

Worksites

R&D Center

Introduction to the R&D Center

The R&D Center is located next to the Kawasaki Plant in a section of the petrochemical complex in Kawasaki across the Tama River from Haneda Airport.

The center carries out development of materials that support ZEON Group business, primarily synthetic rubber, through to development of processing technologies. R&D activities are pursued in line with a basic philosophy of contributing to society through the ongoing creation of world-leading products that "do not imitate and cannot be imitated" using unique, innovative, and environmentally friendly technologies.



Aerial view of the R&D Center

On the premises of the ZEON Takaoka Plant, in Takaoka City, Toyama Prefecture, we also carry out development of optical film for application to LCD televisions and next-generation displays, materials for organic EL lighting, which contributes to energy conservation, and medical equipment, such as catheters, used in the examination and treatment of blood vessels, the digestive organs, the gallbladder, and other parts of the body.

Through the development of such diverse materials and parts that make life more convenient, as well as the creation and delivery to a wide range of customers of new products that contribute to conservation of energy and the natural environment, the R&D Center wants to ensure that ZEON Corporation remains a company that is "friendly to the environment and needed by society."

The center also engages in activities as a member of the local community. This involves the continuation of zero emissions* efforts through thorough sorting of waste generated by R&D activities, Ecocap (plastic bottle cap collection) activities, street-cleaning activities conducted together with neighboring corporations, and ongoing internships.

In addition to efforts in Japan, the center plans to aggressively advance R&D activities conducted together with research laboratories and technological support service locations in North America, China and Europe, as well as joint research with overseas universities and corporations. We will continue R&D activity to deliver to customers around the world new products that benefit the global environment and human prosperity.

* Zero emissions:

The establishment of systems that discharge no emissions into the natural world, and the fundamental idea behind such establishment.

CSR Efforts at the R&D Center

In accordance with the ZEON CSR Policy, all researchers have CSR awareness as they carry out research. In terms of compliance, related laws are strictly observed in all research activities, and the company aims for a highly stimulated and safe research environment that is free from accidents. Before the R&D Center embarks on a new research project, research and administrative departments come together to conduct new experiment safety examinations in which they discuss the research unit's proposal and confirm legal compliance matters and safety considerations, such as chemical substance safety and exposure protection for researchers, as well as ensure

proper allocation of resources. ZEON Corporation will proceed with R&D activities under a system that ensures ongoing provision of quality products offering a high degree of safety and that customers can trust.

Environmental and Safety Activities

The R&D Center's safety policy in fiscal 2012 was "Noticing danger. Notice danger and take measures through communication," with the implementation of comprehensive risk prediction activities focused on noticing danger. Attentive safety activities undertaken by R&D Center staff led to the attainment of eight million hours without accident or incident (zero lost-time accidents). The center also continued to keep landfill disposal at zero throughout the year due to thorough sorting and recycling of waste generated by research activities.

To ensure that the comprehensive risk prediction activities (four-round risk assessment at work sites, near-miss incidents, department patrols) with a focus on noticing danger take meaningful form, we must prevent such actions as the continuation of operations even though a risk has been noticed, thus resulting in an accident.

In fiscal 2012, we returned to the basics of our safety activities, beginning by requesting that all staff greet each other. Greetings are the starting point of communication, and we consider communication the lubricant of an organization. An organization that lacks personal greetings does not have sufficient communication either. Without communication, a risk that has been noticed may be neglected and go unaddressed. We will strive to attain accident- and incident-free operations based on the teaching that "Safety does not exist. Danger is a constant presence."

In addition, waste recycling will continue in order to keep landfill disposal at zero.

Quality Assurance Initiatives

The R&D Center aims to create products based on unique, innovative technologies that "do not imitate and cannot be imitated" in conformance with the ZEON R&D Policy. We intend to realize this aim by raising our manufacturing capabilities while monitoring a variety of aspects including intellectual property, safety, product quality, costs, and productivity in all development stages. In fiscal 2012, we collaborated with research facilities on the theme of production sites in particular, with improvement measures attaining significant results.

VOICE ZEON Creates the Future

As we are required to develop new products that match developments in a rapidly changing world, we will undertake the following.

1. Researchers shall gather their own information from around the world in order to develop products that anticipate changing trends.
2. We will advance appropriate product creation by preparing quality function deployment (QFD) matrices that visualize establishment of design and production quality for each product development process.
3. Eliminating the need for "redoing" will be vital for speeding up product development. We will make efforts to establish mass production technologies for ensuring smooth transition from research to actual production.

I believe these initiatives will allow us to develop products that satisfy the customer.



Yoshiyuki Mitsuhiro
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Living Together with the Local Community

Together with the Kawasaki Plant and in cooperation with Kawasaki City, the R&D Center participates with neighboring companies in joint cleaning and maintenance of sidewalks from Keikyu Kojimashinden Station along the Tonomachi Yakosen street.

In August 2012 upon a request received through the School Support Center, a non-profit organization, to give a tour of the R&D Center, we welcomed a group from a Niigata prefectural high school. The school is a designated Super Science High School (designation awarded by the Japanese Ministry of Education, Culture, Sports, Science and Technology to high schools offering a concentrated STEM curriculum).

On a swelteringly hot day, a total of 18 students visited our center, with many commenting how satisfying it was to be able to tour laboratories and see laboratories at work, which is usually not possible.

We will continue to receive students for laboratory tours so that they may learn about ZEON as well as to create opportunities to spark their interest in the chemicals industry.

In fiscal 2013, we will continue to strengthen interaction with universities, for example by actively accepting interns and dispatching temporary instructors.



Student tour group



Students listening attentively to a presentation