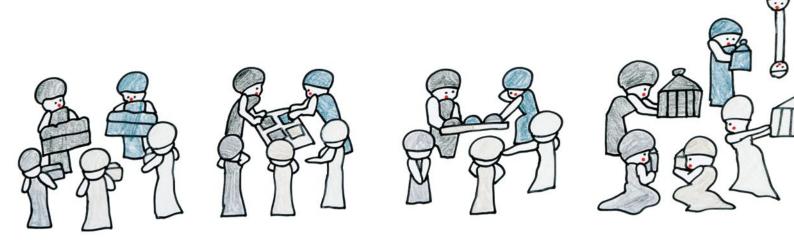




Mitsui Chemicals Group

CSR Communication 2014





About the CSR Communication 2014 Report

Since fiscal 2010, we have provided comprehensive and detailed content primarily via the online version of the Mitsui Chemicals, Inc. (MCI) Group's CSR Report. We also publish a printed version, which is intended to provide information that we particularly want to share with our stakeholders, rather than merely being an abridged version of the online report. We have once again edited our reports in line with this policy in fiscal 2014. We produce CSR reports to maintain dialog with our stakeholders. Our reports highlight the MCI Group's main CSR initiatives from three key perspectives (economy, environment and society), with a focus on environmental and social initiatives in particular. Please see our Annual Report for a more in-depth economic viewpoint.



http://www.mitsuichem.com/index.htm

We will be posting the full version of the MCl Group's CSR Report on our website, to provide comprehensive and detailed content. We have also edited our report with the aim of making it more varied, readable, and accessible. We encourage readers to access not only the hard copy report, but also the website to learn more about our extensive CSR activities here at the MCl Group.

1 CSR Management

CSR at the MCI Group, Management Framework

2 Responsible Care (RC)

MCI's Responsible Care Policy, RC Promotion System, Process Safety and Disaster Prevention, Occupational Health and Safety, Environmental Protection, Chemical Management, Quality, and Logistics

3 Communication with Society

Respect for Human Rights, Working with our Customers, Working with our Suppliers, Working with our Shareholders and Investors, Working with our Employees, Working with Industry, Government and Academia, Working with Local Communities, Social Contribution Activities, and Disaster Recovery Support

4 Feedback from Inside and Outside the Company
Results of the CSR Report 2013 Survey, Third-Party Comments
Regarding the CSR Communication 2014 Report





Rather than an abridged version of our online report, the printed version focuses on aspects of the MCI Group's activities that people particularly want to read about.

In fiscal 2014, we highlight the MCI Group's efforts to solve social challenges through its dental materials business in a special feature entitled "Toward Realizing Health and Happiness in an Ageing Society." At the same time, we introduce certain activities undertaken by subsidiaries and affiliated companies in Singapore that focus on "the Frontline Capabilities" that underpin business activities.

 Please refer to the outside back cover for information regarding front cover artwork





Outline of the Mitsui Chemicals Group

Corporate Name: Mitsui Chemicals, Inc.

Head Office: Shiodome City Center, 1-5-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-7117

Overseas Regional Offices: U.S.A., Germany, Singapore, China

President & CEO: Tsutomu Tannowa Paid-in Capital:

Employees: 14,271 (consolidated) (as of March 31, 2014)

Domestic Manufacturing Sites: Kashima Works, Ichihara Works (including Mobara Branch Factory), Nagoya

Works, Osaka Works, Iwakuni-Ohtake Works (including Tokuyama Branch

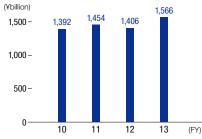
Factory), Omuta Works

R&D Laboratory: Sodegaura Center

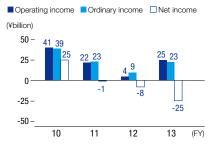
Domestic Sales Offices: Head Office and three branches (Nagoya, Osaka, and Fukuoka) Subsidiaries and Affiliates: Consolidated subsidiaries (domestic: 37, overseas: 71)

Non-consolidated subsidiaries and affiliates (domestic: 15, overseas: 17)

Net sales



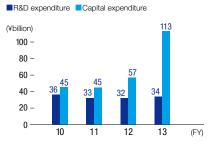
Operating income, ordinary income and net income



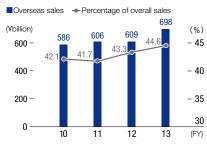
| Total assets, net assets and shareholders' equity ratio



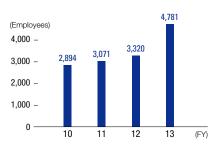
R&D and capital expenditure



Overseas sales / Percentage of overall sales



Number of employees at overseas consolidated subsidiaries



CSR Communication 2014: Contents

- **04** Message from the President
- **06** Solving Social Challenges through Business Activities
- 08 Main Products of the Mitsui Chemicals Group that Contribute to the Sustainable Development of Environment and Society

10 Special Feature 1:

Toward Realizing Health and **Happiness in an Ageing Society** (Healthcare)





Special Feature 2:

Supporting Industrial Platforms by "Frontline Capabilities" (Basic Materials)





18 Mitsui Chemicals Group's **CSR TOPICS 2013**

Achieving Sustainable Growth While Fulfilling Society's Diversifying Needs

Looking Back at Fiscal 2013

In fiscal 2013, the final year of the 2011 Mid-Term Business Plan, we focused on (1) expanding two priority areas, high functional products and high added value polymers, and (2) restructuring the bulk and commodity product businesses. In these two priority areas, we achieved solid growth in our functional products businesses: in high functional products, such as in materials for glass lenses, dental materials, and highly functional nonwoven materials; and in high added value polymers in such products as polypropylene (PP) compounds for automobiles and elastomers. In response to global aging societies and society's increasing health and safety needs, we implemented a raft of measures designed to transform our business portfolio into one that is more resilient to the effects of changes in the business environment. One example was the acquisition of the dental materials division of the German company, Heraeus Holding GmbH.

In contrast, with regard to other bulk and commodity product businesses, such as phenols, urethane, and purified terephthalic acid (PTA), we determined that drastic structural reform was essential in a severe business environment, exemplified by the worsening supply and demand situation in Asia. We decided on a business restructuring policy that included plant shutdowns and works closures.

2014 Mid-Term Business Plan

For the Mitsui Chemicals (MCI) Group, fiscal 2014 is the year that kicks off our new Mid-Term Business Plan under the slogan "Creating New Customer Value through Innovation." Based on one of our corporate missions under the Plan, that of aiming for "social challenges through business activities," we have formulated the future targets of the Group with an eye toward 2020. Specifically, we have identified three social challenges that MCI Group must help resolve, namely "Realizing a cohesive society that is in harmony with

the environment,""Realizing health and happiness in an ageing society"and"Realizing industrial platforms that are in harmony with local communities." By our engagement in resolving social challenges along the three axes of economy, environment, and society, we have once again clearly demonstrated our stance of aiming for the sustainable growth and development of both society and the MCI Group.

In orienting our market-driven business strategy toward resolving these social challenges, we state three targeted business domains that offer growth potential—Mobility, centered on automotive materials; Healthcare, including glass lens monomers, dental materials, and nonwoven fabric; and Food & Packaging, such as food packaging and agrochemicals—as we aim to transform to a business portfolio that will allow sustainable growth. In addition, in commodity chemicals, where our focus is mainly on petrochemicals and basic chemicals, we will work on robust business development in what we term the basic materials business domain that supports society and industry.

Fostering a Culture of Increased Safety

We regard the explosion and fire that broke out at the resorcinol production facility at our Iwakuni-Ohtake Works in 2012 as a lesson that must never be forgotten. All MCI Group employees have vowed to make safety a top priority and to make sure that there are no more tragic accidents, and thorough safety measures are being implemented. Designating the day on which the accident happened, April 22, as Safety Day, ensures that the accident will not fade from memory, and provides each and every employee with an opportunity to look back and think anew of what he or she should be doing to maintain safety.

In the years ahead, we will be doing our utmost in the ongoing implementation of fundamental safety measures and the promotion of a safety culture to fulfill our responsibilities to our customers and everyone living in the vicinity of our plants.

Creating Value That Fulfills Society's **Diversifying Expectations**

For the Realization of a Sustainable Society

Since establishing a dedicated CSR department in 2005, the MCI Group has aimed for growth while striking a balance between the three axes of economy, environment, and society, and working on a wide range of initiatives.

In recent years, there have been major changes in the environment surrounding CSR and calls for new perspectives in CSR initiatives that have included global concepts, such as the ISO 26000 and the Global Reporting Initiative (GRI) international guidelines, and integrated reporting.

More recently, in formulating the 2014 Mid-Term Business Plan, we again verified our corporate Group's mission of "social challenges through business activities" that is the MCI Group's raison d'être as well as our CSR concept and direction.

At the same time, we recognized even more the importance of reinforcing our management foundation, including the strengthening of corporate governance and the promotion of diversity, in global business development.

Society's demands and expectations change on a daily basis and are also diversifying. Always sensitive to these changes, the MCI Group would like to remain a company that grows sustainably in partnership with society.

To meet the diverse expectations of all our stakeholders, we will target the creation of new customer value.



Solving Social Challenges through Business Activities

After establishing a dedicated CSR department in 2005, the Mitsui Chemicals (MCI) Group has continued to engage in a wide range of activities

Since 2007, the Group has been advocating three-axis management, with steps taken to advance CSR activities that focus on their balanced implementation along economic, environmental, and social lines.

In addition to becoming a signatory to the UN Global Compact in 2008,

we have endeavored to meet the growing calls for international guidance in the form of, for example, the Millennium Development Goals (MDGs), ISO 26000, and the Global Reporting Initiative (GRI). At the same time, in line with the need to draw up the 2014 Mid-Term Business Plan, we again discussed and verified the Group's CSR concept and direction. We recognized the need to solve social challenges through business activities.

Corporate Vision

Corporate Mission

Contribute broadly to society by providing high-quality products and services to customers through innovations and the creation of materials and products while keeping in harmony with the global environment.

Corporate Target

Constantly pursuing innovation and growth to become a chemical group with an undisputed global presence

Five social contribution areas

Promoting human well-being

Contributing to the value of shareholders' investments

Increasing customer satisfaction

Contributing to local communities

Promoting the happiness and fulfillment of employees

The Specific Significance of Social Contribution

To help resolve social issues that are attracting attention on a global scale

Dividend/share price appreciation = Business expansion, increased earnings

To provide high-quality products and services Safety and the environment, regional employment, tax payments, regional activities

Employment, increased salaries and wages, improved skills/motivation, work-life balance

Significance of the Mitsui Chemicals Group

We believe that the significance of the MCI Group, as encapsulated in its Corporate Mission, is to fulfill the expectations of each shareholder and provide solutions to a wide variety of social challenges through every facet of its business activities (Solving social challenges through business activities).

By helping to resolve social challenges that are packaged together by each of economic, environmental and social axes, the MCI Group will take positive steps toward promoting sustainable growth and development in partnership with society. We consider that this, in turn, will allow us to become a corporate group with an undisputed global presence.



Toward the Realization of CSR

CSR Management

Our CSR Committee, which is chaired by the president and in principle meets twice a year, is responsible for discussing and finalizing plans and policies relating to CSR activities within the MCI Group.

In an effort to shift the focus onto active initiatives as part of our Group-wide business activities, we extended membership of the CSR Committee to include the heads of all divisions within the Company (directors and general managers) in fiscal 2010 and have been discussing specific initiatives ever since.

Visualizing Product Contribution

For us to help resolve social challenges through our business activities, we believe that it will be necessary for the form of that help to be specific, clearly understood, and easily visible. To actually visualize the level of our contribution to society and the environment through product recycling, we established the mitsui Sustainability Index (m-SI). A measure that enables us to assess environmental impact in 11 different categories, including the reduction of GHG emissions and the prevention of environmental contamination, m-SI has made it easy to visualize product contribution and cleared the way toward further contributions.

Social Challenges that the Group Should Help to Resolve and Optimum Business Portfolio

Taking into consideration the operating environment, which encompasses the Group's Corporate Vision, mega trends and social needs, the MCI Group selected the three social issues listed below that must be resolved through its business activities.

By identifying its optimum business portfolio from those social challenges that the Group should help to resolve while drawing on its strong foundation, the Group will help to resolve social challenges through its business

activities at an unprecedented level.

In addition, the activity areas that underpin the assumptions and foundation of our corporate existence—such as safety, legal compliance, risk management, and social contribution—are those that also maintain and improve the level of trust in the Group. Moving forward, we will continue to promote measures in each of these activity areas.

Social Challenges that the Mitsui Chemicals **Group Should Help to Resolve**

Realizing a cohesive society that is in harmony with the environment

- Climate change (reduction of GHG emissions)
- Environmentally sound lifestyles
- The 3R principle (promotion of a recycling-oriented society), conservation of resources
- Ecosystems (chemical management)
- Renewable energies
- The growing shift to urban living and smart cities

Realizing health and happiness in an ageing society

- Declining birthrates and aging population
- Quality of life (QOL)
- Sophisticated performance in medical and pharmaceutical fields
- Food loss and waste minimization
- Food production

P.10 Special Feature 1

Realizing industrial platforms that are in harmony with local communities

- Stable supply of industrial materials
- Local production within the domestic chemical industry

P.14 Special **2** Feature **2**

The Mitsui Chemicals Group's Optimum Business Portfolio that Helps to Resolve Social Challenges

Targeted business domains that offer growth potential



Mobility

Healthcare

Food & **Packaging**





Basic Materials

Commodity chemicals, mainly petrochemicals and basic chemicals that will support society and industry

Coordinating CSR with the Mid-Term Business Plan

In the process of formulating our 2014 Mid-Term Business Plan, we discussed the future concept and direction of the Group's CSR and further clarified what we consider important, namely helping to solve social challenges through business activities. Going forward, we will also promote CSR activities in conjunction with the Mid-Term Business Plan.

Performance Targets

FY2016

Consolidated operating income: ¥60 billion Consolidated net income: ¥30 billion

Around 2020

Consolidated operating income: ¥100 billion Consolidated net income: ¥50 billion

Policies

- Bring about a recovery in earnings capacity by assuredly executing the restructuring of the bulk and commodity products businesses
- Ensure that growth investments carried out under the 2011 Mid-Term Business Plan take shape and realize definitive earnings growth
- Concentrate management resources to the Mobility, Healthcare, and Food & Packaging domains as a step toward transforming the business portfolio
- Accelerate the pace of new business and product development
- Improve and reinforce the Group's financial structure

Main Products of the Mitsui Chemicals Group that Contribute to the Sustainable Development of Environment and Society

In aiming to remain "a corporate group that sustainably grows and develops with society," we present to you the products that are helping to resolve social challenges and that correspond to make up the Mitsui Chemicals (MCI) Group's business portfolio (Mobility, Healthcare, Food & Packaging, and Basic Materials).

Mitsui Chemicals Businesses

Functional Chemicals Business

Utilizing the MCl Group's precision synthesis technology and biotechnology to supply world-class quality chemical products. (Lens materials for glasses, agrochemicals, catalysts, etc.)

Functional Polymeric Materials Business

Developing, manufacturing, and marketing elastomer, performance compounds, and performance polymer products. (Products that make automobiles lighter as well as environmentally friendly products, etc.)

Polyurethane Business

Developing, manufacturing and marketing coatings and engineering materials. (Urethane and all kinds of paint materials derived from plant-based materials.)

Basic Chemicals Business

Manufacturing and marketing phenols, purified terephthalic acid (PTA), and PET resins. (Materials for transparent engineering plastics, polyester fibers for clothing, and PET beverage bottles.)

Petrochemicals Business

Manufacturing and marketing petrochemical feedstock, polyurethane, and polypropylene. (A variety of products and raw materials that play a key role in people's everyday lives for use in the automobile, food packaging, and related fields.)

Films and Sheets Business

Developing and marketing films and sheets that support a wide range of industries. (Film and sheet products are used across a broad area including food, daily commodities, electronics, the environment, and energy.)

Toward Realizing a Cohesive Society That Is in Harmony with the Environment



[Low Environmental Impact Lifestyles]

■ AdBlue[™]

Raw material that helps in the reduction of exhaust gases (nitrogen oxides)



■ NOTIO[™]SN

Material used for light synthetic leather with superior durability



• CHEMIPEARL™

(Electrode binder)

• MiReTTM (Electrolytes) Materials for lithium-ion batteries

■Evolue™

Possessing superior sealant properties and exceptional strength, a raw material that contributes to comfortable lifestyles

■ TPXTM

Highly grease-resistant polymer material leads to reduced water usage



Toward Realizing Health and Happiness in an Ageing Society



[Food loss/Disposal]

Spash™

In addition to preserving fresh food to keep it fresh, this film can be used to prevent vegetables, fruit and flowers from wilting or losing their color.



[Quality of Life (QOL) Improvements]

COPPERSTOPPER™

Film with antibacterial properties and a deodorant function



Toward Realizing Industrial Platforms that are in Harmony with Local Communities



[Industrial Platforms]

Polycarbonate resins

Raw materials used for automobile headlamp lenses, consumer electronics, smartphones, etc.

[Renewable Energy]

SOLAR EVA™

Film that protects cells in solar power generation systems



[3R (Recycling-Based Society)]

 ■ ECONICOLTM (Biomass chemicals) Polyurethane (biopolyol) made from plant-based materials (used for automobile



[Combating Climate Change (GHG Reduction)]

■ ADMER[™]

Adhesive polyolefins that help reduce the weight of automobile fuel tanks



■ TAFMER™

Olefin copolymers that help make automobiles lighter (material used for bumpers, etc.)



■ MILASTOMER™

Thermoplastic elastomer that helps make automobiles lighter (materials for automobile interiors, such as door trims, interior panels)



■ Polymetac[™]

Helping to reduce weight by integration with metal during plastic molding processes



[Ecosystem Protection]

■ NONROT[™]

Highly functional material that retains the fragrance and grain of wood while extending its life



TAFNEL™ Oil Blotter™

Possessing excellent oil absorbency and strength, sheeting that enables rapid recovery of oil



SYNTEX™ (Nonwoven fabric)

ESPOIR™ (Breathable film)

Raw materials used to make disposable diapers, thanks to their breathability



Acrylamide

Raw material that helps to purify water. A pharmaceutical material that separates out from water substances in various states that are mixed into the water, causing coagulation effectively and more quickly

[Medical/Pharmaceutical Sophistication]

MR™ Series

Raw materials for light yet strong, easy to design lenses for glasses



Super-Bond™

Resin cements used in dental adhesives with high adhesive performance and biocompatibility

DL-serine

(used in drugs for treating Parkinson's disease)

(used in drugs for treating tuberculosis, epilepsy) Pharmaceutical raw materials that support a variety of medical needs

[Increasing Food Production]

Mitsuhikari 2003, 2005

High-yield, late-flowering strains of hybrid rice



ANIKITM

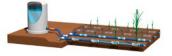
■ FRUITSAVER™

Environmentally friendly, highly safe pesticide and fungicide



• iCAST™

A system that reduces water and fertilizer usage to realize efficient agriculture



[Declining Birthrate/Ageing Society]

 Plastic plates to guide the visually impaired Flexible, durable, high-visibility plates that comply with barrier-free access laws



Purified terephthalic acid (PTA)

Raw material used to make polyester fibers



Prime Polypro™

Raw material for food, detergent, cosmetics and pharmaceutical containers



Mitsui PET™

Raw material for food, detergent, cosmetics and pharmaceutical containers



Toward Realizing Health and Happiness in an Ageing Society

As people live longer and societies age throughout the world, there are increasing demands for lives to be healthy and comfortable. Following this trend, the Mitsui Chemicals (MCI) Group positioned "realizing health and happiness in an ageing society" as one of the social challenges that the Group must help resolve under its 2014 Mid-Term Business Plan. As a result, the MCI Group is working on aggressive developments toward the further expansion of its Healthcare business.

Among these developments, Sun Medical Co., Ltd., an MCI Group affiliated company in Japan, has been working in the dental material business for more than 30 years. Through a 2009 business and capital alliance with the international dental equipment company Shofu Inc., Sun Medical has been building a steady market position centered on Japan.

In Special Feature 1, we would like to present our businesses and activities toward contributing to the solving of social challenges in the field of dental materials. The coverage focuses on Sun Medical and its flagship product, Super-Bond $^{\mathsf{TM}}$ resin cement for dentistry use.



Sun Medical staff members engage actively in meetings between those responsible for sales and development to create better products.

Testing Super-Bond™ on artificial teeth

Super-Bond™ resin cement for dentistry use

Social Issues

Japan's Ministry of Health, Labour and Welfare is currently promoting a health strategy called "Health Japan 21" (National Health Promotion Movement in the 21st Century). Under the strategy, nine areas have been specified in lifestyle-related diseases and the lifestyle habits that cause them, and targets and measures formulated. One of the areas is oral health, where efforts are being made to prevent tooth decay and periodontal disease, with people retaining at least 20 of their own teeth at age 80 as the target. From age 50 onward, one tooth is lost every two years, and promoting the health of the oral cavity has become a challenge that forms the basis of people spending their old age healthily and actively.

Contribution in the Field of Dental Materials

MCI has been engaged in the medical field business, particularly the dental material field, as part of its fine chemicals business. As elements, dental materials call for biosafety, and in terms of function they demand long-term stability. The fine chemicals technologies that MCI has accumulated are contributing to improvements in the quality of life through Sun Medical's business, which is in the manufacturing and selling of Super-Bond™ resin cement for dentistry use, which provides biosafety and long-term stability.

At the Pinnacle of **Technological Innovation:** Super-Bond[™] Resin Cement for Dentistry Use

The acceleration of demographic aging, improvements in the quality of life, and greater sophistication in medicine and pharmaceuticals are intertwined social challenges. At the same time as being the basis of a healthy life, the retention of teeth provide clues to the solving of other social challenges.

Tooth decay is caused by acid in the mouth. If left unchecked, the acid affects the dentin inside the teeth and causes toothache. Treatment involves scraping the decalcified missing part of the tooth's structure, filling the area with metal and resin, and keeping the tooth. At that time, what bonds the filling to the tooth is an adhesive called a resin cement. A resin is a plastic. There are more than 68,000 dental clinics in Japan, and at 60% of those clinics the top brand used is Sun Medical's Super-BondTM.

"The main reason why Super-Bond™ is used by dentists in Japan is because of its outstanding safety and stability," explains Sun Medical President & CEO Kazunori Kamada.

"Adhesives enable an artificial substance



Kazunori Kamada President & CEO, Sun Medical Co., Ltd.



Sun Medical Co., Ltd. Location: 571-2 Furutaka-cho, Moriyama City, Shiga Prefecture 524-0044, Japan

Established: February 21, 1981 Scope of business: Manufacture, sale, and import/export of

dental materials and other medical devices

called a filling to adhere to biological material, in this case the tooth. After Super-Bond $^{\mathsf{TM}}$ has hardened, the biological object does not contain a single substance that can cause an adverse reaction, and the product has shown stable adhesive properties for more than 20 years. This is consistent with the wishes of dentists, who say they would like to provide treatment that can give their patients peace of mind."

The secret of an adhesive that remains stable for a long period lies in the catalyst that hardens the resin. In the case of a general adhesive, just a tiny amount of moisture remaining on the tooth will hamper the process and cause gaps between the tooth and the contact surface. With Super-Bond™, however, a catalyst called TBB is used that hardens in response to moisture, so gaps are unable to form and strong adhesive properties result.



Super-Bond™ was developed through joint research conducted by Tokyo Medical and Dental University and Mitsui Petrochemical Industries, Ltd. (today's MCI). Established in 1981 as a joint venture with Nissin Dental Products, Inc., a specialist maker of dental materials based in Kyoto, Sun Medical Co., Ltd. started to diffuse innovative adhesives. In anticipation of the upcoming long-living society, Sun Medical became a pioneering company to be instrumental in the diffusion of products known as fine chemicals.

Subsequently, Sun Medical commercialized a succession of products, including Super-Bond[™] applications and medical equipment. Still today, MCI supplies the raw materials, and Sun Medical is deploying a consistent system for research, manufacturing, sales, and technical planning and service.

"With only around 120 employees, Sun Medical is a small company, but it has an academic research team of eight people and is continuing activities to making ongoing improvements on the basis of its research results from the forefront of adhesive dentistry."



General view of a study group session

(President & CEO Kamada)

Super-Bond™ is delivered to dentists through the people in charge of sales at sales distributors. There are around 6,000 such people in Japan, and therefore delivering Super-Bond™ safely and securely to patients forms an important point made at education and awareness training activities for salespersons at distributors.

Michihito Miyata, Assistant Manager of the Sales Department says: "Creating sales materials that are accurate and easily understood increases the opportunities for faceto-face meetings with those in charge of sales at distributors, who gain a better understanding. For dentists, we provide direct explanations and practice using the product in study group sessions."

Through such opportunities, it is not unusual for dentists to provide Sun Medical with their own application ideas. "Leveraging the strong adhesive properties of Super-Bond™ and its safety when applied to biological objects, proposals that have been made by dentists themselves have included diminishing the burden on patients if the more delicate soft tissue were used."

(Michihito Miyata, Assistant Manager)



Michihito Miyata Assistant Manager, Sales Department Sun Medical Co., Ltd

Accelerating Overseas Expansion, Full-Scale Diffusion in China and Asian Developing Countries

Super-Bond™ has begun to be widely accepted outside Japan, too. The product is already widely known in the United States, Europe, South Korea, and Taiwan. The environments in China and other Asian countries are also gradually becoming more accepting due to their burgeoning economic growth in recent years. Sales to China were commenced via a local distributor in 1998. We established a marketing unit in 2012 and began full-scale promotion activities.

Formerly, there were only public dental clinics in China. From around 10 years ago, however, the stage was reached at which private dental clinics were able to practice. Centered on the developed cities on the coast of China, and particularly in such cities as Beijing, Shanghai, and Guangzhou, the development of private dental clinics has been remarkable and in some areas has even matched that of public hospitals. To give an example, there are around 1,000 private dental clinics in Shanghai, a city with a population of approximately 24 million.

"Through steady, technical planning



Ihei Son
Director
Technical Planning &
Service Department
Sun Medical Co., Ltd.

Super-Bond™ Set packaging operations



and service, the earnest dentists that have the technology at least highly value the functions and safety of Super-Bond™. This was because they understood that Super-Bond™ is a dental material that would raise the level of their treatment and the value of their clinic," said Sun Medical's Technical planning and service Department Director lhei Son.

In addition, as a part of our technical planning and service, we are building good relationships with the dentistry departments of leading Chinese universities. We are also encouraging universities and teaching staff to present treatment methods utilizing Super-BondTM in their teaching materials.

"Super-Bond™ is and never will be a low-cost product in China. We are currently focusing on the coastal economic development zones, but I would like to spread our efforts to the inland areas, where there are economic disparities, through the creation of a sales network and low-key technical planning and service." (Technical planning and service Department Director lhei Son)



By applying the innovative qualities of Super-BondTM, Sun Medical has been developing, among other products, adhesive fillings, root canal filling material, composite resins (material to fill holes), materials that suppress hypersensitivity, and hard resin (materials to cover the surface of a tooth). We have thus continued the evolution of Super-BondTM itself for more than 30 years.

For example, there have been improvements in operability and in equipment. Not only the brush dip, by which a brush is used to apply the product, but also a powder has been specially developed for the mixing method, permitting that method's application in sets that can applied in a wider range. Because of the difficulties in the overseas use of liquid powder, which



Filling operations for Super-Bond™ Monomer Liquid



Masushi Tsuchikawa

Group Manager of Research & Development Department's 3rd. Applied Development Group Sun Medical Co., Ltd.

demands delicate movements, instruments known as micro-syringes have been developed.

"Realizing functions that are easier to use deepens dentists' trust," said Masushi Tsuchikawa, the Group Manager of Research & Development Department's 3rd. Applied Development Group.

To provide an example, a hard resin was developed in 2007 as a product that would provide superior durability and operability as well as come in a number of colors to match a variety of teeth colors.

"We worked in collaboration with the MCl Group on research, which we anticipated would take from five to 10 years, to realize a hard resin that would provide durability, anti-discoloration properties, and a capability to represent color on par with ceramics." (Group Manager Masushi Tsuchikawa)

Maintaining the health of your teeth from when you are young is essential to spending your time in your old age actively. The MCI Group's technologies in fine chemicals are there in support.

Message from Outside Stakeholder

Hoping for Further Contributions to Dentistry for the Elderly

These past 10 years have seen a significant decrease in tooth decay among children. In contrast, the status of oral hygiene among the elderly cannot be said to be adequate. There is a strong correlation between oral cavity cleanliness and general disease. What's more, when there are many teeth remaining, the stimulation from chewing is said to be effective in preventing the onset of dementia. There will thus be a need to focus on dentistry for the elderly in the years ahead.

Displaying the biosafety attributes dentistry demands, Sun

Medical's Super-Bond $^{\text{TM}}$ is also a product that can withstand the moisture inside the oral cavity yet has completely bonded within a short time at room temperature. Product development always demands world-class high quality. In the years to come, I am hoping for the development of products that maintain that performance and are simple to use.

> Director, Cabinet Dentaire Ochanomizu Dental Clinic, Tokyo President of the NPO "Keep Your Tooth and Oral Health"



Nobori Yasuda (Doctor of Medical Dentistry)

Column

In April 2013, MCI acquired from the German company Heraeus Holding GmbH its dental materials subsidiary Heraeus Kulzer GmbH (hereinafter Heraeus Kulzer). In June 2013, we also acquired shares in the U.S. company DENTCA, Inc., which develops, manufactures, and distributes dentures for which the company utilizes computer-aided design/manufacturing (CAD/CAM) systems and 3D printers. MCl has thus acquired the global business base with which to expand and grow its dental materials business as a core business.





Heraeus Kulzer GmbH

· Building a Global Base for Dental Material Business by Welcoming Heraeus Kulzer and DENTCA into the Mitsui Chemicals Fold

Possessing the strong brand power of Heraeus Dental, Heraeus Kulzer's dental materials business has production bases in five countries and sales bases in 22 countries.

The dental material market is currently undergoing a shift away from precious metals to materials such as resins. However, by connecting Heraeus Kulzer's wealth of knowledge, strong industry presence, and global sales network with the MCI Group's polymer technologies, our presence in the global market for dental materials business will grow by leaps and bounds.

Meanwhile, the acquisition of DENTCA, Inc. shares has combined that company's CAD/CAM design technologies with the MCI Group's material development and processing technologies. The share acquisition has also enabled the basis for the development of highperformance dentures that are finding favor with denture wearers, dentists, and dental technicians.

Acquisitions such as these represent a major turning point in the global development of Sun Medical and of the dental equipment maker in which MCI has invested, Shofu Inc. The MCI Group has established a framework capable of providing total global oral care solutions, including all types of material development, dental materials, and dentures.

The aging of society is advancing on a global scale. The MCI Group is responding to global challenges to realize health and happiness in an aging society by cultivating its dental material business as its core business.

Message from Heraeus Kulzer GmbH Managing Director Dr. Martin Haase

Heraeus Kulzer and the MCI Group have put a lot of effort into getting closer, understanding each other's way of communicating and acting in a positive manner with the clear goal of improving business. Intensive intercultural training finally ended in a common understanding.

We very much appreciate the support given to us by our Japanese colleagues and the help provided

across a variety of areas including better market penetration in the Asian home market of the MCI Group and R&D where the MCl Group has very strong competencies.

We are all looking forward to better using the complementary strengths of both companies to improve overall performance while always respecting different cultures.



Dr. Martin Haase Managing Director, Heraeus Kulzer GmbH

Supporting Industrial Platforms by "Frontline Capabilities"

The 2014 Mid-Term Business Plan promotes "realizing industrial platforms that are in harmony with the local communities" as a social challenge that the Mitsui Chemicals (MCI) Group must help to resolve.

The Group manufactures numerous products centered on materials. Through processing, these products are transformed into finished items that are used in various fields and throughout our daily lives. We believe that safely manufacturing and stably providing these materials to society is an important mission of a manufacturing company.

Along with this, training personnel to deepen frontline capabilities in all areas—manufacturing, sales and research—is essential for supporting industrial platforms.

Focusing on its frontline capabilities, Special Features 2 showcases Mitsui Phenols Singapore Pte Ltd's (MPS) efforts to safely and stably produce phenols in Singapore.



Employee training at the MPS training center



Practical training on the production line



Social Issues

The greatest challenge in building a nation not only involves supporting industrial platforms, but also training the personnel upon which the future of that nation rests. In this age of global competition, it is vital to quickly create leading industrial and technological platforms along with training personnel able to oversee them. Doing business in the host country requires an understanding of the corporate and global competition-related issues facing it and then creating a virtuous circle that generates mutual sustainable growth. This is achieved by incorporating assistance measures into business operations intended to resolve these issues.

Contributing to "Frontline Capabilities"

Known as "Mitsui Frontline Capabilities," the MCI Group's has been focusing its energies on passing along its manufacturing capabilities in the host country as part of its global expansion. Beyond simply maintaining unsurpassed quality, the Group cultivates the capability to create unique technological innovation. Improvement and implementation that reflect people's various ideas is the source of a highly diversified competitive capability and enables the realizing of industrial platforms that are in harmony with local communities.



MPS's manufacturing plant on Jurong Island in Singapore

Jurong Island



Mitsui Phenols Singapore

Established: January 2006 Business description: Manufacture and sale of phenols, acetone and bisphenol A

The Phenols Business' Largest Manufacturing Base

Located off Singapore's southwest coast, Jurong Island is an artificial island created from seven islands and functions exclusively as an industrial park. The facilities clustered on this island, which has expanded to 32km2, are primarily composed of around 100 global leading petrochemical firms, which engage in activities ranging from supplying raw materials for oil refining to product development. The petrochemical companies based on the Jurong Island account for 40% of Singapore's industrial production.

Manufacturing phenols for the Group, Mitsui Phenols Singapore (MPS) is located on Jurong Island. MPS was established in 2006 following the merger of the now defunct Mitsui Bisphenol Singapore (MBS) and Mitsui Phenols Singapore (MPHS). Capable of producing 310,000 tons of phenol, 230,000 of bisphenol and 180,000 of acetone annually following the merger, MPS is the Group's largest phenol manufacturing base.

Produced from the raw material benzene, phenols are used in chemical products that form the basis of today's industrial components. Phenols are a raw material used to manufacture bisphenol A, which has applications in such products as polycarbonate and epoxy resins. Featuring strong impact resistance, transparency and unparalleled dimensional stability, polycarbonate resin is used to manufacture such items as automotive headlight lens plastic, CDs/DVDs and aircraft windows. Epoxy resin is used as a raw material for paint and glue.

Although phenols are said to be the essential raw materials of our comfortable lifestyles, the business environment surrounding this material is currently less than favorable. The entry of new manufacturers and expanding production facilities in China has created an ongoing oversupply, while price hikes for the raw material benzene are eroding profitability. In response, the MCI Group is reviewing its production framework, which includes Japan. For its part, MPS is promoting in-depth business innovation focusing primarily on strengthening alliances with leading regional partners to procure competitive raw materials and electric power.

MPS's Highly Capable Staff of Professionals

Masaaki Higashi, the Managing Director of MPS stated that "while we anticipate improvement in oversupply conditions, which has been driven by economic development in emerging countries, we must establish a "local production for local consumption" system that will contribute to even greater advancements in manufacturing and development in Asia. To that end, I have absolutely no doubt that MPS will serve in its own unique way as a base for such a system."

The reason for Managing Director Higashi's confidence is MPS's highly capable staff of professionals working at its manufacturing facilities. With 160 of 170 employees serving in these facilities, MPS is making ceaseless efforts to pass along "Mitsui Frontline Capabilities" by transcending the barriers among its highly



diversified staff, including those of Chinese, Malay and Indian descent.

Managing Director Higashi: "it goes without saying that job hoping is a common trend in Singapore, which is an impediment to maintaining highly stable manufacturing. Yet, the attrition rate of key staff members at MPS is extremely low, and employees are doing their best to create new manufacturing capabilities for the Group."

Symbolic of these initiatives, MPS became the first MCI Group company in Singapore to select a locally hired engineer to serve as its plant general manager.

MPS staff are from all over the world



Creating Results through Teamwork

Selected as MPS's new plant General Manager in January 2014, Mock Siew Fai studied chemical engineering in university and was among the first round of employees to join the now defunct MBS upon graduating in 1998. Mock Siew Fai's career as an engineer has grown in tandem with the Mitsui Chemicals (MCI) Group's business development in Singapore.

He explains his motivation for joining MBS: "while touring the facilities before being hired, I was impressed by how team members worked together as a single unit despite differences in opinions."

Around the time of Mock's hiring, MBS was constructing Plant No. 1, which was followed by plants No. 2 and 3. Witnessing the construction and launch of new plants while working alongside the numerous engineers dispatched

Mock Siew Fai Plant General Manager, MPS

Control room operations



Information-sharing meeting among team members



from Japan, Mock and the other local engineers received valuable technical training.

Mock states that: "building these plants actually created a very stimulating educational environment. The concepts behind the 5Ss*1 and Kaizen*2 methods are very simple and easy to understand, making actual operations extremely interesting. Had I worked for another company instead, I doubt my career would have been so varied or would have advanced this rapidly."

"Seeing the fruits of our production innovation initiatives has not taken a long time. This is the result of the Company's efforts to deeply instill in all employees MCI's frontline capabilities instead of simply relying on a Japanese plant manager. The team capabilities that so impressed me before joining MBS form the basis of our frontline capabilities."

Mock states that: "In other companies, the attitude is 'this mistake is your responsibility so you fix it.' In contrast, MCI employees say 'your mistake is my responsibility since you have not been trained sufficiently. Let's work together to improve.' Given the significant difference between these two approaches, many employees who previously left MPS have since returned."

Understanding the Entire Process to Grasp Specific Operations

The bisphenol A superintendent, Martinez Mark

Dennis S., transferred from a chemical plant in his native Philippines to MBS 13 years ago. His biggest surprise after being hired was seeing the former MBS's high level of operational standardization and flexible improvement capabilities.

He states: "the Philippines company I worked for was only able to grasp specific operational areas, so they were unable to make improvements. MCI's operational standardization requires that individual workers understand the entire process, which enables them to improve specific operations. Also, improvement proposals are gradually being incorporated, which changes the working environment and in turn enables employees to function more effectively. This has become the unifying force within our multicultural facilities in Singapore."

Chemical plants handle extremely poisonous materials so maintaining safety is absolutely essential. Overseeing Kiken Yochi (hazard prediction) activities*3 has become an important function of superintendents.

Information-sharing meetings known as "tool box meetings" (as they are held near tool boxes) take place every morning before work starts. In addition, line training is conducted repeatedly, which involves veteran and new employees reviewing operational process flow at production lines while examining important check points.

Martinez states: "line training has significantly increased the ability of new employees to respond to problems since it instills a fundamental understanding of the









entire process."

MPS opened an on-site training center on the basis of methods developed internally. The center's programs extend even to conducting training for manufacturing staff from other companies. Thanks to MPS's personnel training initiatives, the number of backup engineers dispatched from Japan has been reduced from

Martinez Mark Dennis S. Production Superintendent, MPS

a peak of over 10 to just two from the spring of 2014.

Plant General Manager Mock states: "carrying on this spirit of MCI, I believe my role is to create a new 'Singapore Way' that leverages Singapore's strength in being able to attract people from different cultures that bring new ideas to the table."

MPS has begun a new evolution toward frontline capabilities that are truly borderless.



Employees participating practical line training

- *1: 5Ss are a workplace management slogan based on five actions: sorting, setting-in-order, shining, standardizing and sustaining discipline.
- *2: Kaizen refers to bottom-up improvement activities that workers take it upon themselves to devise and implement
- *3: Kiken Yochi (hazard prediction) activities identify potential hazards such as accidents and disasters, which are named after the initials of the Japanese words kiken (danger) and yochi (prediction).

Column

MCI subsidiary Prime Polymer established Prime Evolue Singapore in October 2012. This Singapore-based company is currently constructing a facility to manufacture Evolue™ (scheduled to be completed in 1Q 2015).

Evolue™ is a type of plastic manufactured using MCI proprietary metallocene catalyst and process technologies. Used to wrap such consumables as food and detergents, Evolue™ boasts the highest share of the Asian high functional packaging films market.

■ Evolue™ High Functional Packaging Material Maintains the Safety of Asian Consumables.

The economic development of emerging countries and subsequent increase of the middle class is driving the rapid expansion of the Asian high functional packaging film market. Evolue™ fulfills expectations by meeting the high level of quality required by consumables manufacturers.

Tetsuya Yamamoto, General Manager of Sales & Marketing oversees Prime Evolue Singapore's sales from Singapore.



Tetsuya Yamamoto General Manager, Sales & Marketing Prime Evolue Singapore

According to him: "our annual production capacity of Evolue™ is 600,000 tons, which is top class in terms of producing high functional polyethylene in Asia, and this has established a platform to capture growing demand in emerging countries."

Lee Tian San (Trevor), Assistant General Manager of Sales & Marketing, enthusiastically commented: "manufactured using MCI proprietary technologies, Evolue™ features superior sealing capabilities, high strength, minimal odor, low FE (fish eye), high transparency and is easy to process, making it the product of choice for those who demand the very best. In the years ahead, we will provide total solutions that improve productivity, including reducing production costs and increasing ease of processing." Offering superior products shortens the path to more comfortable lifestyles. With

that in mind, MCI is providing Evolue™ throughout Asia.



Lee Tian San (Trevor) Assistant General Manager, Sales & Marketing Prime Evolue Singapore



Products using Evolue™



Mitsui Chemicals Group's CSR TOPICS 2013

Along with the seven core principles defined in ISO 26000, we introduce the initiatives we have taken under the 2014 Mid-term Business Plan, which was created, to address social challenges that the Mitsui Chemicals (MCI) Group should help resolve.

 $\label{thm:condition} \begin{tabular}{ll} The MCI Group aims to enhance engagement with all stakeholders through the implementation of these initiatives. \\ \end{tabular}$

[Explanation of icons]

Initiatives related to ISO 26000

Initiatives based on seven core principles defined in ISO 26000















Initiatives based on Mid-term Business Plan

Initiatives to address three social challenges identified in the 2014 Mid-term Business Plan that the MCI Group should help resolve



Realizing a cohesive society that is in harmony with the environment



Realizing health and happiness in an ageing society



Realizing industrial platforms that are in harmony with local communities



Eco Rail Mark

The Ministry of Land, Infrastructure and Transport's Eco Rail Mark Administration and Screening Committee has designated MCl as a company that proactively uses the railway system to move freight as an environmentally friendly means of transportation. A certification ceremony was held on March 17, 2014, for approving the products listed on the right to display the Eco Rail Mark. The MCl Group has

proactively used environmentally friendly railway freight as a cost effective means of transportation. This certification recognizes our modal shift initiatives. We will continue in our efforts to reduce greenhouse gas emissions and preserve the atmosphere.



Eco Rail Mark logo



Eco Rail award ceremony

Certified products:

Acrylamide, hydroquinone, isopropyl alcohol, COSMONATE $^{\text{TM}}$ MDI, COSMONATE $^{\text{TM}}$ TDI, Dorocrawl, Mitsui PET $^{\text{TM}}$, and high-purity terephthalic acid



Healthy Mileage Campaign

MCI provides a variety of programs, mainly through the Health Management Department and the National Federation of Health Insurance Societies, to help employees manage their health.

One of these programs is the Healthy Mileage Campaign*, which is implemented at all business sites. There were over 5,000

participants in fiscal 2013. The campaign has helped reduce the number of obese people.



A small group exercising for their health during a lunch break

* Healthy Mileage Campaign: Small teams and individuals accumulate points (miles) for exercising and leading healthy lifestyles over a three-month period, and these points can be exchanged for merchandise provided by the company at the end of the campaign.









Reducing food loss

Food loss and waste is a problem around the world. From an environmental viewpoint, the MCI Group aims to help find solutions to social problems caused by strong population growth by providing food packaging and agrochemicals.

In Japan, the Ministry of Agriculture, Forestry and Fisheries has been promoting the Citizens Campaign to Reduce Food Loss (No Food Loss Project), and created the Lossnon logo to recognize efforts to spread awareness and education about this campaign.

On February 25, 2014, the MCI Group was recognized for its

efforts to reduce food loss in its food packaging business by the Ministry of Agriculture, Forestry and Fisheries with the designation as a company involved in the Citizens Campaign to Reduce Food Loss (No Food Loss Project).

We will proactively work to reduce food loss as a part of this

campaign by displaying promotional information in product pamphlets and on business cards.



⑥ 食べものに、 もったいないを、 もういちど

"Lossnon" logo

Products: (Mitsui Chemicals Tohcello, Inc.) Spash™, etc.





Participation in 9th Eco-products International Fair

During March 13-16, 2014, MCI participated in the Eco-products International Fair sponsored by the Asian Productivity Organization (APO), which is affiliated with the Ministry of Foreign Affairs of Japan. It was the first eco exhibition held in Taiwan, reflecting the aims of the Taiwanese government to foster eco business to harmonize industrial development with the global environment.

Taking advantage of this opportunity, MCI and local Group company Taiwan Mitsui Chemicals, Inc. set up an exhibition booth to showcase eco-related businesses and products, and held breakout sessions to describe our contributions to society and the environment, focusing on packaging-related materials. In addition to corporations, people from the general public also came to the exhibition, spreading the eco concept throughout Taiwan.

At an international conference held at the same time, members of Chemicals Safety Dept. gave presentations about how food packaging materials made by the MCI Group contribute to the

environment and the reduction of food loss.

The results of the conference were summarized in a declarative statement with ten articles for the UN Working Group. The sixth article contained the word "packaging" as an outcome of our presentation.



Our booth at the Eco-products International Fair







A Laboratory Class in the Wonders of Chemistry Held in Singapore

At the request of local staff in Singapore, local staff were trained in how to conduct laboratory. These employees then held a laboratory class in the Wonders of Chemistry for the families of local employees in Singapore.

The nearly 100 children of local employees that attended learned about the principles of thermal contraction using PET bottles, and made slime while learning about the characteristics of polymer.



A laboratory class in the Wonders of Chemistry held in Singapore



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About the Cover

Mitsui Chemicals has used an artwork by an individual with a disability for the cover of its CSR Communication 2014 Report. In depicting large numbers of people industriously engaging in the art of manufacturing through close-knit communication, this picture left a lasting impression. The idea expressed in this picture overlaps with the spirit in which the Company undertakes production.

Able Art Company

Able Art Company serves as a conduit between artists with disabilities and commercial end users interested in incorporating their art into designs and products.

http://www.ableartcom.jp/aboutusdb/about_eng.html

Naoko Niimi (Artist)

The young girls depicted in this picture are drawn from the artist's imagination and from her many friends. Taking flight within an air of friendship, these young girls are engaging in the art of manufacturing in an industrious manner. Using every color in a set of colored pencils, the artist put together this magnificent artwork in two to three hours.