

JCIA

ANNUAL REPORT

2019



Japan Chemical Industry Association

Wide-Ranging Measures to Promote Further Development of the Chemical Industry



Although Japan's economy was affected by major natural disasters in 2018, it maintained a gradual recovery trend due to strong demand. However, the global situation deteriorated as trade friction between the US and China worsened and various geopolitical risks increased, and it was a year when the chemical industry needed to carefully monitor changes in the business environment.

Against this backdrop, the Japan Chemical Industry Association (JCIA) shifted to a new organizational structure in May 2018 and engaged in activities addressing three key points: enhancing the safety of operations and products, contributing to new value creation and the building of a sustainable society, and reinforcing public communication.



Strengthening Operational and Product Safety

Operational security and disaster prevention are the most crucial issues for the chemical industry. JCIA continued and enhanced initiatives including research on accident case studies and consideration of revisions of security and accident prevention guidelines, while adopting the forward-looking perspective that efforts to ensure safety generate new value.

To improve product safety, we kept a close watch on the latest domestic and international regulatory trends, shared necessary information with our members as required, and gathered members' views for submission to government and other relevant bodies. In order to promote the Japan Initiative of Product Stewardship (JIPS), a voluntary chemical industry program that aims to minimize chemical product risk, we encouraged use of the JCIA BIGDr risk assessment support portal and conducted seminars to provide more information on this tool.



Helping to Create New Value and Build Sustainable Societies

To spur new value creation, through the JCIA Technology Awards we encouraged the development of innovative and outstanding technologies and products. To build a sound base for generating new value, JCIA also submitted opinions on trade issues and international harmonization of chemical product management regulations in the aim of creating a level playing field in the international business environment.

With a view to building a sustainable society, in September 2018 JCIA co-launched the Japan Initiative for Marine Environment (JaIME) to address the problem of ocean plastic waste, which is drawing worldwide attention. One of the policies guiding JaIME activities is contributing to problem-solving by amassing scientific knowledge, and in May 2019 JaIME published the results of “LCA (Life Cycle Assessment) on the reduction effect of environmental load by energy recovery of plastic packaging waste”.

As well as the ocean plastic waste issue, global warming is a matter of serious concern around the world, and since fiscal 2013 JCIA has set goals within the framework of Keidanren’s Commitment to a Low Carbon Society and strived to reduce CO₂ emissions. Since recent results achieved goals ahead of the original schedule, we started revising the targets and set new goals in March 2019. The new goals include absolute quantitative targets in addition to previous goals set on a “business as usual” (BAU) comparison basis, and we aim to achieve both the goals based on BAU comparison and absolute quantitative targets. These goals will contribute to achievement of Japan’s absolute quantitative reduction targets under the Paris Agreement, and are a major shift in the sense of clearly demonstrating the chemical industry’s stance on global warming.

In fiscal 2018 we established a new SDGs Working Group, and as well as supporting JCIA members companies’ efforts to achieve SDGs, we promoted broader stakeholder understanding of chemical industry contributions to SDGs.



Enhancing Public Communications

JCIA regards public communication as an important part of Responsible Care (RC) activities conducted by the chemical industry. In fiscal 2018 we held local RC dialogue forums in seven regions. We actively used external experts as facilitators, which resulted in lively exchanges of opinion with local residents.

To enhance the presence of the chemical industry and accurately communicate its tremendous importance and potential, we published our Annual Report and proactively publicized chemical industry initiatives and achievements through our Dream Chemistry 21 campaign activities.

Guided by the three points outlined above, this year JCIA will again take a wide range of measures and make every effort to promote the further development of the chemical industry. Thank you for your continued support.

Japan Chemical Industry Association

Chairman

淡輪 敏

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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 : Shifted to an incorporated association 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 the production, distribution and consumption of materials relating to the chemical industry. JCIA also focuses on the research and study of various issues relating to the technology, labor, environment and chemical safety of the industry, and on planning appropriate measures and actions for the economic prosperity of Japan and the betterment of the national standard of living.

Activities

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

Fiscal Year

From April 1 to March 31 of the following year

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 Board 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.



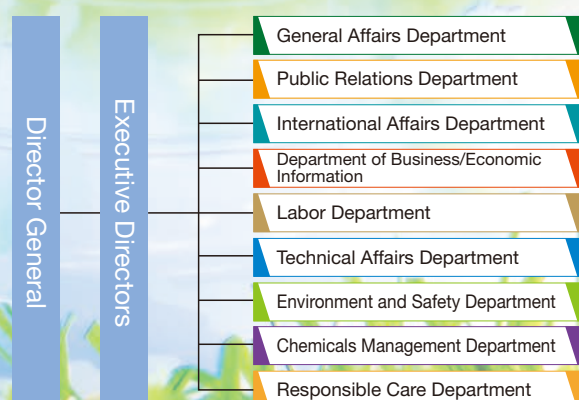
Board members of the Japan Chemical Industry Association (as of July 1, 2019)

Chairman (Representative Director)	Tsutomu Tannowa	Mitsui Chemicals, Inc. President & CEO
Vice Chairman (Representative Director)	Kohei Morikawa	Showa Denko K.K. Representative Director, President
Vice Chairman (Representative Director)	Hideki Kobori	Asahi Kasei Corp. President & Representative Director, Presidential Executive Officer
Vice Chairman (Representative Director)	Masanobu Suzuki	Nippon Kayaku Co., Ltd. Advisor
Vice Chairman (Representative Director)	Teiji Koge	Sekisui Chemical Co., Ltd. President & Representative Director
Director	Masato Izumihara	Ube Industries, Ltd. President & Representative Director
Director	Kazuhiko Ishimura	AGC Inc. Director Chairman
Director	Michitaka Sawada	Kao Corporation Representative Director, President & CEO
Director	Mamoru Kadokura	Kaneka Corporation Representative Director, President
Director	Keiichi Iwata	Sumitomo Chemical Company, Limited Representative Director and President
Director	Misao Fudaba	Daicel Corporation Chairman of board of directors
Director	Shinsuke Yoshitaka	Denka Company Limited Chairman, Board of Directors
Director	Toshinori Yamamoto	TOSOH CORPORATION Representative Director, President
Director	Hiroshi Yokota	Tokuyama Corporation Representative Director, President and Executive Officer
Director	Akiharu Kobayashi	NOF CORPORATION Executive Chairman
Director	Yujiro Goto	NIPPON SHOKUBAI CO., LTD. Member of the Board, President
Director	Kenji Sukeno	FUJIFILM Holdings Corporation President and Chief Operating Officer and Representative Director
Director	Masashi Fujii	MITSUBISHI GAS CHEMICAL COMPANY, INC. Representative Director, President
Director	Hitoshi Ochi	Mitsubishi Chemical Holdings Corporation. Representative Corporate Executive Officer, President and Chief Executive Officer
Director General	Hiroshi Watanabe	The Japan Chemical Industry Association
Executive Director	Akihiro Ichimura	The Japan Chemical Industry Association
Executive Director	Shigeki Nagamatsu	The Japan Chemical Industry Association
Executive Director	Hideaki Makino	The Japan Chemical Industry Association
Executive Director	Shinoi Sakata	The Japan Chemical Industry Association
Auditors	Yoshiyuki Nakanishi	DIC Corporation Chairman of the Board of Directors
Auditors	Mikishi Takamura	TOAGOSEI CO., LTD. President and Representative Director

Committees



Organizational Chart of JCIA Secretariat



SUSTAINABILITY

The concept of “sustainable development” has been widely recognized in society since the Rio Summit United Nations Conference held in 1992, and in 2015, 17 SDGs were adopted by the United Nations as concrete milestones for 2030; many companies in the industrial world are addressing them.

The chemical industry has provided materials with various functions for all industries to support industry-wide innovation, and the created products have contributed to improvement of life in every field of our livelihoods.

On the other hand, we feel responsible for problems of pollution and environmental contamination caused by manufacturing in the past; in response, we are tackling the environmental and safety problems sincerely, and we have ensured environment, health, and safety in every step from producing chemical products to consuming and disposing of them, have disclosed the contents to all stakeholders including communities and consumers, and have conducted Responsible Care activity for communication as a core activity to fulfill corporate social responsibility (CSR) since 1995.

In addition, in order to control the burden on the global environment, we are utilizing renewable energy and promoting energy savings, resource savings, and establishment of carbon cycle to play an important role to realize a sustainable society as a solution provider to create a new world.

Chemical Industry’s VISION on Global Warming Countermeasure

The chemical industry is a unique industrial sector, which consumes fossil resources as an energy source in the production process, and at the same time, uses fossil resources as raw materials, and manufactured products contribute to reduction in greenhouse gas (GHG) emissions at the stage of use. As the chemical industry has created energy-efficient products in various fields, it can be said that it is in a position of a solution provider against global warming. However, as we use fossil resources as a fuel and a raw material on a global scale, reduction of fossil resources consumption is required as a long-term GHG reduction strategy, and we are strongly expected to carry out specific activity toward the reduction. To meet the expectation, the Japan Chemical Industry Association consulted on measures to realize the establishment of a sustainable society by providing solutions for global warming issues while looking ahead to a long-term reduction target in the Paris Agreement, and wrote up them as “Chemical Industry’s VISION on Global Warming Countermeasures”, which it announced in May, 2017.

In this VISION, as a state of mid-21st century society, chemical products will still be used and become important products to support a lot of industries and living, while for the carbon source, activities toward a carbon cycle society will be progressing and the consumption of fossil resources as an energy source will be largely reduced. The pillars to realize this situation are (i) Establishment of carbon-circulation, (ii) Process and energy innovation, (iii) Selection of environmentally focused business model and establishment of social infrastructure to allow the business model, and various technologies and measures to solve are listed. (Refer to the following URL.)

For this realization, through collective efforts of the chemical industry, it is necessary to tackle program formulation toward technology development based on collaboration between government, industry, and academia, and to establish a cooperation system beyond industry to make a social innovation in the whole value chains, and we have already made proposals in various situations for this realization.

In June, 2019, Japan’s “Long-term Strategy under the Paris Agreement” was announced at the G20 summit. We will continuously strive to realize a sustainable and rich society based on this VISION.

https://www.nikkakyo.org/whatsnew_en/7620



Inauguration of Japan Initiative of Marine Environment (JaIME)

In order to deliberate, plan, conduct, and promote measures as Japan's chemical industry including the plastic industry in view of the spirit of "Responsible Care" regarding the marine plastic problem which is being recognized as a political and global environmental issue, 22 companies centering on the Directors of the JCIA inaugurated "Japan Initiative of Marine Environment" (hereinafter called JaIME) on September 7, 2018.

Currently, 47 companies and organizations as members and three organizations as supporting members (as of March 31, 2019) have joined JaIME where the five organizations, the Japan Chemical Industry Association, the Japan Plastics Industry Federation, the Plastic Waste Management Institute, the Japan Petrochemical Industry Association, and the Vinyl Environmental Council, manage the joint secretariat. The bylaws specify that the Chairman of JaIME shall be the Chairman of the Japan Chemical Industry Association, and JaIME held up (i) collect and analyze information and promote information sharing, (ii) take appropriate and timely actions to the domestic and global movements, (iii) engage in outreach to Asia, (iv) accumulate scientific knowledge and evidences as projects to tackle, and has started the activities.

Validity verification of energy recovery

In order to scientifically verify the validity of energy recovery as activity of the accumulation of scientific knowledge, we evaluated the environmental load (energy resources consumption, CO₂ emissions) reduction effect for container and packaging plastic recycling methods (material recycle, chemical recycle) and energy recovery methods by the Life Cycle Assessment (LCA) method. We set up a working group in the Plastic Waste Management

Institute, and assigned academic experts as Chairpersons and Vice-Chairperson of the working group to conduct assessment and evaluation scientifically and objectively. We completed the final report* in March, 2019, and will transmit the achievement both domestically and internationally in the future.

*<https://www.nikkakyo.org/news-e3-page>



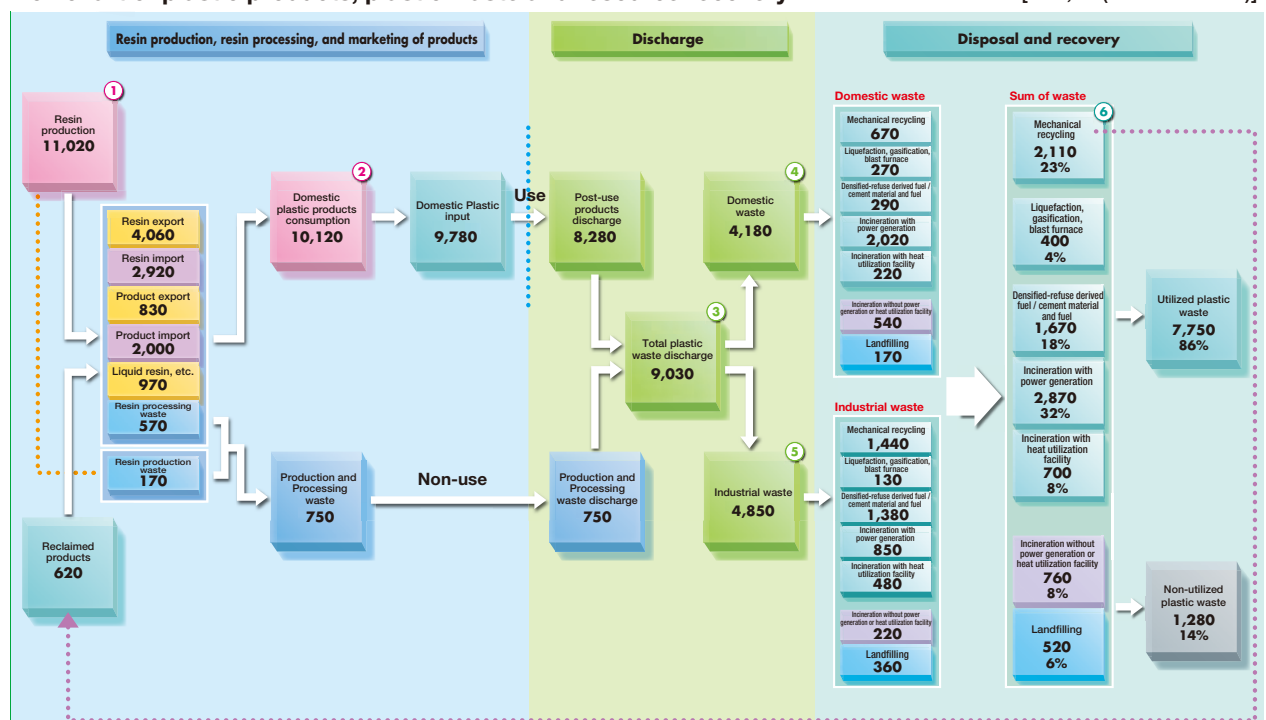
Planning of training seminar for approaching Asia

In Japan, the Plastic Waste Management Institute aggregates and creates the flowchart of plastic products, plastic waste and resource recovery (below) on an annual basis by establishing a wide cooperative relationship with concerned parties. In order to grasp the current status of

plastic waste as an activity for approaching Asia, we are planning a training seminar to introduce knowledge and know-how about the method of creating the flowchart to ASEAN countries.

Flowchart of plastic products, plastic waste and resource recovery

[Unit; kt (thousand tons)]



Plastic Waste Management Institute / PWMI Newsletter No.48 「Plastic Products, Plastic Waste and Resource Recovery (2017)」

<https://www.pwmi.or.jp/ei/index.htm>



SUSTAINABILITY

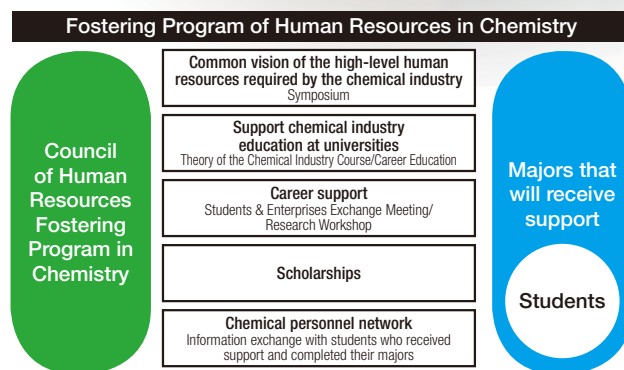
Although the chemical industry plays an important role in the development of society, it is very important to develop human resources to sustain advancement continuously.

JCIA strives to promote the understanding of the chemical industry from society through educational campaigns for “chemistry” to children who will bear the next generation, a course on the theory of the chemical industry in universities, and support activities for postgraduate courses, and at the same time, JCIA is carrying out activities to secure human resources who will enter the field of chemistry.

We also provide opportunities for developing human resources that support the chemical industry such as process safety and prevention of labor accidents and research institutes, and management of chemical substances, through seminars and training workshops for member companies to contribute to realizing a sustainable society.

Fostering Program of Human Resources in Chemistry (university, postgraduate course)

The Japan Chemical Industry Association is supporting postgraduate courses responding to the needs of human resources sought by the chemical industry as a “Fostering Program of Human Resources in Chemistry” to develop the young human resources that will form a foundation of the chemical industry. In fiscal 2018, we supported 20 majors, and offered scholarships to 28 doctoral students. We introduced cases of doctoral students who found employment (in October), and held student-company exchange meetings (at Tokyo and Osaka in January) to support job hunting for doctoral students. In addition, in order to increase the students’ interest in the chemical industry, “Course on the Theory of the Chemical Industry” by lectures from member companies is held at Kobe University, Osaka City University, and Tohoku University.



Dream Chemistry 21 Project

JCIA would like children to be more interested in chemistry by showing them the magnificence and fun of chemistry through a campaign project held by the “Dream Chemistry 21” committee as a member of an affiliated body. We hold “Chemical-Experiment Show for Children” and “Children’s Science Experiment Class,” which are experience-based events where experiment and manual arts are conducted for elementary school students, and also hold “Chemical Grand Prix” as a national convention to compete in chemical proficiency for junior high school and high school students as well as send students out to “International Chemistry Olympiad.”



Chemical Risk Forum

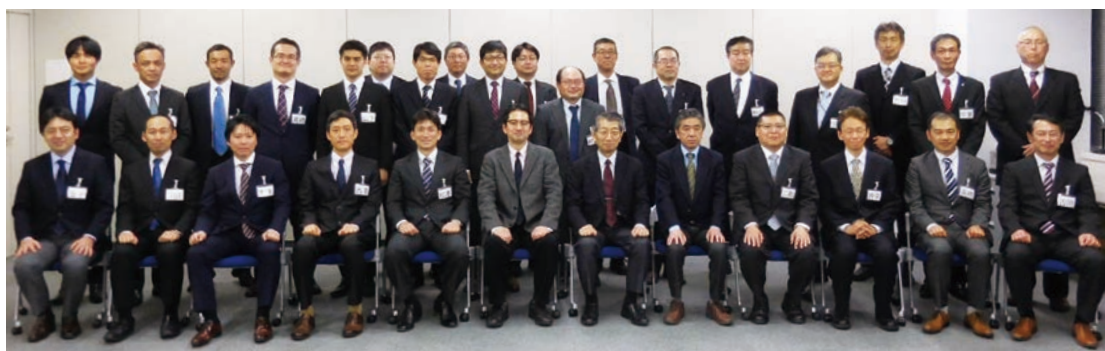
The Japan Chemical Industry Association has run “Chemical Risk Forum” as a training course for workers to conduct risk assessment of chemical substances since 2008. The training consists of lectures for learning the basics of risk assessment, tool education required for risk assessment, and the movement of laws and regulations in Japan and overseas, and 84 companies took part in it in fiscal 2018. In order to improve the convenience of attendance, we looked for participants through live streaming as well as for in-person attendance at forum venue, and streamed the forum online ten times in fiscal 2018. The live streaming was well received, and tens of participants have audited online the Internet every time, so this system has contributed to the improvement of members’ convenience. In addition, we held the Chemical Risk Forum (introduction part) for PR of next year’s seminar at Tokyo and distributed it on the web as well.



Industrial Safety Course

We started the Tokyo Industrial Safety Course in cooperation with the Petroleum Association of Japan and the Japan Petrochemical Industry Association for fostering leaders who will promote safety in each company of the petroleum and chemistry industry, and opened the fifth course in fiscal 2018, which graduated 29 students. A university professor (chief of the course), a section chief in charge of administration, and department managers and former managers from companies were invited as instructors, and we have created the course such that safety is discussed and leads to actual practice. In 2018, we invited Dr. Atsumi Miyake, professor, Yokohama National

University, as chief of the course, and asked him renovate the contents of the lectures and operate it to raise the level further. The number of the students who have completed the Industry Safety Course is over 150, so the expectation of the wide cooperation with the leaders carrying on the spirit of the Industry Safety Course will grow. In addition, we keep support the Yokkaichi Safety Course and the Okayama Safety Course, and expect that these activities will lead to the prevention of serious process safety incidents along with the enhancement of further security awareness and creation of safety culture.



Tokyo Industry Safety Course completion ceremony in 2018

Various lectures and seminars for human resources development of JCIA

Lecture or seminar	Purpose	Interval
Security Export Control seminar	Introductory education regarding the export of products and manufacturing technology based on the Foreign Exchange and Foreign Trade Control Law	Twice a year (Tokyo, Osaka)
Step-up training for the leaders of production worksites of chemical plants	Consider fostering and skill improvement for front-line supervisor of production worksites, process safety, industrial health and safety, and risk assessment.	Four times a year
Guideline, Issue of best practice collection	Improvement of safety activity by sharing of JCIA's tasks regarding process safety, and industrial health and safety	Irregular
Safety management lecture class on dangerous substances transportation	Education to the sector engaged in dangerous substance transportation and prevalence of the latest information	Twice a year (Tokyo, Osaka)
QSAR seminar	Trend of QSAR which predicts biological activities such as toxicities from chemical structures of chemicals	Twice a year
Chemical risk forum (* Live course is available.)	Education of workers of chemical substance management based on the risk. (A series of 10 educational seminars per year)	From May to February next year (Total of 10 times a year)
Chemical risk forum (introduction part) (* Live course is available.)	Free seminar to explain necessary knowledge regarding chemicals management for newly assigned chemicals management personnel for a half day	Once a year
International trade issue seminar	Explanation of anti-dumping system, rule of origin, report on Compliance by Major Trading Partners with Trade Agreement, EPA/FTA	Once or twice a year
Industrial safety course	Development of management layer and managers who can understand the future safety of the petroleum and chemistry industry, and develop specialists for safety with wider vision. (A series of 16 lectures per year)	From October to February next year (Total of 16 times a year)
Information security seminar	A seminar to introduce information related to IT security	Once or twice a year
HR and labor affairs staff development seminar	Development of the next-generation leaders of human resources and labor affairs. (A series of eight seminars, held biennially)	From May to February next year (Total of eight times every other year)
Promotional lecture on the importance of standardization	To understand and promote the importance of standardization through lectures of different themes each year	Once a year
Risk assessment seminar (use of BIGDr.Worker)	Acquisition of the risk assessment method including composites utilizing BIGDr.Worker	Once or twice a year
Risk communication training	Improvement of communication skills in the dialogue meeting for members of the RC Committee	Once a year

SUSTAINABILITY

JCIA is conducting various activities for development of the chemical industry such as human resource development for safe operation of chemical plants and is holding seminars to train workers of chemicals management. The activities are not limited in Japan, but we join ICCA on behalf of Japan's chemical industry and actively contribute to activities toward a sustainable society as a member of international society, such as human resource development for the advancement of the chemical industry mainly in the East Asia and Southeast Asian regions, participating in the program to show the know-how of international chemicals management, and participating in the Chemical Dialogue of APEC and AMEICC Working Group on Chemical Industry.

Activities of ICCA (International Council of Chemical Association)

ICCA was established by the chemical industry associations of the United States, Canada, Europe, and Japan in 1989. Currently, the chemical industry associations of North and South America, Europe, Asia, Oceania, and Middle East Gulf countries join as full members. The total number of member countries and regions is approximately 50, including Associate Members such as China and India and Observer Members such as Russia. The organization of ICCA comprises four main Leadership Groups which implement strategic efforts and engage in policy recommendation in each field. For more information, refer to the ICCA website. <https://www.icca-chem.org/>



Activities of the ICCA Energy and Climate Change LG (E&CC LG)

E&CC LG positively transmits the role and outcomes of the chemical industry as a Solution Provider for global energy problems and climate change issues and acts to be able to acquire the understanding of international society. In 2018, E&CC LG transmitted the "ICCA Statement on Climate Policy," and held an innovation workshop in Japan where opinions were exchanged with downstream industry, the government, research institutes, and NGOs involved with the contribution of innovative creation of the chemical industry for a low carbon society. E&CC LG member participated in the official side event hosted by the Ministry of Economy, Trade and Industry in COP24 as a panelist, which were the activities toward a sustainable society by responding to climate change.

Activities of ICCA Chemical Policy and Health LG (CP&H LG)

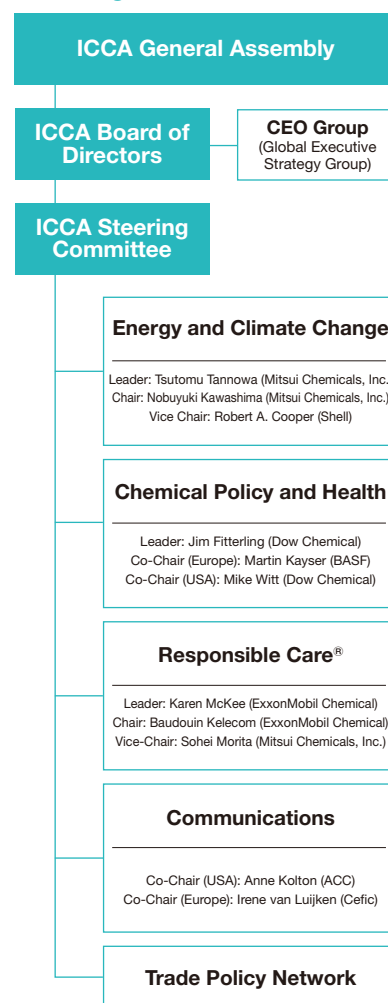
JCIA has participated in the CP&H LG meetings held twice a year and the relevant task force meetings, and offered opinions about the continuation of ICCA GPS Chemical Portal and introduced Japan's efforts against plastic problems. Regarding capacity building, JCIA participated in the instruction course held by the Vietnam RC committee in September, and gave a presentation about RC, security, handling of chemicals, and transportation safety. At the transportation safety WS held in the Philippines in November, JCIA gave a presentation about chemicals management and chemicals transportation.

Activities of ICCA Responsible Care LG (RCLG)

Regular RCLG Conference in autumn was held in Rotorua, New Zealand for three days from November 28, and the Association of Europe reported the status of RC maturity model development, and the Association of China reported the status of RC activity progress. From the afternoon of the second day, the joint conference with the CP&H LG was held to discuss the actions after SAICM2020 and measures against marine plastics.



ICCA Organization Chart



ICCA LRI International Workshop

The workshop was jointly held by the International Council of Chemical Associations, Health Canada, and the United States Environmental Protection Agency in Ottawa on June 20 and 21, 2018. About 120 participants discussed the New Approach Methods (NAMs) based on the risk including sharing of the latest development movement, utilization by self-management in the companies, and the possibility of use in the regulatory and administrative authorities. Two oral presentations were given from Japan to introduce Japan's activities.

Activities as a member of international society

APRO Conference

The main purpose of APRO where Japan acts as the chair is to hold the Asia Pacific RC Conference (APRCC) every two years to energize RC activities in the region. In FY 2018, the conference was held in Manila in July, with participation of 14 people from 11 countries. It was decided that the 16th APRCC to be held in Seoul, South Korea on November 7 and 8 in 2019 under the main theme of “The next challenge for Responsible Care.”



ASEAN Regulatory Cooperation Project

ASEAN Regulatory Cooperation Project targets countries participating in the ASEAN Economic Community (AEC), promotes activities focusing on chemicals management of risk base as a project under the influence of ICCA GRC, and has a goal of applying a “global policy of regulatory cooperation” of ICCA to improve regulations of chemicals in this region. This project is led by the association in Singapore, and JCIA as well as ACC participated as an organization member of the committee. The workshop of the ASEAN regulatory cooperation project (ARCP) was held in the Philippines in July and in Vietnam in September. Relevant government and companies from 10 ASEAN countries gathered to discuss the possible field of concrete consistency about two Virtual Working Groups (GHS and Chemical Inventory) toward the promotion of regulatory cooperation, and held a seminar regarding risk assessment.



JCIA Activity Report of United Nations Environment Assembly (UNEA)

UNEA is a decision-making body of the United Nations Environment Programme (UNEP) and an international conference held every two years. The representatives of each government such as Ministers of the Environment from 160 countries participated in the fourth General Assembly and representatives of the relevant international organizations and NGOs also participated. ICCA including JCIA committed UNEA4 to promote the voluntary efforts of the industry against marine debris, and develop and expand solutions including reuse, collection, and recycling of plastic.

JCIA Activity Report of APEC

APEC is a framework for economic cooperation by 21 economies in the Asia-Pacific region, and carries out activities such as liberalization of trade and investment, business facilitation, security of human beings, and economic and technical cooperation for sustainable growth and prosperity in Asia-Pacific region. JCIA participates in Chemical Dialogue, one of the subforums in the

Committee on Trade and Investment of APEC. The regulatory authority and representatives of the industry participate in the Chemical Dialogue, whose purpose is to find the solutions against the tasks faced by the chemical industry in the Asia-Pacific region. APEC expands and supports regulatory cooperation and mutual recognition in the region to promote trade, and strives to promote the understanding that the chemical industry provides innovative solutions for sustainable economic, environmental, and social development. In addition, in order to improve the stewardship and safe use of chemical products, it also functions as a meeting to promote effective cooperation between industry and the government. JCIA actively provided opinions and made a proposal also in Chemical Dialogue as a representative of the Japanese chemical industry.



Source: APEC website

JCIA Activity Report of AMEICC

AMEICC is a subordinate organization of AEM-METI that implements specific economic and industrial cooperation within the ASEAN region. JCIA actively participated in the activities of AMEICC, and in the Working Group on Chemical Industry (Laos) in July, in order to utilize AJCSD effectively, JCIA requested each country for support, and discussed about WS of each country regarding to future chemicals management and industrial safety to transmit request from the Japanese chemical industry's point of view.



Participation in OECD Meeting

JCIA participates in various meetings held in the Organization for Economic Co-operation and Development (the Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology, Working Party on Hazard Assessment, Working Party on Exposure Assessment, Working Party on Manufactured Nanomaterials, and Extended Advisory Group on Molecular Screening and Toxicogenomics) as a member of the Business at OECD (BIAC), the advisory committee of business and industry to the OECD, to collect useful information for members, transmit it to members, and express opinions from members.

Three JCIA Awards

The 43rd JCIA Safety Award

The process safety and the prevention of labor accidents are the most important issues facing JCIA Environment and Safety Committee. These awards are conferred on chemical plants that have achieved high-level safety records and are implementing excellent safety initiatives, which serve as models for the industry. Their achievements are publicized and discussed in the safety symposium so that these initiatives are shared and utilized by other member companies.

Award	Award Winner
JCIA Annual Safety Award Grand Prize	Showa Denko K.K., Oyama Plant
JCIA Annual Safety Award First Prize (Special: Small and medium-sized business establishments)	Asahi Kasei Metals LTD. Tomobe Plant
	Showa Fine Ceramics Co., Ltd.
	Mitsui Chemicals Tohcello, Inc., Anjo Works
JCIA Annual Safety Award First Prize (Special: Research institutes)	Mitsui Chemicals Agro, Inc., Agrochemicals Research Center (Yasu area)
	JNC Corporation, Yokohama Research Center



Showa Denko K.K. Oyama Plant Director, Kenji Goshona

Thank you very much for the Safety Award Grand Prize. We think that each employee's daily activities led to this prestigious award. Showa Denko aims at achieving no accident and no industrial injury, and based on the basic policy to set safety before everything, we are tackling various safety activities. The Oyama Plant implements "eradication of potential risk by designing inherently safe facilities," and advances ingenious activities to become action oriented safety activities in the "Making people with high safety awareness." This award encourages us to further enhance the activities more to maintain no industrial injury. Keep safe.

The 51st JCIA Technology Award

JCIA Technology Awards recognize companies that have contributed to the progress of the chemical industry and economic society through the development and industrialization of excellent chemical technologies. JCIA awards the Grand Prize, the Special Technology Prize, and the Environmental Technology Prize, and admires their excellent achievement.

In the 51st awards, there was no applicable achievement for the Environmental Technology Prize.

Award	Award Winner	Awarded Theme
Grand Prize	Kaneka Corporation	Research and development and industrialization of "Kane Ace MX"
Special Technology Prize	Kureha Corporation	Establishment of manufacturing technology for high-molecular weight polyglycolic acid and development of new market



Kaneka Corporation, Executive Officer, E&I Technology Solutions Vehicle, General Manager, Riichi Nishimura

It is a great honor for us to receive the Grand Prize for the JCIA Technology Award. With witnessing firsthand the increase in interest of global environment, the evolution of mobility, and dramatic technical innovation in the information-communication field, we are glad that Kane Ace MX receives a high evaluation in these fields. We will strive to contribute to the people's comfortable lives through providing resin modifiers for a wide range of applications such as structural adhesives for automobiles and aircrafts, composites, adhesives for blades of wind power generators, electronic materials, architecture, and civil engineering.

The 13th JCIA Responsible Care (RC) Award

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

Award	Award Winner	Awarded Theme
RC Grand Prix Award	Kao Corporation, SCM Division	The disaster prevention activity by introduction of process safety assessment technology
RC Jury's Special Award	Mitsubishi Gas Chemical Company, Inc. Manufacturing Section-1, Manufacturing Department-1, Niigata Plant	Prevention measures against external corrosion of plants
	Sumitomo Chemical Co., Ltd. Responsible Care Department, Energy & Climate Change	Our new challenge for the sustainable low-carbon society
RC Outstanding Award	JSR Corporation, Chiba Plant	Building activities of safety culture at JSR Chiba Plant
	Tokuyama Sekisui Co., Ltd.	Nature conservation activities in Tokuyama Sekisui Co., Ltd.
RC Award for Effort	Mitsubishi Chemical Corporation Ibaraki Plant, Environment and Safety department	Improvement for dangerous forecasting and settlement of basic operation
	Sumitomo Bakelite Co., Ltd. Shizuoka Plant, Biotope Committee	Efforts of community contribution activities by environmental conservation and utilization of biotope at Shizuoka plant
	Nissan Chemical Corporation, Toyama Plant	Environmental protection and climate change strategy in Toyama Plant of Nissan Chemical Corporation



Kao Corporation, SCM Division, Technology Development Center, Fundamental Engineering, Junya Hamamura

It is a great honor to receive the RC Grand Prix Award. We have collected and analyzed fire and explosion accidents inside and outside the company to prevent similar accidents before they occur. The evaluation of these disaster-prevention enhanced activities makes persons concerned who have been making a lot of efforts feel great encouraged. We will keep our efforts by continuing safe and stable operation to live up to this award, and publicize the information actively to contribute to the safety improvement of the whole chemical industry.

Toward SDGs in 2030

JCIA set up the SDGs Subcommittee that 35 companies join under the Policy Coordinating Committee at the beginning of FY 2018, and started to support the members' efforts toward SDGs achievement. In addition, the SDGs-Working Group, of which 19 companies are members, is advancing voluntary activities. In order to promote an understanding of the chemical industry, JCIA will open a website, release case examples of SDGs of member companies to the public, share information with chemical related parties and administrative authorities, and transmit information actively to stakeholders to contribute to the development of the chemical industry in Asia based on the activities of the SDGs Subcommittee.



1. About SDGs Subcommittee and Study session

SDGs Subcommittee advances activities of two types, liaison meetings and study sessions to share information. In the study session where member companies other than Subcommittee members can participate (see table on the right), we invite external intellectuals as instructors to share the social movement regarding SDGs and provide useful information for awareness and practice. The material for study session can be downloaded from the website* dedicated to SDGs.

●List of Study sessions in FY2018

Date	Contents	Speaker
July 6	Explanation of corporate manager investigation report regarding SDGs	Mitsubishi, Chief Executive Officer, PwC Sustainability LLC
September 7	Explanation of SDGs roadmap issued by WBCSD chemical sector	Nishi, Partner, ERM Japan, Ltd.
	Explanation of SDGs case examples issued by Japan Business Federation	Nagasawa, Deputy Director, Japan Business Federation
	Trip report of high-level political forum regarding sustainable development at United Nations	Imabayashi, Deputy Manager, Japan Science and Technology Agency
	Trip report of high-level political forum regarding sustainable development at United Nations	Takasaki, Manager, Sumitomo Chemical Co., Ltd.
December 7	About SDGs promotion toward regional revitalization	Endo, Counsellor, Cabinet Office, Government of Japan
	Contribution to food waste from the perspective of packaging material	Yabe, Deputy Director, Ministry of Agriculture, Forestry and Fisheries of Japan
March 8	Explanation of Environment Social Governance Guidance	Nakano, Deputy Director, Ministry of Economy, Trade and Industry

2. About SDGs-WG

In the SDGs-WG, many members continue the group discussion about "in-house pervasion" as a theme, which is a task to disseminate SDGs in-house. Based on the four sub-themes of "Employee education," "Information disclosure," "Advanced case examples," and "Reflection to management," they actively tackle activities such as the way of employee education, hearing of advanced companies, and questionnaire investigation about corporate behavior toward SDGs promotion to write up useful tools for in-house pervasion of member companies. The accomplishments of the WG will be compiled as a report in June, 2019 and utilized.



Group discussion in SDGs-WG

3. Open a website and release case examples

In December, 2018, we opened a website* dedicated to SDGs, started "The vision of the chemical industry toward sustainable development" determined in May, 2017, and released "Activity Report" of SDGs Subcommittee and SDGs contribution case examples of member companies as "SDGs case examples." "SDGs case examples," where 20 case examples will be released by the end of FY 2019, were created by interviewing persons in charge while focusing on a wide variety of members' products, services, and project activities such as

health, nursing care, medicine, social infrastructure, and contribution to food, energy resource, and environment problems, which are highly likely to contribute to SDGs and lead to business success.

* The English version of the website designated for SDGs is now under construction.

Activity Report: Responsible Care (RC)



MESSAGE

Continuous improvement and enhancement of public recognition of RC activities

Based on “contribution to the realization of a sustainable society,” we will work for continuous improvement and further enhancement of public recognition of RC activities, and develop positive and open activities toward improvement of the presence of the chemical industry. In Japan, we will proceed with better activities that reflect the opinions of members in response to the environmental change surrounding the chemical industry. In foreign countries, we will support RC activities of local business establishments of member companies, and particularly in Asia, we will strive to expand the base of RC activities by not only supporting each national association, but also encouraging Japanese subsidiaries to participate in RC activities.

Committee Chairman, **Shigeru Ueyama** [Managing Executive Officer, Kao Corporation]

FOCUS

Value Communication and Further Progress RC Activities

Risk Communication Trainings

In RC activities, we value communication activities with various stakeholders. As one of the activities, 15 domestic districts where plants of RC Committee members are concentrated regularly hold regional dialogue meetings where they communicate with residents in the plants’ neighborhoods. In the regional dialogue meetings, it is important to deepen mutual understanding by explaining the efforts of RC activities conducted by member companies to residents and listening to the residents’ questions and opinions. The RC Committee holds risk communication training to improve communication ability for a better mutual understanding. Annual training for two days is held in the Tokyo and the Osaka area alternately; in FY 2018 it was held in Osaka. In the training, participants learn the purpose of communication and its related skills first, and they discuss an assumed theme in a group and create an explanatory material that is intelligible to the residents. In the last phase of the training, they perform a simulated dialogue, and the instructor gives comments and advice about whether they gave intelligible explanations and proper responses to the opinions. By repeating these procedures the participants learn the communication skills, and they can utilize them at the actual regional dialogue.



Risk communication training provides an opportunity for member companies to develop human resources to deepen the mutual understanding between companies and residents and enhance the relationship of trust.

RC Member Relations Events and Study Sessions

The RC Committee holds the member relations events to share the best practices of various RC activities that each company is tackling, and also holds study sessions to introduce new perspectives, standards, and technologies into RC activities. In FY 2018, the member relations events was held in three areas, Osaka, Kita Kyushu, and Yokohama, and information exchange was conducted in the section meetings consisting of eight to ten members about the theme such as “environment preservation, process safety and disaster prevention, industrial health and safety, logistics safety, chemicals and products safety, and dialogue with society.” At the member relations events in Kita Kyushu and Yokohama, we observed “experience-based training facilities” each company owns as one of the best examples of practice sharing. At the study session, we visited the Maritime Disaster Prevention Center (MDPC) under the theme of “improvement of accidents and disaster response capability.” In the morning, we observed firefighting training using actual fire, and again learned “daily preparation is important” to prevent spread of damage when an accident or a disaster occurs. In the afternoon, we took a lecture about “international standard of a crisis and a disaster response method,” and learned about the aspect of the incident command system (ICS) and ISO 22320.

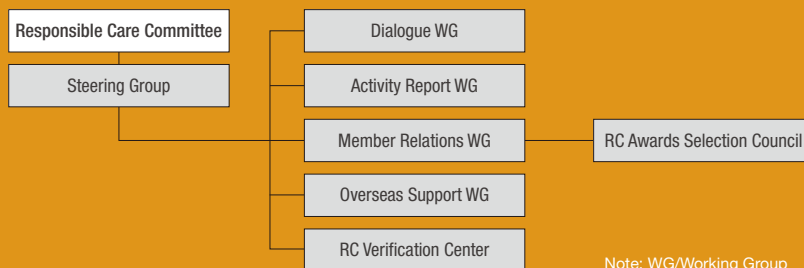
In order to advance the discussion and study in the member relations events and study sessions efficiently in a short time, we carry out preliminary learning and pre-questionnaire.



Firefighting training at MDPC

Activity Outline

The purposes of the RC Committee are supporting member's RC activities, raising society's trust in our members and the chemical industry, and contributing to the sustainable development of the chemical industry and society. To this end, the Committee focuses its efforts on supporting the continuation of RC activities and tackling the task of the activation and the expansion of the range of the activities.



TOPIC 1 RC Regional Dialogue

In FY 2018, RC regional dialogue meetings were held in seven areas, Yokkaichi, Okayama, Eastern Yamaguchi, Chiba, Hyogo, Kashima, and Aichi, with 70 to 190 participants, comprising residents living in the vicinity of chemical plants as well as local government staff, educators, and businesspeople from the area. Residents have a great interest in measures for earthquake and Tsunami, influence of the leakage of chemicals and its measures, and communication systems when these accidents happen, and raised many questions and related opinions.



TOPIC 2 RC Activity Report Meeting

We hold a free-for-all RC activity report meeting every year to let the public widely know the details of RC activities. In FY 2018, we changed the meeting style slightly, and in Tokyo, held the meeting along with RC Award lectures in June, and in Osaka, along with a member relations event in July, so that a lot of people participated. In addition, we invited Prof. Inaba of Kogakuin University as a lecturer to speak about "'Happiness equality principle' in LCA."



TOPIC 3 RC Consumer Dialogues

We hold a consumer dialogue meeting every year in order to deepen mutual understanding with representatives of consumer groups and build the relationship of trust. In FY 2018, the meetings were held at the plants of RC members in Shiga and Kanagawa, and we observed the RC activities at the plants and exchanged opinions about marine plastic problems and consulting examples regarding products from consumers.



TOPIC 4 Overseas Support Activities

1. Support of local subsidiaries of member companies

We held lecture presentation and workshops co-hosted with Japanese chambers of commerce in Thailand and Indonesia in FY2018 so as in the previous year. The activities included lecture presentation and workshops focusing on process & occupational safety and chemical management, lecture presentation from the Ministry of Economy, Trade and Industry and the local embassy, and reports of RC activities of local companies. We would like to extend an opportunity to introduce this overseas support activities in Malaysia as our next step.

2. Participation of AMEICC activities

As an activity of the AMEICC Working Group on Chemical Industry, which is based on a request from METI, there is an improvement initiative of occupational safety, process safety, and environmental preservation of the ASEAN chemical industry. We participated in the activity, and were in charge of planning, implementation, and evaluation of "Japan-ASEAN chemical industry core human resources training" for participants from eight countries of ASEAN. In addition, we held a supplemental lecture presentation in Laos and Cambodia.

TOPIC 5 RC Verification Activities

Each company of the chemical industry is engaged "Responsible Care (RC) Activity" to secure "environment, health, and safety" voluntarily and announces the results in the CSR report and/or the combined report to obtain society's understanding and trust in the company's chemical products and business activities. JCIA verifies these RC activities or the CSR/combined report to improve the quality of the activities, ensure the accuracy, and improve the reliability. These verification activities started in 2002, and through the end of FY 2018 a cumulative total of 218 companies have been evaluated.



Activity Report: Environment and Safety



MESSAGE

Securing safety is the top priority for the chemical industry

Based on the "Principles of JCIA regarding the Environment, Health and Safety" the Environment and Safety Committee has in-depth perspective of "Effort of securing safety creates new value," and is working on various tasks regarding "environment, health, and safety" in the chemical industry to establish the future activity basis for fulfilling social duties of companies. We will grasp the latest movement in Japan and overseas, communicate information to members, and respond appropriately through the reflection of the standpoint and opinions of the chemical industry toward administrative authorities and the development of voluntary activities to contribute to society.

Committee Chairman / **Minoru Suetsugu** [Lead Executive Officer and Chief of Headquarters of Manufacturing General Headquarters, Asahi Kasei Corporation]

FOCUS

Making Safety a Top Priority to Workers and Regional Residents

Effort of "Process safety "

"Process safety" is the most important task of JCIA along with "prevention of labor accidents." We deepen educational activities for the prevention of process safety incidents utilizing DVDs for education and the Safety and Accident Prevention Guideline based on "About the promotion of measures for the prevention of disasters in petrochemical complexes (request)" issued by the Ministry of Economy, Trade and Industry. In addition, we actively participate in the Public-Private Council for Safety Measures in the Manufacturing Industry, which strengthens the safety measures across the manufacturing industry, and work on the new prevention of process safety incidents through cooperation with other parties and associations and providing educational material to contribute to the realization of a sustainable society.

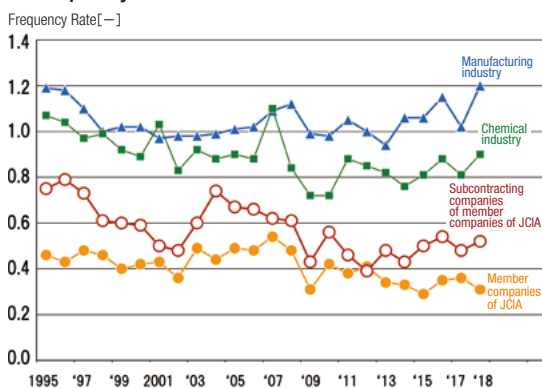
Effort of "Prevention of Labor Accidents "

Prevention of Labor Accidents of the second year of the 13th industrial accident prevention plan accounts for a large portion in review meetings and Public-Private Council for Safety Measures in the Manufacturing Industry among administrative authorities during recent years, and discussion and exchange of opinions are carried out energetically, with a focus on the reduction and prevention of "fall" accidents, which are a task, and "caught in/between" accidents, which happen mainly in the manufacturing industry. Specifically, activities such as technical standard review of work on scaffolds and development of a standard method of risk assessment are progressing. JCIA also participated in these activities positively, and offered opinions. In addition, JCIA writes up the results of frequency rate and severity rate, which indicate the status of accident prevention of member companies every year. Under the recognition that improving the results of safety index of member companies including subcontracting companies as a cooperative collective is a task of sustainable management as a company, we will improve the efficacy of activities.

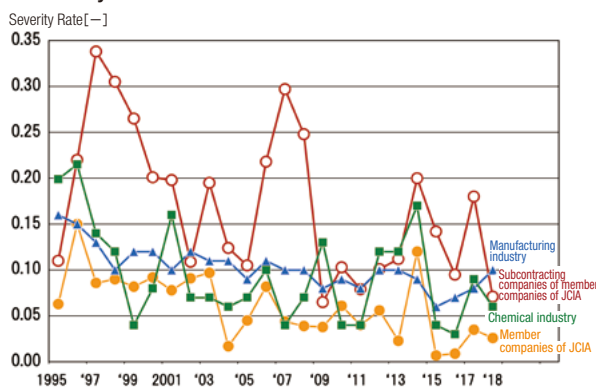
Effort of "Environmental Preservation"

We actively support and promote various activities toward environmental load reduction such as a reduction of environmental risk like chemical release and the promotion of effective use of waste for the environmental preservation in the chemical industry. As a voluntary activity regarding VOCs emissions reduction by the Ministry of Economy, Trade and Industry, JCIA uniquely sets the substances for investigation in addition to notified substances in the Pollutant Release and Transfer Register Law, and sums up emission amount and announces it publicly. In addition, according to the Voluntary Action Plan for Establishing a Sound Material-Cycle Society by the Japan Business Federation, we investigate and announce the status of effective use of resources of waste by member companies to promote the voluntary efforts of the chemical industry.

■ Frequency Rate

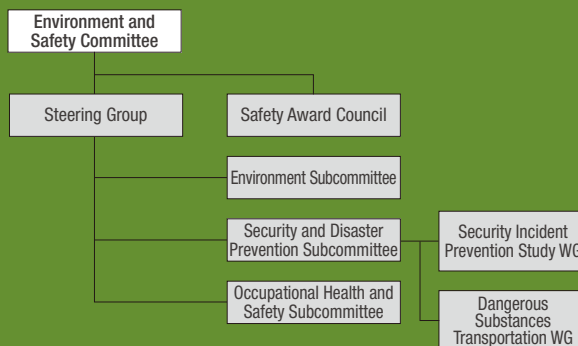


■ Severity Rate



Activity Outline

We grasp the latest movement in Japan and overseas for various tasks regarding “process safety, environment, occupational safety” in the chemical industry, and communicate the information to members. In the Working Group, we compile warning examples for recurrence prevention using accident cases that have occurred in the member companies. In addition, the Safety Award Council honors business establishments of member companies that have achieved excellent results for safety, and announces the activities that are the basis of improving the results to contribute to raising the level as a whole.



Note: WG/Working Group

TOPIC 1 Responses to Regulations for Water Quality, Air Pollution, and Soil Contamination

For study of tightening of regulations of the Ministry of the Environment (water, air, soil, etc.), we exchanged opinions with major industrial associations and members, and offered opinions of the chemical industry to administrative authorities.

[Major themes and results examined continuously]

Water quality: Whole Effluent Toxicity (WET) testing using living things

This testing was compiled as a voluntary non-binding effort (guidance).

Air Pollution: Measures against PM2.5 and photochemical oxidants

We do not use a numerical target but keep the current condition from deteriorating until the generating mechanism is clarified.

Soil Contamination: Actions for revision of the Soil Contamination Countermeasures Act (revision of governmental and ministerial ordinances) and the guideline

With enforcement of the Act on April 1, we offered full dissemination to land owners and clear notification of changed portions of the guideline.

Others: Actions for revision of the Pollutant Release and Transfer Register Law (designated substances selection method)

Exposure index was changed from products import volume to notified emission amount (actual result).

TOPIC 2 Safety Education and Human Resource Development

Utilizing educational material for human resource development regarding process safety (guideline, Japanese version/English version DVD), and using manufacturing site leader training, external human resource development courses, and seminars, we conducted the spread and pervasion activities in 2018 as well. We also continuously support education such as dispatching instructors and providing educational material to the human resource development courses held by the Sanyo Association for Advancement of Science & Technology and the Chiba Industry Advance Center.

TOPIC 3 Activities of Occupational Health and Safety Subcommittee

The Occupational Health and Safety Subcommittee grasps the movement of significant law revisions regarding fall prevention equipment and revision of the Labor Standards Act and Industrial Health and Safety Act regarding disease caused by chemicals, lets members know about the action by communicating information, collects opinions and requests of industry, and offers the opinions to the administrative authorities

to support the activities of labor accidents reduction. Most recently, we strive to share and communicate the information about the revision of Labor Standards Act regarding chemical management and health disorder prevention. Under the increase of accident frequency and severity in the fact-finding survey collecting the data of the member's industrial accidents, we are introducing case examples of serious accidents for actions toward accident prevention. For the risk evaluation of chemicals, we strive to grasp the progress of dermal exposure, and when concrete progress and substances for evaluation are clarified, we explain and inform them at occasional subcommittee meetings and through the safety environment network to support member companies.

TOPIC 4 Lecture for Preventing Tsunami Disasters

With the Petroleum Association of Japan and the Japan Petrochemical Industry Association, on October 25, 2018 we co-hosted a “lecture for preventing tsunami disaster” associated with “World Tsunami Awareness Day, November 5” resolved in the United Nations. Two lectures of “Damage of dangerous facilities by a large-scale earthquake and its disaster prevention/reduction” (academic expert) and “Efforts of disaster prevention in Kawasaki” (local government) were very helpful to three association members regarding information such as the idea of disaster prevention/reduction and examples of the efforts.

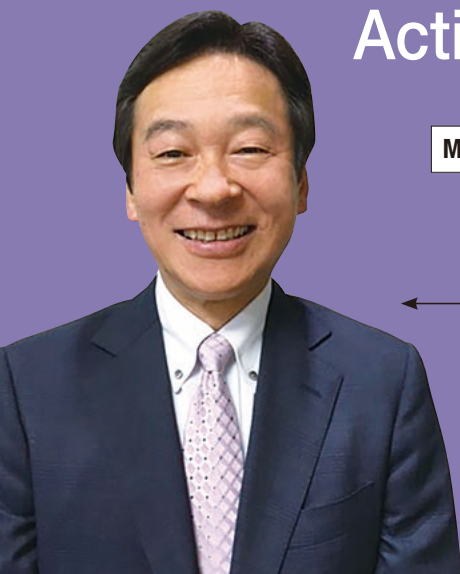
TOPIC 5 Lecture for Dangerous Substance Transportation

We held “Safety management lecture for dangerous substance transportation” in Tokyo and Osaka in November, 2018 as well. Recently, consignors are called to responsibility more than before due to



revision of the Commercial Code, so we invited experts from the administrative authorities and related parties as instructors to explain in detail the international rules to learn, as well as the aerial, maritime and onshore knowledge and information. We will continue to hold these lectures in the future as an opportunity for acquiring knowledge of new information and regulations.

Activity Report: Chemicals Management



MESSAGE

Toward the Establishment of More Efficient Chemicals Management as a Business Strategy

Under the basic policy of strengthening the support of the chemical management business in project activities and further spread and expansion of voluntary contribution by industry, we develop various activities such as transmitting information related to chemical management to members and actions for the revision of related laws and regulations in Japan and overseas. Especially, regarding actions for laws and regulations, we actively participate in various committees and review meetings of the government in our position of a representative of the chemical industry, and are working on issuing the guideline and Q&A for business operators as well as offering opinions to appropriate authorities. In addition, we are aiming for the establishment and spread of more efficient and elaborate risk evaluation technology, and will strive to strengthen further support activities.

Committee Chairman / **Teijiro Nishitani**
[Managing Executive Officer, Mitsubishi Chemical Corporation]

FOCUS

Aiming for the Response to Laws and Regulations and Improvement and Spread of Evaluation Technology

The Movement of Domestic Laws and Regulations and Actions

The “Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.” (the Chemical Substance Control Law), the revision of which was promulgated in 2017, entered into force in April, 2019. In 2018, JCIA offered opinions centering on the evaluation exception system where the administrative authorities were examining the details of the operation. In addition, in the risk assessment of existing chemical substances, we cooperated with related associations and member companies handling the related substances, advanced the elaborate risk assessment and the examination of emission-reduction measures, and carried out efforts toward more rational risk management as an industry.

To meet the revised Chemical Substance Control Law enforced in 2019, we are advancing the revision work for “Chemical Substance Control Law Q&A Notification Guidebook for Workers” compiled by JCIA.

Response to the Laws and Regulations of Overseas Chemicals

We grasped the latest movement of chemical management regulation in each foreign country, transmitted information to members, and collected opinions of member companies to offer them to the administrative authorities. Especially, the chemical management regulation in South Korea was largely revised last year, so we cooperated with local Japanese-affiliated companies, and as a Japanese industry, we offered our opinions and suggestions to Korean administrative authorities. In Europe, as the deadline to register the existing chemical substances with REACH came, we collected and transmitted information to check the following new directional movement, and to cope with the Brexit issue, we offered opinions from the industry through the government to continue the business. In China and Taiwan, as they needed opinions regarding enactment and amendment of the law, we collected opinions from member companies and provided them for the administrative authorities in each country and region.

The Movement of GHS and Actions

In order to reflect the contents of the 6th revised edition of United Nations document GHS (Globally Harmonized System of Classification and Labelling of Chemicals) to JIS Z7252 and Z7253, JCIA, as a secretariat, organized the JIS Drafting Committee, and created revised drafts in FY 2017. In FY 2018, we held “Presentation meeting for the revision movement of JIS Z 7252 and JIS Z 7253 based on GHS United Nations documents” to explain the contents of the revised drafts and the implementation schedule, in Tokyo, Osaka, and Nagoya, with the attendance of many people. The revised JIS was made known to the public in May, 2019, and “GHS guideline The guidance for labeling and compiling a safety data sheet” compiled by JCIA was also revised.



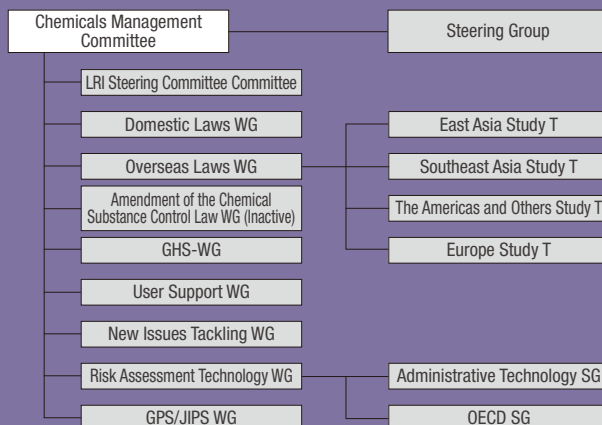
United Nations subcommittee of experts on the GHS on its thirty-fifth session (Switzerland)



“GHS guideline The guidance for labeling and compiling a safety data sheet”

Activity Outline

The committee cultivates close ties with relevant authorities, including administrative authorities, in order to collect, analyze, and communicate necessary and useful information to members about domestic and overseas regulatory trends regarding chemical management, and collects opinions and requests of members to submit them to the administrative authorities. As voluntary activities in the industry, the Committee is promoting GPS/JIPS, tackling new issues, and supporting research and technology evaluations related to risk assessment methods of chemicals.



Note: WG/Working Group
SG/Subgroup
T/Team

TOPIC 1 Information Transmission and Risk Assessment of Chemicals

As voluntary activities of the chemical industry, in order to improve the chemical management level in the whole value chain through the utilization promotion of the risk assessment support portal site "JCIA BIGDr" and the risk assessment tool "BIGDr.Worker," we conducted dissemination activities through chemical risk forums, risk assessment seminars, etc.

TOPIC 2 Complete JIPS Consortium Activities in FY2018

As part of GPS/JIPS WG activities, in FY 2018, eight companies formed a consortium to create "Draft of Safety Summaries" about the three substances of Acetaldehyde, Bisphenol A (2-hydroxypropyl) ether, and Glyceryl stearate and published it on JCIA's BIGDr website.

TOPIC 3 GPS/JIPS Activities (JIPS Award) 2018 JIPS Award

In the third JIPS award given this year, the Grand Prize was won by Kao Corporation, and Excellence Award was won by Tosoh Corporation. Yuki Gosei Kogyo Co., Ltd., Nippon Nyukazai Co., Ltd., and Fujifilm Wako Pure Chemical Corporation, which published safety summaries for the first time, won the Incentive Prize.



From the left: Mr. Hayashi from Kao Corporation, Chairman Mr. Nishitani

TOPIC 4 Response to Supply Chain of Chemicals

In order to promote proper chemical substance management in the supply chain, we provided various forms of support from the standpoint of the chemical industry for an information sharing scheme of chemicals contained in products "chemSHERPA," the substances list GADSL prepared and maintained by GASG, which is composed of representatives of automobile, automotive parts, and chemical manufacturers in Japan, the United States, and Europe, and international standard TC111 (environmental standards for electrical and electronic equipment) promoted by electric and electronics industry organizations such as JEITA.

TOPIC 5 JCIA LRI

In FY 2018, JCIA LRI adopted new research projects from the development and evaluation of new risk assessment methods or system, research on the effects of chemicals on children, elderly people and those with gene disorders, and research regarding microplastics.

In the JCIA LRI Annual Meeting in FY2018, the accomplishments and progress of the research were reported, and the symposium was marked by enthusiastic argument on themes of environmental influence assessment of microplastics and efforts of LRI.

Award winners in FY 2018 of the Japanese Society of Toxicology LRI Award and the Japanese Society for Alternatives to Animal Experiments LRI Award, which are given to researchers who produce brilliant achievements, were Dr. Tsuyoshi Nakanishi, associate professor, Gifu Pharmaceutical University (at the time, now professor), and Dr. Yuji Komizu, associate professor, Sojo University, respectively.



JCIA LRI Annual Meeting

Activity Report: Technical Affairs



MESSAGE

Efforts of climate change measures

Under “the Commitment to a Low Carbon Society” in which many of the JCIA member companies and associations participate, new reduction targets for 2030 could be set. In addition to the traditional BAU target, new targets set a high-level goal by managing absolute amount of real reduction, which shows a chemical industry’s substantive effort of climate change measures. Through the activities of the Technical Affairs Committee, we will work toward achieving the new targets by promote further communication among member companies and associations.

Committee Chairman / **Tadashi Hiraoka** [Executive Officer, AGC Inc.]

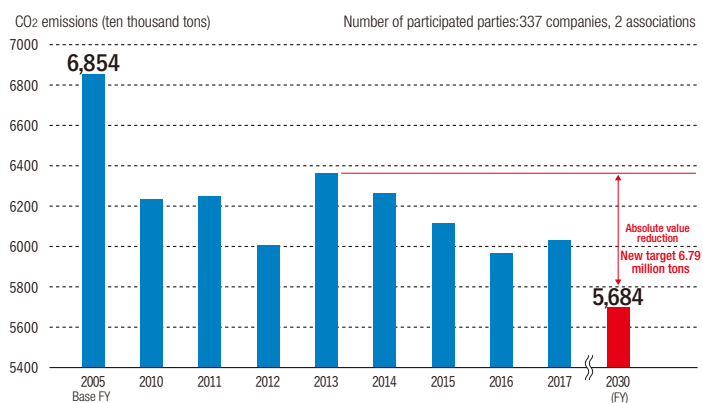
FOCUS

To Realize Low Carbon Society, Try Hard to Achieve a Higher Target

The Result of the Commitment to a Low Carbon Society in FY 2017 and New Target Setting for FY 2030

JCIA started efforts to reduce CO₂ emission at the time of the Keidanren Voluntary Action Plan on the Environment under Keidanren, and has continued the efforts since 2013 as “the Commitment to a Low Carbon Society.” In the Commitment to a Low Carbon Society follow-up survey in FY 2018, CO₂ reduction of 5.73 million tons was achieved compared to the CO₂ reduction target of 2 million tons by FY 2030 (on the basis of FY 2005), which resulted in significantly greater reductions than anticipated for three years in a row since 2015. In response to this result, in January, 2018 we established the Industry Target Review Task Force in the Commitment to a Low Carbon Society WG, and at JCIA Board of Director in March, 2019 the governing body decided a new target for FY 2030. We set FY 2013 as a base year according to the Plan for Global Warming Countermeasures, and as new targets, we decided on 6.5 million tons reduction of a BAU and 6.79 million tons reduction as an absolute amount target. Moreover, we aim to achieve two targets at the same time. If the production volume increases under management only by BAU ratio index, the absolute amount of CO₂ emission can increase even if the BAU target is achieved. Therefore, an absolute amount index is necessary in order to apply a brake to CO₂ emissions. In addition, if the production volume varies under the management only by absolute amount index, we cannot simply explain the efforts for reduction as an industry, so the BAU index is necessary. Introducing these two management indexes makes the target higher than the target using only BAU index, and it is a big change in the way that the efforts of the chemical industry are shown in a plain way.

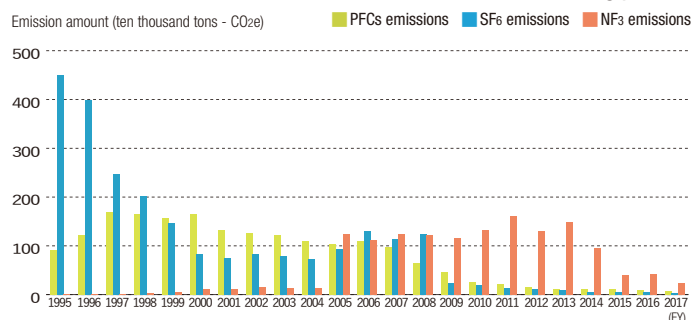
Transition of CO₂ emission



CO₂ emission reduction target and result

Former reduction target (on the basis of FY 2005)	Result in FY 2015	Result in FY 2016	Result in FY 2017	New reduction target (on the basis of FY 2013)
▲ 2 million tons by FY2030 on BAU comparison basis	▲ 2.73 million tons	▲ 3.5 million tons	▲ 5.73 million tons	▲ 6.5 million tons by FY2030 on BAU comparison basis

Transition of PFCs, SF₆, and NF₃ emitted from manufacturing process

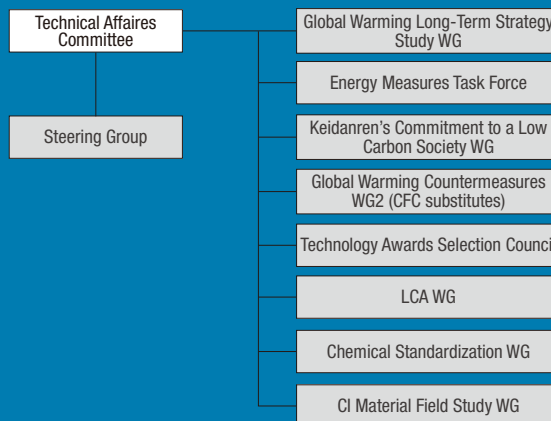


Three Gases Substituted for CFC Achieved the Target for FY2030.

In the emission reduction activities at manufacturing of PFCs, SF₆ and NF₃ of global warming gas, NF₃ intensity was reduced by 89% per emission rate to production compared to that of FY 1995, which achieved 85% of the reduction target for FY 2030. PFCs and SF₆ achieved the target for FY 2030 (90% reduction) in 2010 and 2009, respectively, and have been kept at 90% or more since then. Therefore, all three gases achieved the target for FY 2030.

Activity Outline

We are actively participating in the Keidanren's Commitment to a Low Carbon Society and activities concerning global warming and energy policies at home and abroad, and are tackling various tasks. In addition, we are participating in the promotion activities of science technology by JCIA Technology Awards, the prevalence activities of cLCA products, and the activities of the ICCA Energy and Climate Change Leadership Group, and are carrying out the activities to emphasize that the chemical industry is a solution provider against global warming.



Note: WG / Working Group

TOPIC 1

50th Anniversary of JCIA Technology Awards

The JCIA Technology Awards were established in 1968 as a system to honor the creation of innovative and excellent chemical technology and products contributing to the development of the whole society and improvement of the environment. In FY 2018, the awards marked their 50th anniversary, and in the chemical forum memorializing "Chemistry Day/Chemistry Week" (Hosted by The Chemical Daily Co., Ltd.), a lecture about the social contribution of chemical technology was given by the former JCIA Technology Awards Selection Council Chairman, and two companies from the successive Technology Award winners gave lectures about their award-winning results. In addition, we recommend the winners to The Ichimura Prize in Industry (Ichimura Foundation for New Technology) every year, and the 50th Technology Award Grand Prize winner was awarded the 51th Ichimura Prize for Outstanding Achievement and the Special Technology Prize winner was awarded The Ichimura Prize for Distinguished Achievement.

TOPIC 2 Prevalence Activities of cLCA

We participated in the creation of the GVC concept book of Keidanren, compiling cLCA case examples of the industry, and three high-impact cases by global assessment in the cLCA case examples that JCIA had compiled, (i) Desalination plant by RO membrane method, (ii) Hall element and hall IC (magnetic sensor of inverter air conditioner), (iii) Material for aircraft (carbon fiber composite material) were published in the book. In a trial calculation by the flow-base method when these products which are expected to be manufactured for a year in 2020 are used until the end of their lives, the CO₂ emission reduction amount will reach 387 million tons. This concept book was widely introduced to the world from Keidanren at COP24 (Poland Katowice).

TOPIC 3

Meeting to Exchange Opinions with International Energy Agency (IEA)

IEA and JCIA member companies and associations held a meeting to exchange opinions about "The Future of Petrochemicals" published by IEA in October, 2018. The amount

of chemical products will continue to increase worldwide in the future, as a result, the amount of fossil fuel used as raw material will increase. Therefore, we responded to the suggestions of IEA of the necessity of measures such as the advancement of investment to the development of sustainable chemicals production route and the improvement of the management of waste plastics and recycling rate, and the meeting to exchange opinions was very beneficial.



TOPIC 4

Activities of Connected Industries Material Field Study WG

In the round-table conference with the Minister of Economy, Trade and Industry in May, 2018, the Chairman of JCIA reported to the Minister that JCIA will pursue the following three tasks based on the report of Material Field Study WG: (i) establishment of a shared platform of unutilized resources and technology; (ii) establishment of a common data platform for material data structuring; and (iii) development of human resources fostering course by information science × chemistry. Based on this, we cooperated with related parties, and advanced the study toward realization. UMI (Universal Materials Incubator Co., Ltd.) became a parent organization for (i), and we will look for participant companies in the platform in cooperation with UMI from FY 2019. (ii) is placed in the Technology Development Project of NEDO, and we will tackle tool development centering on the industry. (iii) will be held by Japan Association for Chemical Innovation (JACI) from FY2019, and JCIA will work on continuously and proactively.

Activity Report: International Activities Committee

[International Affairs Department]



MESSAGE

Gathering Information on Trade Issues and Dealing with Unfair Trade

After enforcement of TPP11 and Japan-EU EPA, while Japan is currently advancing negotiations of expanding regional economic partnership like RCEP and so on, we encounter (a) the movement triggered by a handful countries to jostle conventional fair and solid trade system and (b) the movement to set, against the backdrop of Sustainable Development Goals (SDGs), new international objective which could affect chemical industry as well. Through collecting information, communicating with our membership and coordinating with government, we will promote remedying unfair trade and reflecting the message of chemical companies. In addition, through various channels including ICCA activities, interaction with business associations of China and South Korea etc., we will carry out the activities contributing to realize a sustainable society and development of chemical industry.

Committee Chairman / **Takashi Shigemori**
[Director & Senior Managing Executive Officer, Sumitomo Chemical Co., Ltd.]

Activity Outline

This Committee deals with our Association's international affairs including grasping chemical industry related trade issues, transmission of information and reinforcement of relationships with overseas chemical-related organizations. Specifically, aiming to materialize the opinions of domestic chemical industry, our activities include but not limited to (a) advocating to the authorities about such issues as Rule of Origin and redress of unfair trading, (b) information sharing with our membership, (c) fortifying the relationships with the chemical industries of China and South Korea etc. by chemical dialogue and so forth and (d) participation in administration of the International Council of Chemical Association (ICCA).



FOCUS

The 4th Japan-China Chemical Industry Conference

In 2018, the 40th anniversary of the Japan-China Peace and Friendship Treaty, the 4th Japan-China Chemical Industry Conference was co-hosted by the China Petroleum and Chemical Industry Federation (CPCIF) and JCIA / JPCA in Chengdu in September. In addition to the Japanese chemical industry related people, including Mr. Tannowa, Chairman of JCIA and Mr. Morikawa, Chairman of JPCA, Mr. Li, Chairman of CPCIF and people being engaged in chemical industry in China participated in the Conference, and approximately 100 people in total exchanged opinions actively. At the General Assembly on the first day, the current status of the chemical industry in Japan and China, technical innovation of the chemical industry and Responsible Care activities were introduced. In the subcommittee meetings of the following day, global warming issues relevant to chemical industry and their countermeasures were shared through Japan-China alternate presentations about (a) Japan and China respective countries' measures against Climate Change and (b) individual company's action for the reduction of CO₂ emission.



TOPIC The 9th Japan-South Korea Annual Meeting

In November 2018, the 9th Japan-South Korea annual meeting was held. Because this meeting was held in Tokyo, our membership also participated as observers, and opinion exchange and discussion were made about Chemicals Management, Responsible Care, and Climate Change as main topic. In addition, given recent rising awareness, plastic waste issues and SDGs activities were also picked up. For Chemical Management, presentation and opinion exchange were made regarding not only the latest progress of Chemical Management regulation in Japan and South Korea but also individual practical issues on Chemicals Management in South Korea. In view of (a) large export trade to South Korea by Japanese chemical companies and (b) quite a few Japanese chemical companies have set up affiliates in South Korea, we intend, through intercommunication and opinion exchange during this meeting, to deepen the relationship with the Korea Chemical Industry Council (KOCIC) and to make such relationship to serve the development of both countries' chemical industry.



Activity Report: Economy and Tax System Committee

[Department of Business/Economic Information]



MESSAGE

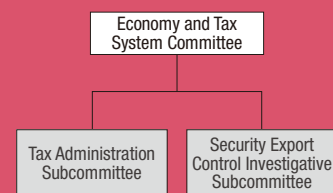
Aiming at Increasing International Competitiveness and Further Growth of Chemical Industry

While the chemical industry maintains good business results by stable demand both in Japan and abroad, uncertainty surrounding economic conditions is increasing such as prolonged trade war between the United States and China, and increasing natural disasters. Globalization of company activities requires regulation reform and tax system reform in response to demands of the times such as speed-up of FTA and EPA agreements, intensification of Export Control Regulations and international taxation, and action for environmental issues compatible with economic growth. For further growth of the chemical industry in Japan, we are working to offer opinions on various restrictions and systems including tax systems, and transmitting useful information for business operation.

Committee Chairman / **Shuji Furuta** [Executive Officer, DIC Corporation]

Activity Outline

Toward the development of Japanese economy and for the purpose of realizing active economic conditions, various efforts are being implemented towards deregulation, revision of the tax system, and other regulatory actions. Under these circumstances, we are working to consolidate and share information on the economy and tax systems to lead to suggestions and requests for policy change for the future growth of the chemical industry. Especially for tax systems, we are strengthening and promoting activities while cooperating with other industries. We also respond to current topics regarding economics and management as necessary.



FOCUS

FY 2019 Activities for Requesting a Revision to Tax System

While the limit of the temporary measures of the research development tax system will expire this fiscal year, the following four items were set as important requirements centering on the further expansion of relevant tax systems important for the chemical industry. (i) Preservation and relaxation of research development tax system, (ii) Coordination of tax systems for promoting capital investment, (iii) Fundamental review of global warming taxes, and (iv) Exception of taxes on materials for petrochemical products provided by the main provisions of the act of gasoline tax and petroleum and coal tax. Request activities cooperating with other industrial associations were carried out, and as a result, the limit of the temporary measures of the research development tax system was extended and it was revised to the system where increasing incentive produces a stronger effect. We will continue to request policy support for promoting research development and capital investment as a basis of value creation.

TOPIC 1 Security Export Control seminar

The Security Export Control Investigative Subcommittee cooperates with a department in charge in the Ministry of Economy, Trade and Industry, and holds seminars regarding the importance of security export control, the point of voluntary



export control system maintenance, and penal regulations. The meeting includes contents centering on the basic important items, and utilized as part of an instruction course by companies related to the export control business. The meetings were held in Tokyo and Osaka for the first time in two years in FY 2018, earning a good reputation.

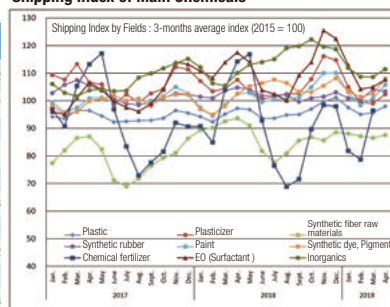
TOPIC 2 JCIA Indexes Disclosed to the Public

As indexes of representing the "Now" of the chemical industry, we were disclosed JCIA Indexes to members, but in response to requests from mass media and analysts, contents were added and disclosed it to the public on our website. In addition to the existing three indexes, we posted the graphs and the excel data of shipment indexes by fields of major chemical products for factor analysis. Please refer to the monthly materials posted on our website with comments.

Shipment indexes of major chemicals (9 fields, 33 items)

Field	Index	Month-to-month	Year-to-year
Total of major products	101.4	2.5	0.2
Plastic	98.0	2.4	0.7
Plasticizer	102.4	3.4	▲4.9
Synthetic fiber raw materials	87.6	1.1	▲6.5
Synthetic rubber	103.4	▲0.7	▲1.3
Paint	105.8	4.9	3.3
EO	107.6	2.5	▲8.4
Synthetic dye	108.0	5.4	5.2
Chemical fertilizer	110.6	14.6	▲3.2
Inorganics	111.5	2.6	1.3

Shipping Index of Main Chemicals



https://www.nikkakyo.org/content_en/nikkakyo_index
* The English version is published as data.



Activity Report: Labor Committee [Labor Department]



MESSAGE

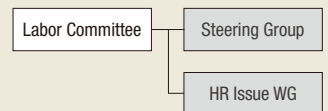
Human Resources Fostering Support to Member Companies and Continuous Promotion of Appropriate Information Provision

In FY 2018, we held a fostering seminar for human resources and labor affair staff (every two years), and continuously held instruction courses for production site leaders of chemical plants five times. In addition, we hold a presentation meeting for Revision Bill Related to Work Style Reform, and continuously collect and transmit various labor information such as wages, salary, and bonuses. We will move ahead on providing member companies with useful information and supporting human resources development.

Committee Chairman / **Keiichi Kamiguchi** [Director & Corporate Officer, Showa Denko KK]

Activity Outline

We provide members with information such as “human resources development,” “response to measures and regulations related to labor,” and statistics of “survey of labor conditions,” and implement activities based on appropriate relational maintenance with labor unions.



Note: WG / Working Group

FOCUS

Human Resources and Labor Affairs Staff development seminar

With the aim of “Fostering leaders of human resources and labor affairs divisions who will be responsible for the next generation of the chemical industry,” we have held eight seminars since May 2018. The core human resources staff members from 12 member companies participated in the seminar to learn the basis of “The function of human resources and labor affairs in management” and had discussion, and in the last session, they summarized the reports of “How I propose the management strategy for human resources” and took them to their companies. We are looking forward to the participants’ actions.



Activity Report: Public Relations Committee

[Public Relation Department]



MESSAGE

For the sustainable development of the Chemical Industry

In order for the chemical industry that contributes to our lives and economy, Improving social recognition of the chemical industry is important for securing the human resources who will be responsible for the next generation and achieving the sustainable development of the chemical industry. We will strive to improve further presence of chemistry and the chemical industry by cooperating with members, academia, and the media, along with mutual understanding.

Committee Chairman / **Hideo Tamada** [Managing Executive Officer, Ube Industries, Ltd.]

Activity Outline

We communicate information of various activities of JCIA such as chemicals management and responsible care to society, and tell the value and attractiveness of chemistry to youth through the project of “Dream Chemistry 21” to improve the presence of the chemical industry.



Note: WG / Working Group

FOCUS

Toward New Public Relations Activities

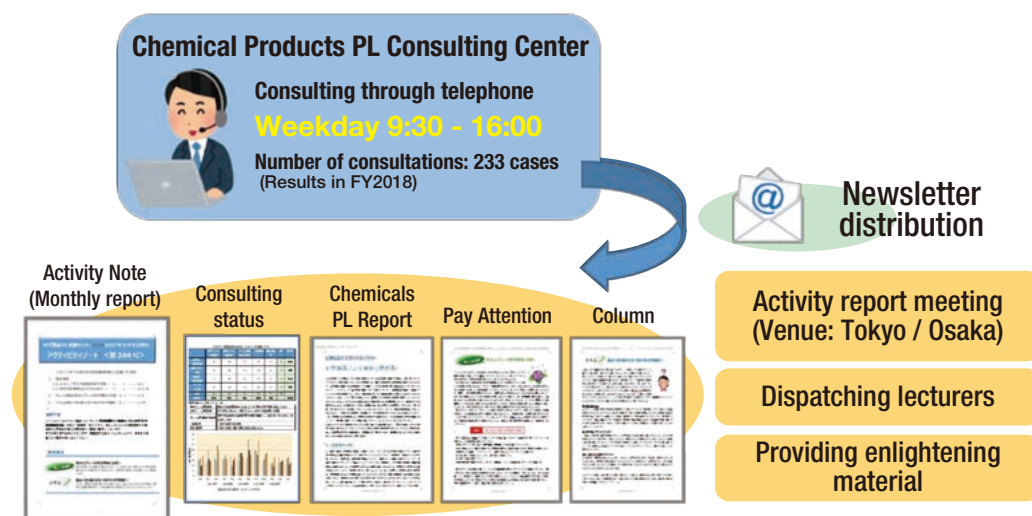
Since 2014, JCIA has promoted the social recognition of “Chemistry Day” and “Chemistry Week” established by four associations, The Chemical Society of Japan, The Society of Chemical Engineers, Japan, The Japan Association for Chemical Innovation, and JCIA. In 2018, with the aim of further improvement of the presence of the chemical industry, we conducted questionnaire survey to the companies and associations participating in the Public Relations Committee regarding the expectation to the Public Relations of JCIA, and PR committee decided to set an opportunity to ask the media on their expectation or needs to the PR of JCIA for improving the recognition of the chemical industry from society. We would like to meet the expectations of all members through these activities.

Introduction of Chemical Products PL Consulting Center

When the Product Liability (PL) Act was promulgated in 1994, the Chemical Products PL Consulting Center was established as an independent organization in the Japan Chemical Industry Association from the need to form the dispute handling system and not relying upon lawsuits using professional knowledge in each product field. This center handles consultations related to chemical products made by business operation to general consumers all over Japan, in addition to general consumers from a Professional perspective. Furthermore, it emphasizes on awareness-raising activities through the provision of information, lectures, and publication of pamphlets for the prevention of accidents caused by chemical products.

The activity of this Center is delivered to everyone as a monthly report "Activity Note." "Activity Note" includes the contents and answers of all consulting, "Chemicals PL Report" related to product liability and product safety, "Pay Attention" to prevent accidents by chemical products, and "Topics," bits of knowledge related to chemistry. "Activity Note" is opened to the public on the website of this Center.

The latest information including the issue of "Activity Note" is provided in a newsletter by e-mail. Please subscribe by e-mail to PL@jcia-net.or.jp



Information Distribution Services Provided by JCIA

JCIA distributes the following mail magazines for member companies and associations that wish to receive them. Please contact the relevant office for a new delivery request.

Ankan-Net (Safety and Environment Net)

We deliver information that requires publicity such as notice and communication from each ministry and agency, guidelines regarding environmental safety, and regulatory information to member companies and associations registered in the Ankan-Net (Safety and Environment Net). (Up to two addresses per company/association)

Contact: Environment and Safety Department

RC net

"RC Net" in which member companies of Responsible Care Committee are registered delivers information of RC-related events such as Responsible Care activities report meeting, and for member relations events and study meetings for members provide the holding schedule and recruits participants.

Contact: RC Department

Chemical Standardization Information Net

We provide the information about seminars of relevant associations regarding chemical standardization, and movements at home and overseas, as well as distribute the holding schedule of seminars provided by JCIA to the member companies and associations registered in the Chemical Standardization Information Net.

Contact: Technical Affairs Department

Chemical Management Net

We provide the latest information about the movement of the regulations and laws at home and overseas regarding chemicals management, and deliver the holding schedule of seminars provided by JCIA to the member companies and associations registered in the Chemicals Management Net.

Contact: Chemicals Management Department

PR Net

We distribute the holding information of the activity report meetings, seminars, and Children's Science Experiment Class of JCIA regularly, and distribute the guide and implementation reports of event activities such as experiment show to those who belong to member companies or associations that wish to receive them (mainly persons in charge of general affairs or public relations).

Contact: Public Relations Department

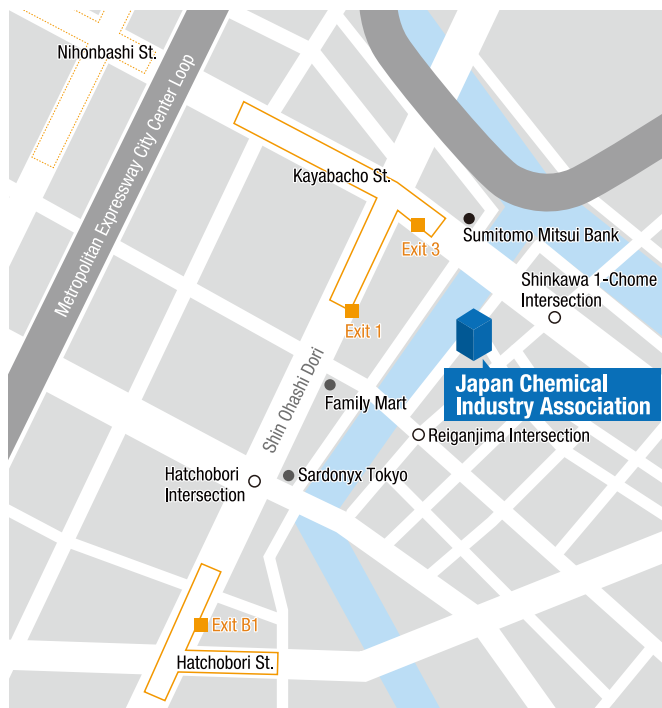
Glossary

ACC	American Chemistry Council	
AEC	ASEAN Economic Community	One of three pillars that supports "ASEAN Community" together with "ASEAN Policy and Security Community (APSC)" and "ASEAN Society and Culture Community (ASCC)." Intended to make 10 ASEAN member countries (Indonesia, Cambodia, Singapore, Thailand, The Philippines, Brunei, Vietnam, Malaysia, Myanmar and Laos) one economic sphere.
AEM-METI	ASEAN Economic Ministers and METI (Ministry of Economy, Trade and Industry)	Japan-ASEAN Economic Ministers meet to discuss economic cooperation and coordination between Japan and ASEAN.
AMEICC	ASEAN Economic Ministers and METI Economic and Industrial Cooperation Committee	Japan-ASEAN Economic and Industrial Cooperation Committee. Substructure of Japan-ASEAN Economic Ministers meeting.
AI	artificial intelligence	
AJCSDB	The ASEAN - Japan Chemical Safety Database	The ASEAN-Japan Chemical Safety Database. Based on the agreement of ASEAN Economic Ministers and METI Economic and Industrial Cooperation Committee (AMEICC) Working Group on Chemical Industry (WG-CI), this is a database established by Japan and each ASEAN country.
APEC	Asia-Pacific Economic Cooperation	Framework for economic cooperation by 21 economies in the Asia-Pacific region.
APRCC	Asia Pacific Responsible Care Conference	Asia Pacific Responsible Care Conference. International Meeting held with the aim of transmission of information and commoditizing of RC activities in each country toward sustainable development of the chemical industry in the Asia-Pacific region. Meeting held by APRO. It was held every year from 1995 to 2000 and has been held every two years since 2001.
ARCP	ASEAN Regulatory Cooperation Project	
APRO	Asia Pacific Responsible Care Organization	Established in 2003 as an organization for supporting APRCC. Currently Japan is the chair.
BAU	Business as usual	CO ₂ emissions which are given by multiplying CO ₂ amount per production volume in the base year by production volume in the target year.
BIAC	The Business and Industry Advisory Committee to the OECD	Business and Industry Advisory Committee. Private Economic advisory committee to the OECD. It consists of private economic organizations in affiliate countries of OECD.
BIGDr	The Base of Information Gathering, sharing & Dissemination for risk management of chemical products	Total information system that comprehensively supports and promotes GPS/JIPS activities.
BIGDr. Worker	The Base of Information Gathering, sharing & Dissemination for risk management of chemical products. Worker	Evaluation tool software developed by JCIA to support risk evaluations of chemical substances. Capable of estimating exposure concentration in work environment and performing risk evaluations with a simple operation.
CB	Capacity Building	Construction of organizational ability of developing country side required for industrial development.
Cefic	European Chemical Industry Council	
chem SHERPA	Chemical information SHaring and Exchange under Reporting Partnership in supply chain	Information transmission scheme of chemical substances contained in products
CI	Connected Industries	Industrial society where new added-value is created by various types of connection among persons, materials, technology, organizations, etc.
cLCA	carbon- Life Cycle Analysis	Evaluation of emission from the whole life cycle by summing CO ₂ emitted from each process of raw material extraction, manufacturing, distribution, use and disposal.
COP24	The 24th session of the Conference of the Parties	United Nations Framework Convention on Climate Change The 24th session of the Conference of the Parties, which was held in Paris, France from November 30 to December 11 in 2015. Paris Agreement that is a framework of world climate change and measures against global warming from 2020 was agreed upon. COP25 will be held in Chile in November 2019.
CP&H LG	Chemical Policy and Health Leadership Group	An organization within ICCA.
CPCIF	China Petroleum and Chemical Industry Federation	Renamed from CPCIA in 2010.
E&CC LG	Energy and Climate Change Leadership Group	An organization within the ICCA.
EPA	Economic Partnership Agreement	
GADSL	Global Automotive Declarable Substance List	List of substances already restricted or planned to be restricted worldwide by countries and published by the GASG with the possibility of being contained in automotive products.
GASG	Global Automotive Stakeholders Group	Organization constructed and established by representatives of automotive, automotive parts, and chemicals manufacturers in Japan, Europe, and United States for the purpose of continuously exchanging and sharing information through the supply chain of the global automotive industry in order to achieve reductions in the environmental load through the life cycle of automotive.
GESG	Global Executive Strategy Group	It consists of about 10 people as ICCA's directors of Japan, the United States, and Europe is its main members. It advance a strategic direction and advice regarding priority concerns of ICCA.
GHG	Green House Gas	
GHS	Globally Harmonized System of classification and labelling of chemicals	Globally harmonized system concerning classification and labeling of chemicals. System for classifying chemicals by type and degree of hazard according to globally unified rules with labeling to make the information understandable at a glance and provide a safety data sheet. Issued from UN in 2003.
GPS	Global Product Strategy	Voluntary approaches for performing risk evaluations of chemical products by each company in order that each company minimizes the risk of chemicals through the whole supply chain by implementing appropriate management based on the risk and disclosing the information on safety and risk to general society including customers.
ICCA	International Council of Chemical Associations	International Council of Chemical Associations
ICCA GRC	International Council of Chemical Associations Global Regulatory Cooperation	Organization within the ICCA CP&H LG that promotes the introduction of efficient and reasonable management systems by creating more consistent requirement items for regulatory authorities and the industrial field while satisfying the high criteria for human health and environmental safety based on a global policy for regulatory cooperation approved by the ICCA in 2015.

ICTA	International Chemical Trading Association	
IEA	International Energy Agency	International Energy Agency. The secretariat is in Paris.
IoT	Internet of Things	This is a concept of information communication technology enabling automatic recognition, automatic control, and remote measurement by providing various objects existing in the world with a communication function by connecting to the Internet and performing mutual communication, not only information and communication equipment such as computers.
JaIME	Japan Initiative of Marine Environment	Japan Initiative of Marine Environment. Conference for marine plastic problems
JEITA	Japan Electronics and Information Technology Industries Association	
JIPS	Japan Initiative of Product Stewardship	Risk evaluation considering the supply chain and voluntary approaches by the industrial field on the basis of risk management.
KOCIC	Korea Chemical Industry Council	
LRI	Long-range Research Initiative	LRI is long-term activities to support research into effects of chemical substances on human health and the environment based on the funds invested by LRI member companies. Operated by three associations in Japan, the US, and Europe under ICCA.
OECD	Organization for Economic Co-operation and Development	Organization for Economic Cooperation and Development
PS	Product Stewardship	Based on the concept that stakeholders of the whole life cycle of products, namely manufacturers, retailers, users, and disposal agents, are responsible for reducing the environmental influence of products.
RC	Responsible Care	Activities wherein each company handling chemical substances voluntarily secures the environment, safety, and health in all processes of development of chemical substances, manufacturing, distribution, use, final consumption, disposal, and recycling and then discloses the outcome of activities and communicates with society.
RCEP	Regional Comprehensive Economic Partnership	Wide-regional free trade agreement by a group of nations RCEP mainly consisting of ASEAN (16 countries composed of Indonesia, Singapore, Thailand, Philippines, Malaysia, Brunei, Vietnam, Myanmar, Laos, Cambodia, Japan, China, Korea, India, Australia, and New Zealand)
RCLG	Responsible Care Leadership Group	An organization within ICCA.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals	Rules concerning the registration, evaluation, authorization, and restriction of chemicals
SDGs	Sustainable Development Goals	Seventeen goals until 2030 concerning poverty, starvation, energy, climate change, industry and innovation as agendas of 2030 for sustainable development were adopted by the UN in November 2015. Successor of Millennium Development Goals.
TPP	Trans-Pacific Partnership or Trans-Pacific Strategic Economic Partnership Agreement	Indicates the economic cooperation agreement that promotes not only customs duties for articles but also liberalization of services and investments and establishes 21st century type rules for intellectual property, financial services, electronic commerce, and the discipline of national enterprises in the Asia-Pacific region.
TPP11	Trans-Pacific Partnership or Trans-Pacific Strategic Economic Partnership Agreement	In February 2016, 12 countries signed the TPP Agreement, but in January 2017, the United States declared its withdrawal, so this agreement was basically agreed at the TPP Ministerial Meeting held in Vietnam in November 2017. In March 2018, Ministers from 11 countries signed it, and it became effective in December.
TSCA	Toxic Substances Control Act	Hazardous substance restriction act. A US law on the restriction of manufacturing hazardous chemical substances. Established in 1976. Intended to restrict the unreasonable risk of chemical substances against human health and the environment. Under this act, a person who newly manufactures or imports chemical substances must notify the EPA (Environmental Protection Agency). The EPA reviews and can impose necessary conditions (including prohibitions).
UNEA	United Nations Environment Assembly	United Nations Environment Assembly (UNEA). Decision-making body of UNEP "United Nations Environment Programme." UNEA 4 means the 4th United Nations Environment Assembly.
UNEP	United Nations Environmental Programme	Established in 1972 based on the UN General Assembly as an organization for implementing the Human Environment Declaration and Environment International Action Plan adopted by the UN Human Environment Conference based on the proposal by that Conference that was held with catch phrase of "Irreplaceable Earth" in Stockholm in June 1972. Secretariat in Nairobi.
VOC	Volatile Organic Compounds	Generic name of volatile organic compounds as gases in the atmosphere. Various substances such as toluene, xylene, and ethyl acetate are considered VOCs.
WBCSD	World Business Council for Sustainable Development	Conference organized by businesspersons who gathered from 33 countries in 1991 to prepare the Earth Summit in 1992. Currently, it is composed of 170 international companies from more than 35 countries bridging 20 industrial sectors. It continues activities about three pillars of economic growth, ecological balance, and social progress.
WET	Whole Effluent Toxicity	Wastewater control technique using all wastewater toxicity evaluations (utilizing biological response).
WG	Working Group	Working group organized for promoting investigations and planning of particular problems.
Inventory Reset	Inventory Reset	Rule for deciding priority after investigating whether each chemical substance accommodated in the TSCA inventory is active or inactive in US markets before a risk evaluation is implemented by the US Environment Protection Agency.

Editorial Policy

"JCIA Annual Report" is published to widely publicize the activities of JCIA to stakeholders including members. We aim at creating an easily understandable report by summarizing into one page cross-sectional activities of JCIA such as activities as members of international society and human resources development activities. In addition, "JCIA Annual Report Material Version," which introduces various data and efforts regarding the activities of JCIA, will be published in the fall.



Access Information

Kayabacho St. (Tokyo Metro Hibiya Line, Tozai Line)
 Approximately 3 minutes on foot from Exit 1 or Exit 3
 Hatchobori St. (JR Keiyo Line)
 Approximately 8 minutes on foot from Exit B1

Contact

General Affairs Dept.

TEL 03-3297-2550
 FAX 03-3297-2610

International Affairs Dept.

TEL 03-3297-2576
 FAX 03-3297-2612

Labor Dept.

TEL 03-3297-2563
 FAX 03-3297-2606

Environmental Safety Dept.

TEL 03-3297-2568
 FAX 03-3297-2606

Responsible Care Promotion Dept.

TEL 03-3297-2583
 FAX 03-3297-2615

Dream Chemistry 21 Committee

TEL 03-3297-2555
 FAX 03-3297-2615

Public Relations Dept.

TEL 03-3297-2555
 FAX 03-3297-2615

Industry Dept.

TEL 03-3297-2559
 FAX 03-3297-2606

Technical Affairs Dept.

TEL 03-3297-2578
 FAX 03-3297-2606

Chemicals Management Dept.

TEL 03-3297-2567
 FAX 03-3297-2612

SDGs Office

TEL 03-3297-2583
 FAX 03-3297-2615

Chemical Product PL Consulting Center

TEL 03-3297-2602
 FAX 03-3297-2604

ANNUAL REPORT 2019

JCIA



Japan Chemical Industry Association

7F Sumitomo Fudosan Rokko Building, 1-4-1 Shinkawa, Chuo-ku, Tokyo 104-0033
 TEL 03 3297 2555 FAX 03 3297 2615



<https://www.nikkakyo.org/>

October 23 is
Chemistry Day



Nikka-chan:
 JCIA's official character



This report was printed using processes and materials that are considerate of the environment. Energy-saving UV printing was used, as has low-VOC ink that releases only tiny amounts of volatile organic compounds into the atmosphere.