



# With Our Employees

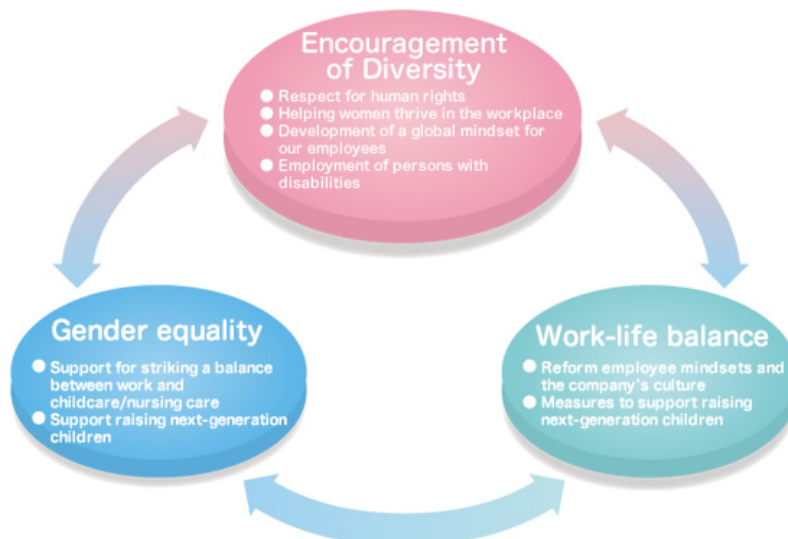
A company is nothing without its people. Nippon Kayaku respects the human rights of each and every employee, and strives to offer a workplace environment that offers peace of mind to employees. Our goal is to be a company where employees can grow personally and professionally through work and feel a sense of motivation in what they do.



## Message from the Head of Administration Group

In order to realize the **KAYAKU spirit**, the Nippon Kayaku Group has developed a number of innovative systems and programs so that all employees can fulfill their individual responsibilities and roles with a sense of pride and self-confidence as key implementers of this vision. Our position class system, implemented 20 years ago, makes it possible to deploy and compensate human resources without focus placed on age, gender or academic history. The number of females promoted to manager positions also continues to increase with each passing year thanks to our appointment system that encourages a self-starter spirit and desire to take on challenges, and does not consider gender. Moreover, we are actively promoting diversity. This includes the re-hiring of nearly 100% of our employees who reach mandatory retirement age since the start of our senior partner program and supporting the employment of persons with disabilities through partnerships with schools for the disabled. Meanwhile, our business continues to become more global in nature. In line with this growth, we provide pre-departure and post completion training for expatriate employees and systemically carry out training for locally hired staff.

Moving forward, we will continue to develop systems with new, innovative thinking, unbound by conventional approaches or practices respecting human rights, so that we can respond flexibly to the changing business climate.



## Diversity & Inclusion

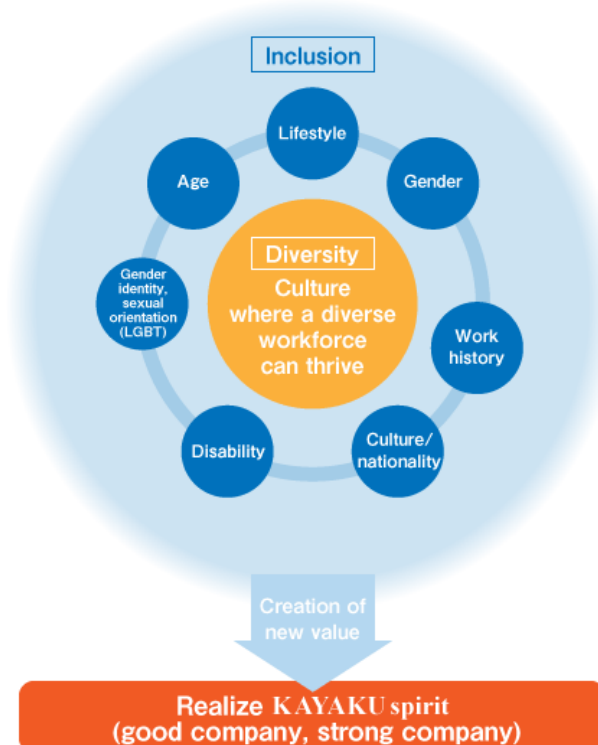
### Approach to Diversity & Inclusion

The Nippon Kayaku Group aims to be a company with a work environment and atmosphere that can maximize people with differing personalities and values and where every employee can work enthusiastically with a feeling of fulfillment and that work is a worthy pursuit.

This means bringing about the sustainable growth of CSR management (i.e., the **KAYAKU spirit**) by creating a virtuous cycle of productivity improvement through human resource development and the creation of new corporate value through SDGs for our business.

Diversity and inclusion means a revolution in the way we work. With these initiatives as an impetus, we will succeed in becoming a company that is trusted by society and a company that is strong and good.

### Approach to Diversity and Inclusion



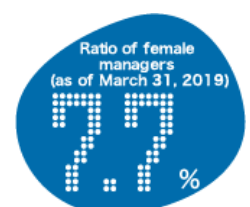
### Encouraging Diversity

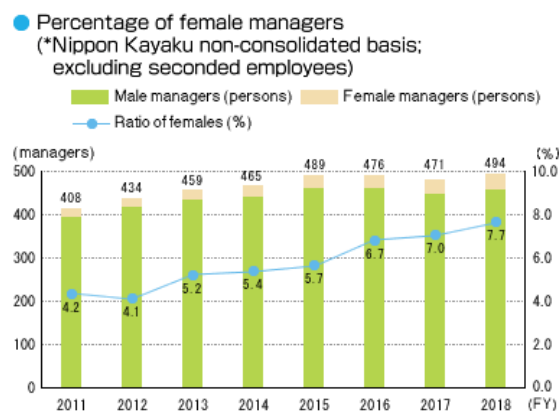
#### ■ Nippon Kayaku Group's Personnel System

We have adopted the position class system as our personnel system which enables assignments and compensation not tied to age, gender, career or academic history. This system marks the 20th year. This system focuses evaluations on a person's roles and responsibilities. The same system is also used for managerial employees. Therefore, promotions to the managerial level can be achieved regardless of age, gender, academic history or career. As a result, the number of female managers continues to grow with each passing year.

### Helping Women Thrive in the Workplace

The appointment of female managers is one aspect of the results of our initiatives to encourage diversity in the workplace. The ratio of our female managers increased to 7.7% as of the end of March, 2019 (7.0 in previous year). We will continue with our efforts to encourage the greater involvement of women in the workplace, with a goal to increase the percentage of female managers to 8% by the year 2020.





## Employment of Persons with Disabilities

Nippon Kayaku employs people with disabilities. As of the end of March, 2019, 55 people\* with disabilities are working with us (1.9% of total employees). Society demands that we move swifter in hiring persons with disabilities and so in the future we will strengthen our efforts and continue to actively hire persons with intellectual disabilities wherever possible.

\* One part time employee is included.

## Re-employment of Employees after reaching Mandatory Retirement Age (senior partners)

In April 2006, we launched the Nippon Kayaku Senior Partner Program as a way to rehire employees who reached their mandatory retirement age. This program is intended to provide a place of work after retirement for former employees who are in good mental and physical health, are motivated to continue their career, and who can contribute their past career experiences and know-how. Participants are asked about their requested workplace, work duties and employment format, and since adopting this system we have been able to meet the requests of nearly 100% of participants who are rehired. Most of these participants continue on working until the age of 65. There are 153 reemployed persons working for Nippon Kayaku as of March 31, 2019.

## Development of Global Human Resources

As one of our efforts to promote diversity, we provide employees in Japan as well as at our overseas group companies with opportunities to thrive in a global environment. We also strive to develop our employees' language abilities by offering study-abroad programs, short-term intensive English programs and company-wide TOEIC test. Moreover, we provide employees assigned overseas as expatriates with training programs on various subjects including cross-culture training. In addition to the training programs, we will keep making efforts to develop global talent by means of promoting personal interactions between business units in Japan and overseas group companies and also enhancing our support to experience various cultures and business environments.

In fiscal year 2017, Nippon Kayaku had foreign staff transferred from our overseas group companies to the head quarters. In order for the transferees to accustom to the Japanese lifestyle and culture smoothly, we held various orientations and prepared English version of the related regulations. This has been one of our efforts aimed at our commitment to further develop global human resources.

### More active role for women in the workplace

I joined Kayaku Safety Systems Europe a. s. as an HR Specialist in 2000.

At that time, KSE\* had 107 employees, and there were only two female managers at the company. The company currently employs 1,076 people, of whom 539 are women, and 4 women are in management positions, including me. In addition to these management positions, 10 women hold Group Leader positions in Administrative Division and Team Leader positions in the production department. The diversity of the work teams is key to the balance and healthy development of the company.

We know that working in the production area with continuous shift operations is strenuous for women; however, we regularly hear from our women that they value the stability and personal development care that our company offers. What our female employees



Kayaku Safety Systems Europe a. s.  
Jitka Simarova

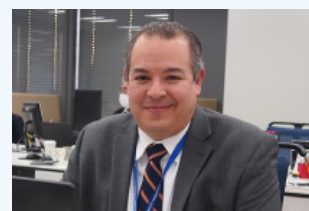
mainly want are good working conditions and work–life balance. In HR, we support the integration of women returning to work from maternity leave, so we currently offer part–time positions at selected workplaces for women with young children. Personally, I think that there are still not enough women in leadership positions. That is why I am pleased every time one of my female colleagues is promoted to a leadership position.

The world is full of strong and independent women who motivate us. In my opinion, being strong does not mean being flawless, unafraid, and without any self–doubt. I think it means being able to deal with and accept one’s own shortcomings and being aware of one’s own value and expectations of life.

※ KSE: Kayaku Safety Systems Europe a.s.

## Global exchanges

My name is Jorge Montes. After my involvement in setting up the plant of Kayaku Safety Systems de Mexico., S.A. de C.V. (KSM), I spent ten years on continual improvement activities with regards to quality and manufacturing. In June 2017, I was assigned to the Nippon Kayaku head office as a member of the Global Quality Project Team led by the Quality Assurance Division of the Safety Systems Group.



Jorge Montes, Safety Systems Group

Outside of work, my family and I have opened our hearts to the totally new world of Japan and its completely different living environment. We are learning Japanese as well as visiting various places, and our interactions with people’s kindness along the way is an experience we cherish above all else.

I’m often asked, “What is your staple food? Can you buy it in Japan?” I always answer “Tortillas, and yes I can buy them in Japan.”

In closing, we have the chance to make the Nippon Kayaku Group better on a daily basis. Let’s be drivers behind change in each of our positions under the motto, “Everyone has a place in the driver’s seat”※.

※ “Everyone has a place in the driver’s seat”: take the lead in taking action from the driver’s seat(D–seat)

## Expanding Programs for Gender Equality

The Nippon Kayaku Group is expanding in–house programs for gender equality and encouraging their utilization. In terms of our Next Generation Childcare Support measures, we have rolled out various programs that exceed legal requirements, beginning with our childcare leave program. While percentage of childcare leave use for female employees was 100%(26 employees), that for male employees was 9.3%(4 employees) from April 1, 2017 to March 31, 2018.

Also, percentage of reinstatement after childcare leave was 100% for both male and female employees, we will seek to develop a workplace culture that encourages male employees to participate in childcare.

### Special Paid Leave Program

The Special Paid Leave Program enables employees to set aside annual paid leave that will expire if not taken within a two year period and use it for nursing care obligations, training, volunteer work, infertility treatments, or to donate bone marrow. No complicated procedures are required to use this program, as employees simply have to apply by providing supporting proof for their activity. In addition, even after using the program once, employees can continue to accumulate paid leave to the maximum number of days for employees’ convenience.

Also, starting this fiscal year, in response to childcare and nursing care needs, employees are now allowed to take half–day leave as part of nursing care leave for adults or children.

※1 Nursing care for a spouse, relative within the second degree, and uncles or aunts: employees permitted to take up to 10 days in half–day increments

※2 Nursing care for a child: employees permitted to take in half–day increments (up to 10 days)

●Special Paid Leave Program	
Applicable Uses	No. of Days Allowed
To receive treatment of an injury or illness that requires at least 4 consecutive days of care To receive outpatient services for rehabilitation or aftercare (within the stated period on the physician-issued medical certificate)	Up to 60 days
To provide nursing care to an immediate family member, aunt or uncle	45 days
To participate in a training program or volunteer activities	30 days
Leave in conjunction with the use of active points from the Nippon Kayaku Cafeteria Plan	5 days
To take leave in order to receive a vaccination or medical exam for a child of preschool age	5 days
To receive fertility treatments	60 days
To allocate additional days to childcare leave	10 days
To allocate additional days to leave for providing care to a sick child	10 days

**Better Management of Employee Work Hours**

With regards to compliance and mental health, the Nippon Kayaku Group strives to properly ascertain employee work hours and conditions, to take action where needed, and to manage working time properly by cooperation between employees and management. Additionally, from the perspective of enhancing work-life balance, starting last fiscal year we have reduced the total working hours by 7.5 hours and implemented work-style innovations to change the way employees think in an effort to increase productivity and create added value. We will now look to further reduce overtime hours and increase the percentage of paid leave taken.

To increase the rate at which paid leave is taken, we have established the new anniversary paid leave system and taken other measures to encourage employees to use their paid leave days. To reduce overtime, we need to change our workplace culture and change the way employees think (work-style innovation). As a result, we are improving work-life balance along with aiming to increase operational productivity and create added value. Additionally, the Nippon Kayaku Group employs workers in various formats, including rehired seniors (senior partners), contract workers, and part-time workers. We are now working to develop various training and systems for these different formats in response to the growing diversity of our workforce.

**Work-life balance**  
(Nippon Kayaku non-consolidated basis)

	FY2014	FY2015	FY2016	FY2017	FY2018
Total working hours	1852.25	1852.25	1844.75	1844.75	1844.75
Overtime hours *Average monthly hours per employee	12.8	12.4	12.3	12.8	13.3
Number of paid leave days taken	10.5	10.6	11.5	11.0	11.3
Ratio of paid leave days taken	55.1%	58.6%	62.7%	59.2%	61.1%
Employees taking childcare leave (males)	1	0	4	4	13
Employees taking childcare leave (females)	17	20	27	26	37

**On Taking Childcare Leave,  
"What I Realized By Stepping Away from Work and Concentrating on Childcare at Home"**

We don't have any relatives nearby that we can ask for help, so in September 2017, I took a half-year of childcare leave so that I could relieve my wife, who was busy with our newborn second child, and help keep our first child (then three years old) happy. During this time, I was able to spend quality time with my wife watching our second child grow (and cry) on a daily basis, and our first child getting used to and growing up in a new and perplexing environment. These days with my family were even happier than ever before, and at the same time, made me realize how much work it is to spend 24 hours a day with children. In addition, I also realized that our older child has been supporting us as well, by doing his best at daycare and allowing the both of us to go to work. By allowing me to step away from my job and focus on childcare and housework, childcare leave has given me new insights and was a very valuable life experience for me. Although I realize that my work colleagues were very inconvenienced by my absence, I deeply appreciate their support during my absence and warm acceptance upon my return.



Koji Mazaki, Planning & Coordination Division  
Functional Chemicals Group

**Taking Childcare Leave**

I returned to work in July 2017 after taking childcare leave for the second time. I am currently working reduced hours so that I can drop off and pick off my children from daycare. This enables me to pursue my career seamlessly while still spending time with my children.

After giving birth, I was worried about whether I could continue working. However, during the course of my approximately one-year leave, my workplace contacted me to update me on the latest situation, which made the transition back to work smooth. The company offers a wide range of leave programs, so my husband was able to take a short child-care leave. It was really encouraging for us to be able to share the workload so to speak during the really difficult phase of childcare. I feel like the environment is gradually changing so that men, too, can take childcare leave. Sometimes I feel like I'm inconveniencing my workplace when I have to take a day off because my children aren't feeling well. I'm really grateful that everyone at work accepts this and kindly asks how my children are doing.

Since taking childcare leave and returning to work, I'm once again keenly aware that balancing work and childcare everyday with a smile is only possible with not only a wide range of leave programs, but also the understanding and support of people in the workplace and the support of family. I hope to grow as a member of society and as a mother, always remembering to appreciate those around me.



Hiromi Takimoto, Administration Department, Fukuyama plant

## Development of Human Resource

### Training Programs

Various training programs are provided to employees according to their jobs positions. These comprehensive training programs are conducted so as to develop the skilled workforce that will lead Nippon Kayaku in the next generation.



Training programs

#### Mandatory Programs

In order to systematically develop the skills of the employees, training is imparted to the employees start immediately upon their joining the company. This is followed by mandatory programs after durations of one year and three years. Training programs are also conducted for mid-level employees in accordance to their job types and positions and matching their job work performance. We support our employees to make new steps forward to develop practical skills based on the changes of their roles and competences.

#### Voluntary Programs

A wide array of voluntary training programs is also available. These voluntary programs are tailored to specific employee characteristics and jobs. They facilitate self-improvement and boost the job-related problem-solving abilities and business skills of the employees.

#### Selective Program

A program providing special leadership and management training is also available for the next generation promising candidates who are recommended by the superiors.

	By level		By job type		Elective programs		
	University graduates	High school graduates	MR	Researchers & Engineers	Technical	Managerial	Global
Junior and mid-career employees	New employee orientation		Pharmaceuticals training Part 1 and 2	Introductory information research	Introductory information research		International business managers support
	Post first-year training		Follow-up	Introductory patents	Introductory patents		Introductory English
				Intermediate patents	Intermediate patents		Intermediate English
Leaders and managerial staff	Third year training			Documentation	Documentation		Advanced patents
	Career presentation	Post third-year training		Marketing	Marketing		Short-term study abroad
			Interpersonal skills MR	R&D Training program	Logical communication		
	Mid-career employees training		Cancer specialist MR training		Problem solving methods		
	Networking with other industries		Training for new managers and group leaders	Training for managers and group leaders	Management simulations		
	Self-improvement seminar				Interpersonal skills		
	Business leader development				Mandatory programs		
	Newly appointed E-class employee training				Elective programs		
	Senior manager training				Medical Representatives Training & Education Dept.		

### Passing down Technologies from Veteran Senior Employees to Junior Employees Initiatives of Fukuyama Plant

The Fukuyama Plant is manufacturing of functional materials and pigment materials. As of October 2014, some 70% of its workforce was under the age of 40, and when many of its core employees reach retirement age five years from now the company's employees in their 20s and 30s will need to take the reins and drive the company forward. For this reason, Fukuyama Plant



Workshop about the basics of cost price as well as profit and loss

faced the urgent task of passing down its technologies and establishing a solid foundation of knowledge among its young employees before its veteran senior employees reached retirement.

To overcome this issue, the Fukuyama Plant worked on developing a new training program that would allow younger employees to obtain a comprehensive overview of the plant's functions. This in-depth three-year program consists of 49 curriculums and administered to employees based on their career stage. The company set up an effective organizational structure for this program involving the entire plant by establishing a cross-functional working group to come up with the curriculum and instructors.

The program was launched in 2014. Section heads, team leaders and other mid career employees headed up efforts to create the curriculum so that newly hired employees can learn a broad range of skills over a period of time. Through this training, the plant's vertical threads and horizontal threads are able to mesh, creating a sense of solidarity that transcends age. The program is now being implemented under a new three-year plan established for fiscal 2017 and beyond. The know-how gained from the program will be shared with other business sites as a way to develop the human resources who will underpin the Nippon Kayaku Group in the future.



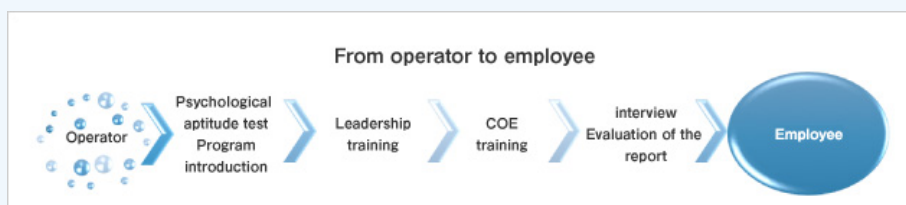
Members of the training system development team at the Fukuyama Plant

### Kayaku Safety Systems de Mexico, S.A. de C.V. (KSM) COE 2<sup>nd</sup> Generation\* (Change from Operator to Employee)

KSM launched the COE 2nd Generation Program in September 2017. COE is a program in which the operator is trained to become a supervisor (employee level). Since September 2017 we carry out trainings based on leadership skills. The purpose of the program is to make those program members aware of their new responsibilities and how to supervise the operators. The subjects included in the program are: teamwork, effective supervision, labor union, emotional intelligence, communication and conflict management. Now we are in the final process of the program, which is internal training on different topics (safety and human resources). We plan to finish on May 2019, evaluating all the participants to know their performance and effort made in the program and in their daily work at KSM. At the end of the program a graduation ceremony will be carried out.



- \* COE 2<sup>nd</sup> Generation Program participants
- COE: change from operator to employee
- Operator (day worker; format of employment in Mexico)
- Employee (monthly worker; format of employment in Mexico)



### General Business Operator Action Program under the Act for Measures to Support the Development of the Next Generation

We submitted our Action Plan for Measures to support the Development of the Next Generation action plan (from April 1, 2018 to March 31, 2020) to the Tokyo Labor Bureau for approval on April 1, 2018. We will now work to obtain Platinum Kurumin certification as quickly as possible.



Kurumin logo

## Encouraging the Creation of Intellectual Properties

Nippon Kayaku develops its businesses and contributes to society by producing useful products through the creation and utilization of intellectual properties. To encourage the creation of intellectual properties, we have established several programs to reward employee inventions, with both monetary awards and commendations presented annually.



### ■ 1. Performance Award Program and Invention Award Program

Our performance award program provides remuneration to employee patents that have contributed to sales. This program was initiated under the company's rule on the handling of employee inventions first prepared in 1963. This rule was created based on the provision of Japan's Patent Act and hence has been changed over the years with each modification to this law.

Researchers receive a certain percentage of the sales and licensing fees for each business year and retired employees, too, are eligible for such payments.

Employees responsible for inventions or patents that contribute particularly to society and sales are eligible to receive a lump sum payment, which incentivizes the creation of intellectual properties.



### ■ 2. Early Performance Contributions

Even for patents pending, if an invention has already made contributions to the performance of the Nippon Kayaku Group, the employee can receive remuneration known as an early performance contribution. This particular program was initiated in 2005 to properly recognize product inventions with a comparatively shorter lifecycle. This program serves to complement the previously mentioned Performance Award Program, and the fact that employees are eligible to receive payments based on sales for patents not yet registered makes for a very advanced program in the corporate world.

### ■ 3. In-house Commendation for Excellent Technologies

At the Company-wide Research Presentation Conference held every year in July, a commendation ceremony is held for employee inventions that have been patented or are patent pending during which time talented inventors are presented with monetary prizes and awards. These awards include the R&D Director's Award, presented at the recommendation of each laboratory head, Patent Pending Award, for inventors with many patents pending, and the Best Invention Award, recognizing highly advanced technological innovations. Recipients of the Best Invention Award are asked to present a lecture.

## Promoting Health Management

The Nippon Kayaku Group reviewed its Declaration on Environment, Health and Safety, and Quality in 2017 and as a result, decided to add an item on health. Employee health is an essential element in any company's prosperity and helps to enhance stakeholder satisfaction at the same time. For this reason, we are implementing various activities for not only preventing exposure to chemical substances handled during work, but also aimed at mental health care and reducing lifestyle diseases.

### Promotion of Health and Productivity Management

All employees of the Nippon Kayaku Group receive regular health exams, which form the basis for the health and productivity management. After undergoing an exam, employees meet with an industrial physician to receive advice and guidance on how to manage their health.

In addition, employees who handle designated chemical substances receive special health exams. Furthermore, we have created a database of hazardous chemical substances handled in the workplace, which is utilized to help prevent occupational diseases.

Each workplace implements a THP\* for building mental and physical health in order to maintain and improve employee health. The goal is to encourage employees to review their lifestyle habits and promote continuous and systematic health improvement from a young age to ensure a healthier lifestyle. Specifically, physical fitness measurement, health management contests, walk rallies, hiking and other programs are being organized.



In February 2019, Nippon Kayaku Co., Ltd. was recognized in the large enterprises category of the 2019 Certified Health & Productivity Management Outstanding Organizations Recognition Program(White 500) after undergoing an evaluation of its employee health promotion initiatives.

- ※ Total Health Promotion Plan (THP) is a program that utilizes that P-D-C-A cycle involving "health promotion plan," "health assessment," "health advice," "practical activities" and "improving lifestyle habit and invigorating the workplace."

### Receiving Recognition under the 2019 Health & Productivity Management Outstanding Organizations Recognition Program (White 500)

Nippon Kayaku has been evaluated as a company that takes strategic initiatives for managing employee's health from a business standpoint, and it has been recognized in the large enterprises category of the 2019 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500<sup>※</sup>).



The company has traditionally offered many programs to maintain and promote employees' health, including stress checks, training sessions on mental health, and maintaining 100% participation in health exams. For this recognition, the Company was evaluated for its health promotion programs, including how it determines which initiatives to take, its initiatives for improving the results of health examinations, measures dealing with passive smoking, and health promotion events for all employees. In particular, our initiatives to improve the results of health exams include having everyone with a diagnosis consult with an industrial physician, and the Health and Safety Committee is getting advice from industrial physicians on how to link health improvements with items for which diagnosis ratios are high. We believe that promoting employees' health is indispensable to the company's prosperity and to increasing our stakeholders' satisfaction, and we will remain proactive about health management going forward.

- ※ White 500 is a nickname for certified companies in the large enterprises category, which includes large corporations and medical institutions, of the Certified Health & Productivity Management Outstanding Organizations Recognition Program, a recognition program set up by the Ministry of Economy, Trade and Industry in 2016.

## ■ Mental Health Initiatives

To balance improvements in operational productivity with the creation of added value, employees need to have workplaces where they can thrive and also be in good mental and physical health.

The President of Nippon Kayaku issued a Mental Health Declaration in 2005 and since then we have provided thorough guidance to managers on the subject. Mental health care requires that all employees have the correct knowledge and understanding to ensure they can prevent or detect mental health issues at an early stage. We focus the greatest efforts on mental health issue prevention.

As a concrete example, we invited a speaker from our contract EAP<sup>※</sup> to lead a mental health care training program mandatory for all employees to take part in at least once that was set up on five occasions – in fiscal 2005, between fiscal 2006 and 2008, between fiscal 2009 and 2011, between fiscal 2012 and 2014 and between fiscal 2015 and 2017.

And we formulated a new three-year plan in fiscal 2018 and all employees are currently undergoing necessary training.

In addition, with regard to obligations under the "Stress Check System" of the Occupational Safety and Health Act implemented on December 1, 2015, we already established the "Stress Check System", which is scheduled to once every year for all the employees.

- ※ EAP is an acronym for Employee Assistance Program.

## Health Improvement Initiatives at Business Sites

### ■ Responses at Business Sites without a Statutory Industrial Physician

Nippon Kayaku employee working at branches and business offices not required to appoint an industrial physician<sup>※</sup> were unable to receive follow-up by an industrial physician after undergoing statutory health exams or adult disease exams of the KAYAKU Health Insurance Association administered at the main business hub for each region. As a result, in fiscal 2013, after examining how to provide follow-up at branches and business offices without an appointed industrial physician, we decided to dispatch the industrial physician of the head office to meet with these employees directly. Starting from fiscal 2014, the head office's industrial physician began annual visits to branches and business offices nationwide, from Sapporo in the North to Fukuoka in the south. The industrial physician reviewed the results of health exams before visiting and then selected certain employees for follow-up interviews. These employees meet with the industrial physician at a nearby location or by telephone conference. Because one year was spent covering all of Japan, on some occasions the health



exam results of the previous year were used as a basis for interviews, instead of the results of the health exam taken in the same fiscal year of the visit. As a result, we determined an annual itinerary for industrial physician interviews and adjusted the timing of health exams accordingly to ensure that interviews are based on the latest health exam results.

※ Branches and business offices not required to appoint an industrial physician: Business sites that employ less than 50 workers are not required to appoint an industrial physician as per the provisions of Article 13 of the Industrial Safety and Health Act and Article 5 of the Order for Enforcement of the Industrial Safety and Health Act.

### Kowa Sangyo Co., Ltd. Health Promotion Project

Kowa Sangyo Co., Ltd. has been implementing a health improvement project since 2015 aimed at maintaining and improving employee health. The project team comprises representatives from each department and members from the Environment and Security Department. Its activities focus on support based on the fundamental precept of "health equals safety" indicating employee health is an important component of safe work.

The main initiative involves monthly self-assessments based on a health improvement challenge established by all employees for taking action to reduce or prevent certain lifestyle habits found in regular health exams. In addition, the project also held lectures called health outreach classes on lifestyle diseases and smoking with the cooperation of the city's Health Improvement Section, and organized events for employees including health checks (vascular age and 7 other items) and a walking event. The project also raised awareness through a regular article in the company newsletter about health. In the three years since the start of the project, employee awareness of health has increased and employees are now taking voluntary actions, with health exam results improving, too.

Specific results from this project include a 4.1% reduction in employees requiring follow up and a 2.0% reduction in employees that smoke.



### Kayaku Safety Systems de Mexco, S.A. de C.V.(KSM) 1kg Weight Loss Program

KSM started the program "Bájale 1 kilo menos" in 2014, due to the "Chécate, Mídete, Muévete" campaign promoted by the Mexican Institute of Social Security, which promoted physical activity and a balanced diet to avoid overweight, obesity and other health problems.

The "Bájale 1 Kilo Menos" program promotes a healthier lifestyle in nutrition. The tenth season was held during 2018, in order to continue improving the habits of the participants, preventing diseases related to lifestyle and generating health and emotional well-being.



"1 Kilo Menos" Program	2017		2018	2019
	8th	9th	10th Feb - Jun	11th Feb - Jun
Target weight (kg)	629.40	573.40	678.50	Undergoing
Number of participants (persons)	100	91	91	//
Participation rate (%)	25%	22%	22%	//
Number achieving target (persons)	7	12	10	//
Participant achievement rate (%)	7%	13%	11%	//
Total weight loss (kg)	141.20	98.30	115.00	//
Total waist loss (cm)	497.75	89.10	545.30	//

※ KSM : based on Mexico, supply of the automotive and automotive components

Click to show the other activities

- Kayaku Safety Systems de Mexico. S.A. de C.V.  
 Opening of Futsal Court
- KAYAKU CHEMICAL (WUXI) CO., LTD. (KCW)  
 Lectures on Health Check-ups at KAYAKU CHEMICAL (WUXI) Co. Ltd.

## Initiatives for Health and Safety

The Nippon Kayaku Group is committed to promoting initiatives for occupational health and safety aimed at completely eliminating accidents and injuries in the workplace. This includes developing a system for safety training, implementing safety training on a company-wide scale, preventing accidents and injuries before they happen, and conducting health promotion programs.

### Safety Performance (targets and results)

The Nippon Kayaku Group has set targets for safety performance based on the following categories: serious accidents and injuries, serious environmental incidents, lost worktime accidents, non-lost worktime accidents, motor vehicle accidents, and non-injury related accidents. With regard to motor vehicle accidents, starting in fiscal 2016, we have subdivided this category further into the following sub-categories: serious accidents, personal injuries, property damage, and self inflicted injuries for incidents counted with a separate target per subcategory, in order to analyze incidents and facilitate preventive measures.

#### 1. Safety Performance (results)

The safety performance of Nippon Kayaku business sites as well as all group companies inside and outside Japan during fiscal 2018 is presented below.

● Fiscal 2018 Safety Targets and Performance

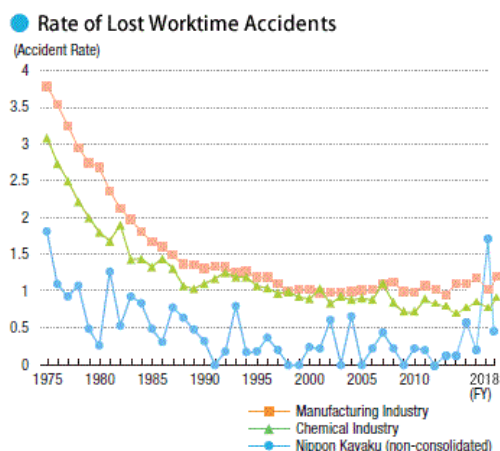
Items	Target	Actual	Group companies
Major injury / Accidents	0	1 cases	0
Serious environmental accidents	0	0	0
Lost worktime accidents	0	1 cases	10 cases
Accidents not accompanied by lost worktime	Rate of lost worktime accidents <sup>※1</sup> of under 1	1,15	-
	Less than 5 cases	9 cases	5 cases
Non-injury related accidents	0	0	10 cases
Work-related automobile collisions <sup>※2</sup>	Serious accidents	0	1 cases
	Personal injuries	0	1 cases
	Property damage	Less than 3%	4.8 %
	Self inflicted	Less than 3%	5.8 %

※1 Frequency rate of lost worktime accidents: It expressed in terms of numbers of deaths of injuries in industrial accidents per 1 million work-hours in the aggregate.

※2 Work and commute-related automobile collisions: Only applicable to MRs using company-owned vehicles belonging to the Pharmaceuticals Group.

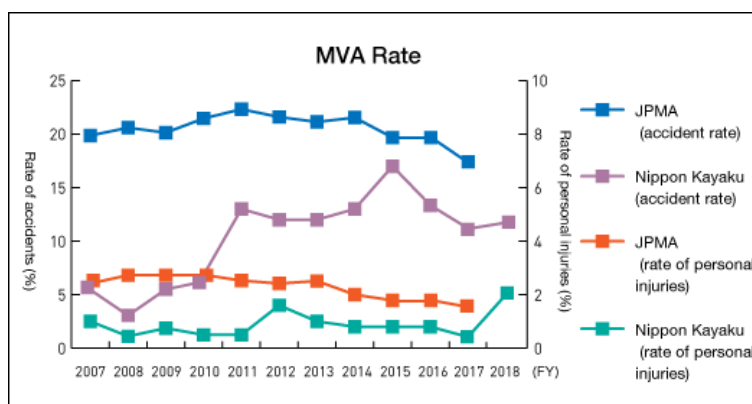
#### 2. Graph Comparison of frequency rate of Lost Worktime Accidents

The frequency rate of lost worktime accidents in fiscal 2017 greatly exceeded the rate observed by the manufacturing industry and chemicals industry. As a result, we decided to institute workplace patrol activities (fixed-point observations) with the goal of pointing out unsafe actions in order to prevent accidents and injuries during non-regular work. We will continue to strengthen this activity in fiscal 2018.



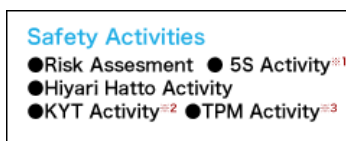
### 3. Efforts to Prevent MVA

While the rate of motor vehicle accidents at the Nippon Kayaku Group is lower than that of the Japan Pharmaceutical Manufacturers Association, our rate has remained somewhat elevated since fiscal 2011. Starting in fiscal 2016, we have added seminars at corresponding driving training centers as a new measure against motor vehicle accidents. Going forward, we aim to further reduce motor vehicle accidents.



## Health and Safety Activities at Each Business Site

We define the health and safety policy and targets, and we are undertaking a wide range of health and safety activities at our business sites.



※1 5S Activity: An acronym of five Japanese words phonetically starting with the letter "S".

※2 Kiken Yochi Training (KYT): Danger Prediction Training.

※3 Total Productive Maintenance (TPM): Activities that maintain equipment and facilities in good working order to ensure safety and maintain productivity.

### 1. Conducting Safety Assessments (Risk assessment, understanding potential risk factors)

Each of our business sites performs safety reviews for new processes and facilities and whenever changes are made to existing processes and facilities. And we implements "Risk Assessments" in order to prevent business sites accidents, injuries, environmental accidents, complaints and quality issues. Risk factors in chemical reactions are analyzed primarily based on HAZOP.\*

\* HAZOP: Hazard and Operability Study. A safety evaluation methodology used at chemical plants. Potential hazards associated with chemical reactions can be comprehensively extracted for evaluation.

### 2. Elimination of Shortcuts and Omissions

Accidents that have occurred within the Nippon Kayaku Group in recent years have tended to result from shortcuts or omissions. As a result, the Nippon Kayaku Group is working to share safety awareness across different workplaces by distributing work flow checklists to help eliminate shortcuts or omissions, having employees issue a safety declaration to prevent shortcuts and omissions, as well as displaying this safety declaration clearly in each workplace.

### ■ 3. Traffic Safety Initiatives

Many Nippon Kayaku Group employees drive a car as part of their work duties or to commute to work. We perform safe driving reviews using a camera-equipped drive recorder <sup>※1</sup>. And using the driving aptitude test approved by the National Police Agency <sup>※2</sup>. From now on, we will further strengthen the education of new employees in practical skills and engage in reducing traffic accidents.

- ※1 Camera-equipped drive recorder: A recorder that can analyze bad driving habits, such as sudden acceleration, sudden braking, and sudden turns using sensors for front/back and right/left acceleration, gyrocompass and GPS system.
- ※2 Driving aptitude test approved by the National Police Agency: An exam that measures the aptitude of driving based on seven written questions covering 11 topics, including decision making skills, ability to prevent collisions, and mental stability test.

### ■ 4. Deployment of AEDs

Driving aptitude test approved by the National Police Agency: A driving aptitude test that measures driving ability based on responses to seven questions covering 11 items including situational awareness, collision prevention ability, and mental stability, among others.



AED training

### ■ 5. Fire Response

Each business location is equipped with a fire truck, fire hydrant, and fire extinguisher for chemical substances in preparation for potential fire hazards. In addition to holding onsite training, employees also participate in local fire fighting competitions at which they have achieved strong results.

[> Related Articles](#)



Firefighting training

### ■ 6. Natural Disaster Response

As a precaution for earthquakes and other natural disasters at each business sites, we have compiled the Employee's Handbook of Disaster (Earthquake) Prevention and distribute it to each and every employee. This handbook contains instructions on emergency response when an earthquake occurs, how to make contact and confirm one's safety, and alternative methods to reach home when public transportation is unavailable.

Employee safety during a disaster is monitored by a safety reporting and communication system that uses email. As an earthquake strikes, the disaster response headquarters will send out an instruction by email to all employees. Employees can reply to the email by a simple touch of a button, which allows data to be collected. This system will be used to confirm employee safety during an earthquake of a seismic intensity of 6 or higher in Japan.

#### **Kashima Plant** Improving Operator Skills through the Forklift Certification Program

There was a time when there were frequent occurrences of near misses involving forklifts at the Kashima Plant. The following initiatives were undertaken in an effort to prevent accidents before they happened with the goal of improving the skills of forklift operators.



##### (1) Initiatives for improving skills

All forklift operators were required to take a practical skills short course led by an outside instructor covering the basics of forklift operations and approaches to operator skills and educational guidelines.

(2) Introduction of operator certification program

Only those who passed the certification exam are allowed to operate forklifts (certification lasts for six months).

(3) Environmental improvements

A permanent training course was set up so that operators can practice and take practical exams at any time.

(4) Analysis of driver techniques

An omnidirectional driving recorder was installed on all forklifts to analyze operator conditions and habits using video footage.

These initiatives have helped to drastically reduce the number of near misses involving forklifts. The Kashima Plant will continue to use this certification program in order to prevent accidents before they occur.

**Kowa Sangyo** We are promoting safety experience education using Esperanza (safety experience equipment).

Kowa Sangyo mainly carries out contract manufacturing work for Nippon Kayaku's Asa Plant. Kowa Sangyo conducts interactive safety training using equipment they have fabricated to provide employees with a greater sense of the importance of safety in accordance with its policy of placing safety as a top priority.

This equipment was given the name Esperanza (or hope in Spanish) because this was the same name given to the child born to a worker who was buried alive with 33 others in the 2010 Copiapó mining accident in Chile only to be rescued 69 days later miraculously along with all the missing workers.

The manufacturing floor involves work that carries with it an element of danger. Therefore, Kowa Sangyo is always heightening its awareness of safety, learning from past accidents and near misses, including through safety training. As part of these efforts, Kowa Sangyo uses Esperanza to simulate actual dangers to enable its employees to experience the scariness of accidents and reaffirm the importance of working safely. At the same time, interactive safety training enables employees to learn the correct usage of tools and the basics about equipment and component names, which helps to prevent accidents before they happen and to train employees about how to respond to accidents if they do occur.

All safety training equipment was created in-house. Also, the safety experience room makes use of an idle room, which was renovated, repainted and installed with unused work tables and equipment, making this learning lab completely homemade from reused equipment.

Learning with these interactive safety equipment helps to reaffirm dangers on the manufacturing floor, educating not only new employees, but veteran employees, too. Currently, Kowa Sangyo has nine kinds of equipment, which are also used by other workplaces for safety training. Kowa Sangyo will continue to further enhance these offerings so as to aid the safe operations of the Nippon Kayaku Group and train employees who are well versed in safety knowledge.



Click to show the other activities

Polatechno Interactive Training on Getting Caught in Machinery ▼

Kayaku Safety Systems (Huzhou) Co., Ltd. (KSH) Introduction of ISO 14001 and OHSAS 18001 Systems ▼

WUXI POLATECHNO OPTICS CO., LTD. (WPLC) Introduction of OHSAS 18001 System ▼

Kayaku Safety Systems Europe a.s. (KSE) ▼

## Labor Union/Management–Labor Relations

On June 1, 1998, Nippon Kayaku Co., Ltd. and the Nippon Kayaku labor union entered into a labor agreement "based on good faith and trust, in order to acknowledge the social significance and responsibilities of industry and labor, to mutually respect the each other's rights based on the spirit of the labor laws, and to establish stable and peaceful relations between management and labor." Since then, this agreement has been renewed six times in accordance with its purpose, so that today we maintain sound relations based on mutual

trust between management and labor. Because the Company has a union shop system, with the exception of certain managerial and contract employees, union participation is 100%.

The Company and the union engage in active discussions, and the Company's policy regarding these discussions is to be candid while disclosing as much information as possible. Also, the Central-Management-Labor Liaison Committee meets three times a year, at which the executive team communicates the Company's management policies as soon as the annual business plan, mid-term business plan, and health and safety policy are firmed up. A central management roundtable is held monthly to deepen mutual understanding, to share information about the status of the Company, and to discuss how to solve problems. Also, we are making efforts to promptly communicate the outcome of these management-labor discussions to employees throughout the Company.

At the same time, with respect to issues faced by individual offices, we hold monthly business site management roundtables to obtain a shared recognition through discussions and opinion exchanges and to bring about a labor environment where it is easy to work.

### Environment, Health and Safety (Integrated) Review with The labor union of Nippon Kayaku

The Environment, Health and Safety Review is conducted together with the Quality Review in an integrated review of Nippon Kayaku's business sites and certain Group companies based on the annual plan. This review process also involves the labor union of Nippon Kayaku.

During the review, the progress of the environment, health and safety policy and plan of the business sites and Group companies being reviewed is checked and results of activities are identified through meetings, documents and onsite audits. The labor union is also given the opportunity to point out issues, as part of efforts to increase the level of safety and health at the company-wide level.



### Safety and Health Initiatives with the Labor Union

The Nippon Kayaku labor union puts safety at the top of its action policy and offers an annual health and safety training, titled the "Level-Up Seminar (Health & Safety)," which is co-hosted by the Company and attended by employees from every local branch. The fiscal 2018 training lasted two days and was attended by 24 employees.

On day one, participants took part in outside training using interactive safety training equipment to experience actual dangers first hand, including why getting caught in machinery or pocket hands (walking with both hands in pockets) are dangerous and what is dangerous about them.

On day two, members of the Environmental Protection & Safety Division led a lecture entitled, "About learning safety measures from past accidents of Nippon Kayaku, and learning to implement KYT and pointing-and-calling." Also, the labor union held a lecture called "What is a Health and Safety Committee?" which covered the initiatives being undertaken by health and safety committees at each business site in compliance with laws.

Participants then learned by comparing these with the activities of their own health and safety committees. Furthermore, training participants were asked to identify positives and negatives related to the health and safety activities of each branch (business site) that were then used as part of a group discussion on sharing information about health and safety and how to improve the issues faced by participants' own business sites. This process greatly enhanced awareness of health and safety in the workplace.



## Human Resources Data

「-」 is unpublished, Blank is not counted

	2017			2018			Unit
	Total	Males	Females	Total	Males	Females	
Number Of Permanent employees (consolidated)	5,684			5,814			Persons
Percentage of pamanent employees (consolidated)							%





	2017			2018			Unit
	Total	Males	Females	Total	Males	Females	
		Manufacturing industry average (2017)			Manufacturing industry average (2018)		
Workplace accident frequency rate	1.74	1.02		0.43	1.20		Frequency rate
Workplace accident severity rate	0.085	0.08		0.012	0.10		Severity rate
Number of union member	1,753			1,762			Persons
	University degree	High school degree		University degree	High school degree		
Starting salary	225,000	173,200		226,000	174,200		Yen

※ The re-employment rate for retirees desiring re-employment has reached 100%