

Research & Development

In line with our corporate motto “Best Quality for a Better Life” and a management philosophy which centers on helping to bring about a brighter future for all people, we at Mitsubishi Rayon aim to provide unique specialty chemical products and services, and thereby continue to raise the profitability of the whole Mitsubishi Rayon Group.

To this end, we have increased our investment in R&D and are expanding the scope of our collaboration with research institutes run by the government and universities. We are working to strengthen our overall research capabilities by bolstering cooperation among our research bases and restructuring R&D operations, as well as expanding the scope of our basic technologies. The Group employs R&D resources with the primary focus on strengthening and expanding our core MMA and AN business complexes, and cultivating next-generation core businesses.

R&D expenses for fiscal 2008 amounted to ¥13,400 million. The principal achievements are summarized below.

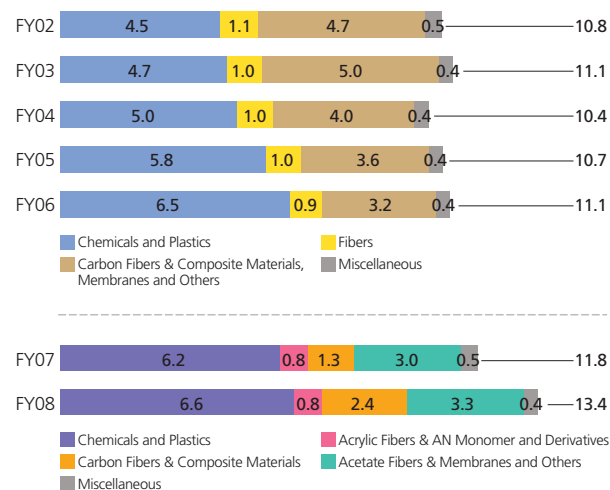
Chemicals and Plastics

1. We continued to make improvements in catalysts used in production of MMA as well as to the production process itself, and introduced a new catalyst in the former stage and another catalyst in the later stage of the C4 direct oxidizing method, confirming that operations could proceed smoothly with these technological improvements.
2. In the acrylic sheet business, we are developing new applications, such as netbook (mini-notebook) PCs and digital photo frames.
3. Regarding conductive polymers, we worked on the development of film-related applications to prevent static build-up, and in semiconductors we have been making swift inroads in this market.
4. In plastic optical fiber, we developed plastic optic fiber cables that can withstand temperatures as high as 105°C, offering high heat-resistance and improved reliability for automotive applications.

Acrylic Fibers & AN Monomer and Derivatives

We made advances with regard to applications for the conductive fiber “COREBRID B,” developed from wet-spun acrylic yarn using core-in-sheath composite spinning technology.

R&D expenses (consolidated) (¥ billion)



Prior to 2005, the effect of changes in actuarial assumptions was not taken into consideration.

Carbon Fibers & Composite Materials

We focused on the technological development of low-cost carbon fiber. We also worked on the development of high-performance aircraft materials, materials for high-pressure vessels, and materials for large-scale industrial applications, primarily in the areas of automobiles and wind power generation. We also developed composite materials and process technologies for automotive applications, and continued working on the development of a gas diffusion layer for polymer electrolytic fuel cell systems.

Acetate Fibers & Membranes and Others

1. We have introduced a new high-productivity process, which has contributed to a significant increase in output.
2. We focused on the development of new materials, such as moth-eye structure anti-reflective film. We also worked to develop technologies in the environment and energy-related fields.