Internet of Things (IoT) are advancing rapidly to quickly become an essential part of life. In workplaces, the computerization of production, control, sales and all other operations are significantly changing the way we work

On the other hand, the advance of information technologies has also brought about security risks that previously did not exist.

To mitigate such security risks, in addition to addressing problems concerning information network systems of JCIA members, the Security Information Management Subcommittee offers various education programs and activities that are aligned with actual information security needs. One example is a control system security exercise developed specifically for the chemical industry and offered in partnership with the Control System Security Center (CSSC). Other activities include security seminars provided by the Information-technology Promotion Agency (IPA) or invited security experts. Targeted at all JCIA members, these seminars pertain to computers and networks used in daily operations. The subcommittee also engages in awareness raising activities for member companies on the topic of security.

#### Message

#### Combating the increasing threat of cyber attack

While digitization is called for and information technologies are becoming a leading force in business innovation, we are also increasingly facing the new threat of cyber attack. In 2015, the Security Information Management Subcommittee took its first step in combating cyber attacks by grasping the current status and sharing information on what measures should be taken among member companies. I hope to see every company working together and mobilizing their wisdom to counter the increasing threat of cyber attacks.



Ichiro Terashima, Former Subcommittee Chairman

# Topic Information security seminar for associations

On July 28, 2015, an information security seminar titled "Information Security Seminar Management Course—Introduction" targeted mainly at association members of the JCIA was held in Tokyo. An invited expert from the IPA presented the seminar.

It is often the case that these associations do not have dedicated information system personnel. Nonetheless, they are too powerless to resist trend toward greater reliance on information technology. The JCIA intends to support them in the development of a more secure environment.

# Topic Information security seminar for executives

On October 14, 2015, we organized an information security seminar for executives in Osaka in partnership with the Kansai Chemical Industry Association. The seminar helped



the participants deepen their understanding of the importance of information security.

#### **Voice of the New Committee Chairman**

### We must end the cat-and-mouse game with hackers through information sharing and a swift response

FY 2015 turned out to be a very difficult year on the security front for Japan's chemical industry as we experienced targeted and ransomware attacks. It is most likely that we will face cyber attacks in an even wider variety of forms again in FY 2016. The Security Information Management Subcommittee will respond without fail to cyber attacks in a much swifter manner than ever before.

Kazuya Hara [Manager, Information System Group, Administration Department, Sekisui Chemical Co., Ltd.]



### Member Services That the Entire Association Engages in

### **JCIA Symposium 2016**

On the same day as the JCIA's annual General Assembly in May 2016, the first part of the JCIA Symposium 2016 was held at the Palace Hotel Tokyo. Under the title "The Future of the Chemical Industry," special lectures were given by Mr. Tadashi Mogi, Director of the Chemicals Division at the Ministry of Economy, Trade and Industry, and Professor Kenichiro Itami from Nagoya University. These were followed by a panel discussion featuring the two speakers and moderated by Mr. Yasutoki Ishiguro from Deloitte Tohmatsu Consulting.

In June, lectures by JCIA award winners (three "Technology," six "Responsible Care," and five "Annual Safety" category winners) and a panel discussion on safety were held at the lino Hall & Conference Center. Despite the bad weather, this daylong event attracted a large number of people from the early morning.



First part of the JCIA Symposium held at the Palace Hotel Tokyo

#### **JCIA** seminars

JCIA has been holding JCIA seminars with the goal of providing members with more beneficial information since the second half of FY 2013. In FY 2015, six seminars, as listed below, on topics such as "safety," "chemicals



management," "global warming," and "trade secrets and information security" were offered, attracting nearly 1,000 attendees in total.

Seminars will be held again in FY 2016 to discuss timely issues. The schedule is available on the JCIA seminars website (http://www.jcia-seminars.org/).

| No. 1 | Recent trends in chemical laws and regulations in East Asia as seen by experts invited from different countries |
|-------|---|
| No. 2 | Discussion of issues related to global warming  |
| No. 3 | Direction of functional materials industry policy—digitization and the chemical industry                        |
| No. 4 | Recent trends in the protection of trade secrets and information security measures                              |
| No. 5 | Recent trends in overseas chemicals management regulations  |
| No. 6 | Safety initiatives from a management perspective  |

### **JCIA** explanatory meetings

JCIA explanatory meetings have been held since FY 2012 to explain the JCIA's activities to both members and nonmembers. In FY 2015, the meetings took place in Tokyo and Osaka, with the Director General and Executive Directors making presentations in person to a total of 90 participants. A reception following each meeting provided an opportunity for participants to network and for us to hear their requests

firsthand. The meetings helped introduce the wide range of our activities to many attendees. We will continue holding them, among other activities, with the intention of making both members and non-members alike more familiar with the JCIA.

### Greeting from New Director General

JCIA, by gathering, analyzing, and generalizing knowledge gained from committee activities carried out in cooperation with corporate members, has been engaged in the following two key activities. One is sharing information among members as their source of new measures that can be utilized for their corporate management. Another is offering opinions to relevant administrative agencies based on the knowledge gained and advocating for them to be reflected in governmental policy making.

Under Mr. Osamu Ishitobi, our newly appointed Chairman, the Secretariat officers and staff will work closely together to contribute to JCIA's three focus initiatives, namely, efforts to secure safety, efforts for chemicals management, and contribution to realizing a sustainable society, for the development of the chemical industry and the creation of a sustainable society.

With regard to efforts to secure safety, we will continue to share with the chemical industry the best practices and other knowledge accumulated so far to contribute to ensuring the safety and security of society. Based on the belief that efforts to secure safety generate new value, we will examine new approaches, such as the possibility of utilizing Internet of Things (IoT) technologies for plant safety management, in cooperation with administrative agencies and other organizations to realize a more advanced level of safety activities.

As for efforts for chemicals management, we offer opinions to relevant authorities for evaluation conducted under the Act



Hiroshi Watanabe Director General

on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., for which a revision is currently under way. We will also help chemicals management spread throughout the supply chain.

Regarding making a contribution to realizing a sustainable society, we will, among other efforts, continue implementing Responsible Care activities in Asia in cooperation with the International Council of Chemical Associations (ICCA).

We at the Secretariat will seek out and analyze the views of member companies to an even greater extent and respond even more effectively in order to gain their deeper understanding of and active participation in JCIA activities.

### Member visits

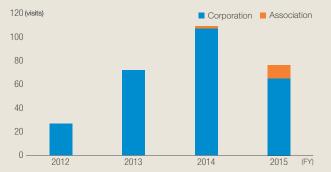
JCIA changed its status to a general incorporated association on April 1, 2011 as a result of the government reform of the public-interest corporation system. As there was a concern on the part of JCIA that this change may have created distance with our members, we decided, after much discussion, to visit members in person and listen to opinions and requests directly. Member visits started in 2012.

To begin with, representatives of the General Affairs Department and Department of Business/Economic Information visited the members of the Policy Coordinating Committee. When we told the members that we would like to visit them, some of them were at first alarmed, suspecting that there must be some problem. In the end, however, the meetings provided us with good opportunities to hear their views on JCIA and frank opinions on other matters. Since then, we have expanded the target of our visits each year and began to visit association members. Moreover, we developed a uniform set of questions that allows us to detect and monitor changes and trends over time. It has also been decided to send representatives of other departments along on the visits to provide even more detailed information as part of our efforts to improve the quality of the meetings.

In 2015, we visited 76 corporate and association members including 11 associations between September and December. Opinions collected during the visits will be used in planning future activities.

- Expectations toward JCIA
- Activities concerning process safety and disaster prevention,

#### Number of member visits made



chemicals management, and development of human resources in chemistry

- (From association members) collaboration with JCIA; providing guest speakers for seminars
- ◆ Areas needing improvement
- The JCIA's activities are mainly for large companies and smaller companies are feeling it difficult to take part in activities.
- The seminars are too technical. Something for beginners is needed

Feedback received during the visits is shared within the JCIA on such occasions as the annual debriefing meeting, where the results of the visit meetings are reported to all personnel and used to inform activity planning for the next fiscal year and further improve member services. We will continue to make member visits, so please share your frank opinions with us when we visit your company/association.

# My expectations toward JCIA initiatives to contribute to creating a sustainable society

2015-present President, Shufuren

Yoshiko Arita President, Japanese Federation of Consumer Organizations: SHUFUREN Director, Environmental Section of SHUFUREN After working at a government office and others, Ms. Yoshiko Arita moved into the nonprofit sector, where she tackled environmental and other issues. She was invited to attend the workshop for chemical risk management organized by the Organization for Economic Co-operation and Development (OECD) in Berlin in 2000 and reported risk communication activities conducted by co-operatives in Japan. She has served many times as a facilitator for communication between corporations and local civil stakeholders concerning such issues as genetic recombination technologies and chemical substances. She has also been a member of the Japan Association for Environmental Law and Policy and served on many government councils.



| 1986–1988    | Trustee, Fco-op   |
|--------------|---|
| 1994-2000    | Trustee, Co-op Kanagawa                                     |
| 1996-2000    | Trustee, Uco-op   |
| 2000-2005    | General Secretary, Shodanren (National Liaison Committee of |
|              | Consumer Organizations)                                     |
| 2005-present | Director, Environmental Section of Shufuren                 |

#### Government councils on which Ms. Arita is serving in FY 2016:

Ministry of Economy, Trade and Industry: Chemical Policy Subcommittee of the Industrial Structure Council; Council of the Japanese Industrial Standards Committee Ministry of Agriculture, Forestry and Fisheries: Agricultural Materials Council Ministry of Health, Labour and Welfare: Pharmaceutical Affairs and Food Sanitation Council

Consumers use cosmetics, laundry detergents and cleaning products. They purchase pesticides and insecticides for their gardens. They eat foods containing artificial flavors, sweeteners, and seasonings. They do all these things in pursuit of a healthy, comfortable life, without being aware that these products are all chemicals. Thanks mostly to the tremendous efforts made by companies, consumers believe that these products are safe and reliable as long as they are used properly.

When I stated, at a 1990 symposium organized by the Society for Risk Analysis Japan, that consumers were demanding zero risk, a young researcher employed by a chemical company who was attending the symposium told me that she was shocked to hear my statement. As a matter of fact, I myself had already stopped believing in zero risk at the time, but I made the statement on behalf of the general consumers. She felt it is difficult to convey to consumers that zero risk is not possible. However, since then, understanding of the zero risk's impossibility has gradually spread, thanks largely to efforts made since the 1990s by consumer organizations, the government, companies, and, particularly, JCIA and other associations.

In dialogue meetings with consumers and consumer organizations conducted as part of Responsible Care activities, in which I have been participating since 1998, JCIA has been reporting to consumers the latest trends in chemicals management in Europe and other overseas regions as well as making tremendous efforts to communicate how chemicals are managed in Japan. As I have come to know how painstakingly JCIA has been sharing information and working

to protect the environment, my trust in Japan's chemical industry has grown.

A few years ago, I was very shocked to hear that a JCIA's representative member company had caused an accident at their plant. Although I had believed in the safety of the Japanese chemical industry, I had several times expressed my concern at chemical conferences as to whether safety could really be assured following the retirement of baby-boomer engineers and subsequent outsourcing of facility management and maintenance operations. However, when I saw a JCIA representative explaining the reasons for the accident at a dialogue meeting held afterward, I could see his sincere regret from his attitude and way of speaking and thought that the information provided during the meeting was trustworthy. In the meeting I also learned that deteriorated facilities caused the accident. Rather than reinforcing my distrust in the company due to its failure to invest in new facilities, this information brought home to me the harsh reality that Japanese chemical companies were facing.

In his message at the beginning of this JCIA Annual Report, Chairman Osamu Ishitobi emphasizes the JCIA's role in contributing to the creation of a sustainable society. I hope that, under the basic policy that says "securing safety is the chemical industry's highest priority issue," JCIA will succeed in gaining broader understanding and recognition of the chemical industry's voluntary Responsible Care activities aimed at protecting the environment, safety, and health, and that such efforts will lead to the realization of a sustainable society. I highly expect the JCIA's future activity.

#### Editorial policy

The "JCIA Annual Report" is published to inform a wide range of stakeholders about the JCIA's activities. As in the previous issue, in this 2016 edition we reported on our activities by committee in an effort to make them easier to understand. The "Focus" section introduces key themes and the "Topic" section covers our various activities. For this edition, we added a new section that enumerates and introduces, at a glance, major activities conducted by the JCIA Secretariat during FY 2015. In addition, JCIA Annual Report Reference Materials, which provides various data and introduce initiatives related to JCIA activities, is published in the autumn of each year.

#### Targeted organizations

Targeted organizations are the Japan Chemical Industry Association and member companies and organizations.

#### Languages

This report is issued in two languages, Japanese and English.

#### Reporting period April 2015–March 2016

April 2015–March 2016 (Some information from outside this period is included.)

#### Publication date

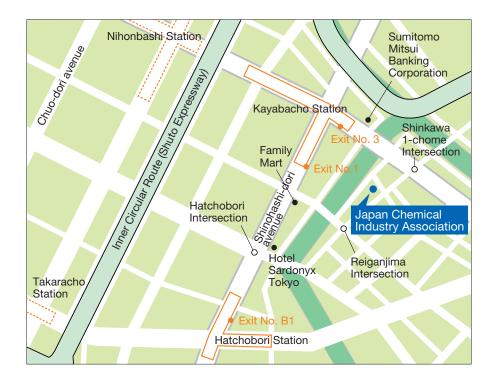
September 2016

### Scheduled date of next publication

September 2017

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Approximately 3 minutes on foot

Kayabacho Station (Tokyo Metro Hibiya Line)
Walk straight ahead from Exit No. 1,
turn left at the intersection with the Family Mart store,
and then turn left at the Reiganjima Intersection.
Approximately 3 minutes on foot

Hatchobori Station (JR Keiyo Line)
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Nikka-chan: JCIA's official character





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JCIA Annual Report 2016



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