Products and Services that Contribute to Sustainable Development of Society

Evaluating the Group's products and services by application using unique criteria, we certify those with high environmental contribution value and high quality of life (QOL) improvement contribution value as Blue Value™ and Rose Value™ products, respectively. We intend to deepen initiatives aimed at solving social challenges and, in turn, contribute to the sustainable development of society by presenting in visual form the ways in which our products and services contribute to society as well as sharing those values with all stakeholders.

Blue Value™ Products

Reduce CO_2

Protect resources

Bumper and instrument panel materials

PP compounds

Reduce GHG emissions by 13.3% without the need for any painting process.

Reduce CO_2

Harmonize with nature

Exhaust gas (NOx) reduction agent

AdBlue™

Reduce NOx emissions. Contribute to fuel conservation.

Reduce CO_2

Adhesive polyolefin for plastic fuel tank

ADMER™

Reduce weight of fuel tanks by 10-30% by using plastics instead of metals.

Reduce CO_2

Protect resources

Food packaging milky-white film

ECONEIGE™

Deliver a white finish by diffusing light on layers of air created inside films. Reduce the amount of resin used by 20-30% without the need for white printing.

Rose Value™ Products

Promote the advancement of medical and pharmaceutical fields

Ophthalmic lens materials

MR™ Series / UV+420cut™

Contribute to eye health and comfort in addition to correcting for visual acuity.

Respond to the food problem

Insecticide

TREBON™

Contribute to stable and enhanced crop production.

Respond to the food problem

Keep-fresh film

SPASH™

Inhibit the wilting and discoloration of fruits and vegetables thereby contributing to reduction in the amount of food waste.

Respond to the declining birth-rate and aging population

Hygiene nonwovens

SYNTEX™

Search for higher performance, such as comfort and a snug fit in addition to such basics as being leak proof, having breathability, and causing no diaper rash.

* An example of one of our showcased products and application.
* AdBlue™ is a trademark of the VDA (Verband der Automobilindustrie).

MITSUI CHEMICALS,INC.

Shiodome City Center, 1-5-2, Higashi-Shimbashi,
Minato-ku, Tokyo 105-7122, Japan
Corporate Communications Division
Tel: +81-3-6253-2383
Fax: +81-3-6253-4245
https://www.mitsuichem.com

A comprehensive report on Mitsui Chemicals Group CSR activities is available at this website.

https://www.mitsuichem.com/en/csr

Issued in November 2017

Mitsui Chemicals Group
CSR Communication

CSR in the Mitsui Chemicals Group

The Mitsui Chemicals Group undertakes a diverse array of activities to ensure that it is trusted and highly valued by all stakeholders, and a corporate group that employees can be proud of as a matter of course. We also believe that realizing our Corporate Mission through our main business activities is the very essence of CSR.

The Group clarified its view of a targeted future society in its 2025 Long-term Business Plan, formulated in 2016, after taking into consideration the requirements of society and its Corporate Mission. In order to bring this view of a targeted future society to fruition, the Mitsui Chemicals Group also reiterated its commitment to management that strikes a proper balance between economic, environmental, and social concerns. Based on each of the aforementioned, the Group has identified three environmental and social targets after giving due consideration to its contribution to and impact on society through its business activities.

Moving forward, the Mitsui Chemicals Group will work to secure the sustainable growth and development of the Group and society through its business activities.

Corporate Mission

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

Targeted future society

Environmental and Social Targets under the 2025 Long-term Business Plan

- Maximize products and services to achieve a low carbon, recycling-oriented, and cohesive society in harmony with the environment
- Maximize products and services to achieve increased QOL and a smart society
- Pursue thorough safety, high quality, and fairness across the entire supply chain

Changes in R&D
at the Mitsui Chemicals Group

Contributing to Society through “Customer-driven Innovation”

The Mitsui Chemicals Group has declared “pursue innovations” as one of the basic strategies of its 2025 Long-term Business Plan for the sustainable growth and development of society. To address the rapidly changing needs of society, it is essential to understand what society and customers desire at a deeper and more intellectual level. Providing value that addresses customer needs with a combination of its technologies and services is the essence of the Mitsui Chemicals Group “customer-driven innovation.”

The Mitsui Chemicals Group’s research and development is in the process of undergoing substantial change.

Here, we provide details of initiatives aimed at solving those challenges facing society and our customers through open innovation activities based on collaboration that extends beyond traditional boundaries both within and outside the Group.

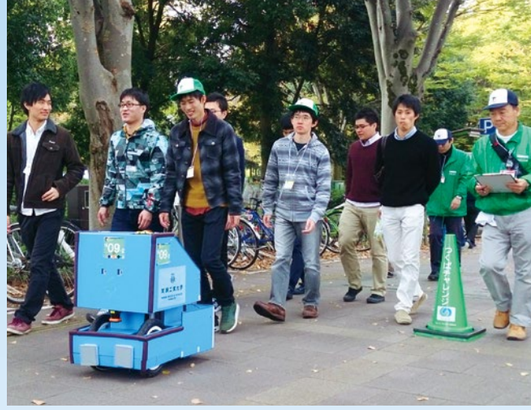
Voice 01

Fields Where We Can Leverage Our Strengths as a Comprehensive Chemicals Manufacturer

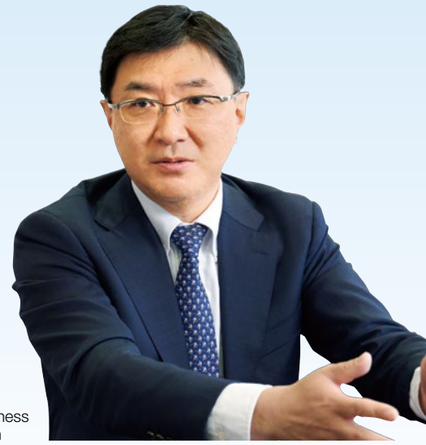
The Mitsui Chemicals Group has excellent technologies that have been refined in its existing businesses, and a diverse range of products representative of a comprehensive chemicals maker. Our basic view is to create a pathway to new markets by applying these technologies and products to the field of robotics. External technologies are also heavily utilized. I truly believe innovation is accomplished by flexibly combining internal and external technologies.

Through the robot materials business, I sense there is a broadening wave of new interactive relationships within the Mitsui Chemicals Group. For example, bumpers incorporating piezo-electric materials for sensors were provided to participating teams at the Tsukuba Challenge 2016, which featured an experiment involving autonomous robots navigating city streets. Produced as a prototype on an internal cross-organizational basis, these bumpers incorporate highly sensitive piezo-electric sensors combined with flexible polyurethane foam that not only detect when robots bump into walls and people, but also protect robots and surrounding objects from damage. The prototype is being incrementally improved with ideas being exchanged with experts.

We will advance the Robot Materials Business while thinking about how robots featuring the Group’s technology can play a constructive role in the world. We are proud that our technologies are contributing to society through robots.



A robot with one of our bumper sensors at the Tsukuba Challenge 2016



Shiro Otsuzuki
Manager
Robot Materials Business
Development Division

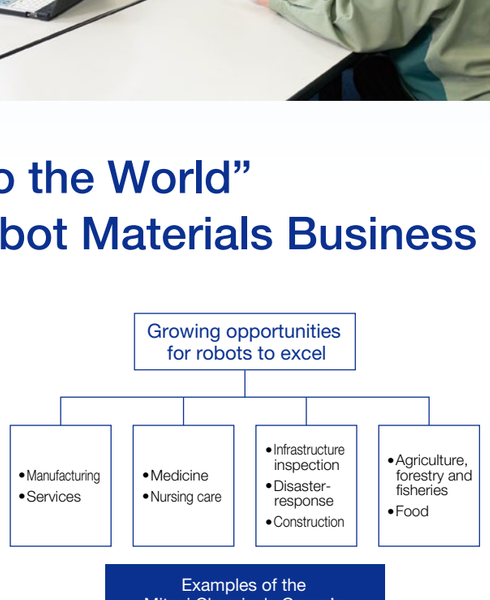
Special Topic

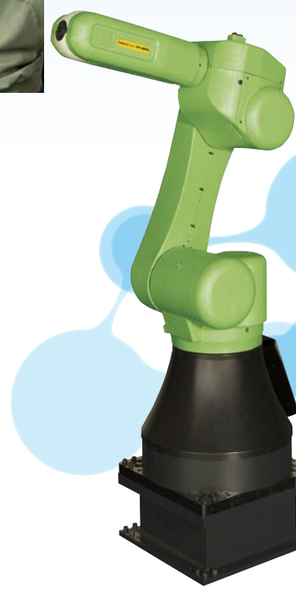
“An Exciting Step Out into the World” The Beginnings of the Robot Materials Business

In 2012, the Future Creation Workshop was launched in the Mobility Business Sector. It began with the Company’s backing as a venue for employees to freely explore new business ideas, with the key phrase “an exciting step out into the world.” People naturally congregate around exciting ideas. Workshop members took steps outside of meeting rooms and found volunteers within their own company as well as companies that could offset their weak spots, and customers who were prepared to take on new challenges. Efforts were then made to co-create with each of these partners. This is where the Mitsui Chemicals Group’s robot materials business began.

Much like a “chemical reaction,” various repercussions arose inside and outside the Company after we got outside our comfort zones. At the same time, we posed hypothetical questions like “will robots still be ‘lumps of steel’ when they are expected to fix various social challenges?” or “will robots increasingly use performance materials like automobiles?” Moving forward, there was the development of flexible components for human collaborative robots. In this instance, the need for flexible materials by robot manufacturers exactly matched the Company’s material technologies leading to the mutual development of unique specialty components.

The Robot Materials Business Development Division, formally launched in April 2016, has now taken the lead in creating new customer value and driving innovation by forming new networks of people and new combinations of technologies that had not existed before in robots and materials.





Example of human collaborative robot

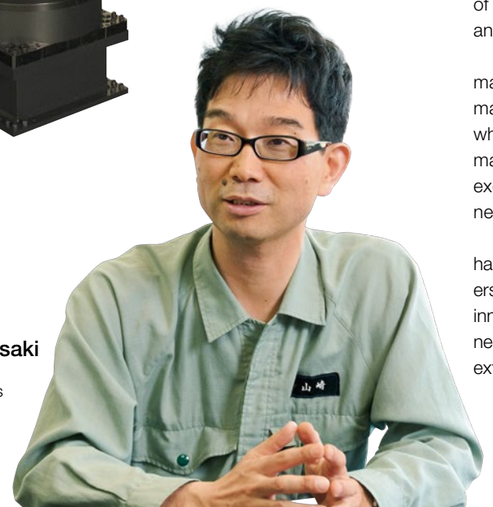
Voice 02

Sharing the Excitement with Robot Makers and Parts Makers

It is hard to fully satisfy customer needs and the needs of society on our own with respect to robot materials business development. Steps were therefore initiated to look for partnerships with willing parts makers that would help with the development of components for human collaborative robots. While this proved to be an extremely difficult task, because parts makers are customers in most of our existing businesses, we were successful in finding partners due to the established strong relationships of trust built up by our veteran employees in business divisions and research labs.

We work with parts makers in that they process our materials into shaped objects desired by customers, and use materials made by other companies that we bring to the table when necessary to create parts. Mitsui Chemicals and parts makers have shared ideas for interesting new parts, and also exciting ideas with robot makers, giving rise to the potential for new products.

I believe open innovation is essential in future R&D. For this to happen, we must foster relationships based on trust with customers and others involved in the collaborative effort. We aim to move innovative R&D forward at the Mitsui Chemicals Group and create new businesses while collaborating with our customers and other external parties.



Satoshi Yamasaki
Research Fellow
Synthetic Chemicals
Laboratory