

# CREATING CORPORATE VALUE

## R&D Policy and Organization



### R&D Policy

**We will use accumulated technologies to open up new fields of technology**

We see our R&D achievements as keys that will unlock the future for JSR. We have built an extensive R&D organization, which has created many

new high-performance materials based on our original technologies. JSR's involvement in the petrochemical field began with elastomer technology. We have since developed our activities globally by creating highly competitive materials and technologies for a wide range of technology fields, including the seemingly disconnected area of IT. We have accumulated a record of continual effort to expand business areas behind our main business. That is, not only to deepen our knowledge of our core polymer technology, but also to develop ways of combining it with other technical fields such as optics, inorganic chemistry, and precision processing technology. We continue to challenge ourselves to develop new fields that offer major growth potential, such as next-generation electronics, life sciences, environment and energy.

### Integrating R&D with business activities

After discovering seeds of innovation through our R&D activities, we need to link those seeds to actual business activities. JSR has created an organizational structure that ensures rapid decision-making in this area by giving senior R&D executives management roles in strategic business divisions to ensure close collaboration. Another example of the accelerating integration of R&D and business activities is the identification of needs through direct interaction between our researchers and customers. The priority countries and regions for cutting-edge research vary according to every field such as elastomers, semiconductor materials, display materials, life sciences, environment and energy. By locating our R&D and business sites in the most advanced areas, we are building a structure that will allow us to respond quickly to new trends. We also make extensive use of strategic investments and business partnerships to secure rapid access to the advanced specialist technologies and knowledge, and connect our businesses that we need for our strategic business activities. We are evolving a structure that can provide new value to society by flexibly integrating R&D with business activities within the JSR Group and beyond.

### Number of Patents

The number of patents held by JSR is steadily increasing in Japan and overseas, mainly in the Fine Chemicals and Other Products Business.

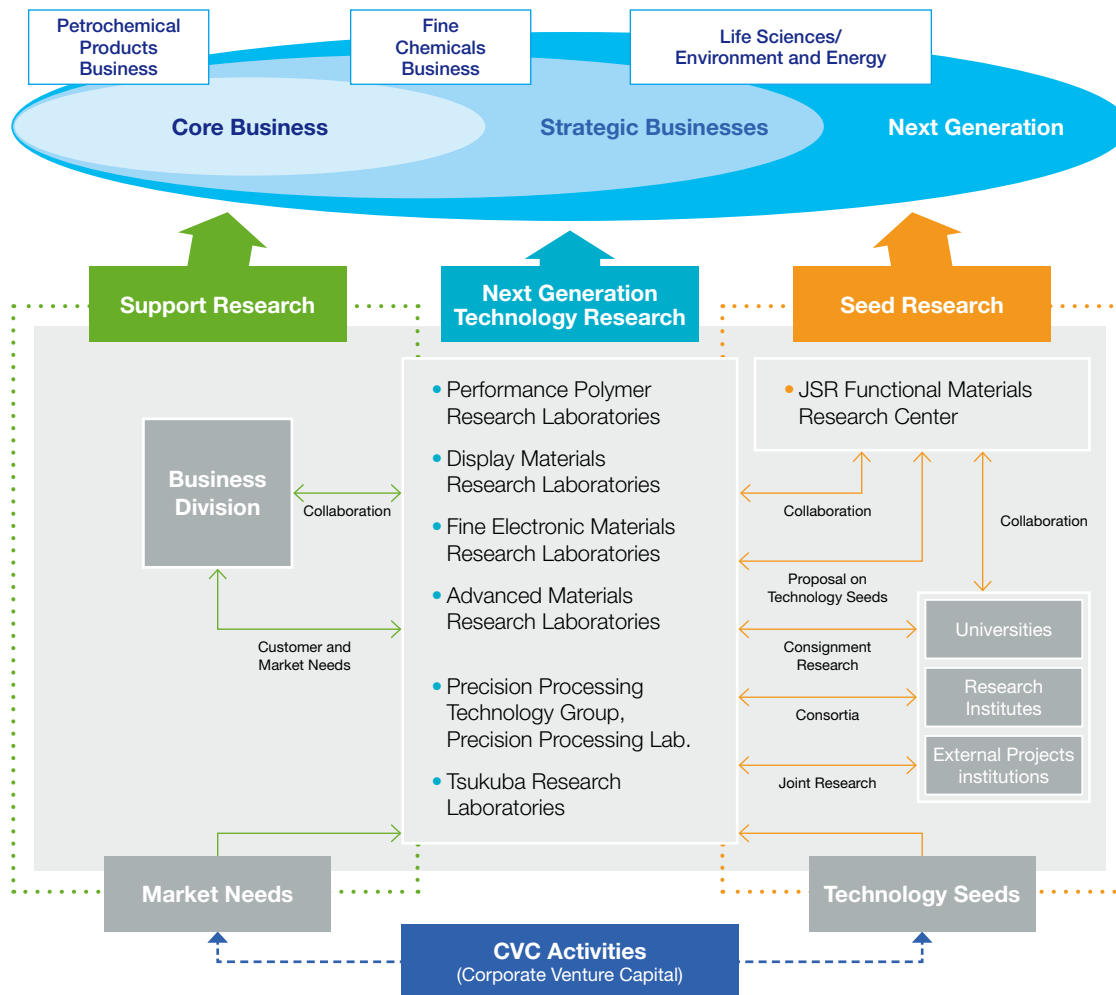
| As of March 31 |                                   | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015  |
|----------------|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------|
| Japan          | Petrochemical Products            | 428          | 374          | 377          | 387          | 358          | 334          | 308   |
|                | Fine Chemicals and Other Products | 1,269        | 1,465        | 1,685        | 1,972        | 2,331        | 2,633        | 2,717 |
|                | Others                            | 73           | 75           | 67           | 79           | 89           | 104          | 99    |
|                | Subtotal                          | 1,770        | 1,914        | 2,129        | 2,438        | 2,778        | 3,071        | 3,124 |
| Overseas       | Petrochemical Products            | 512          | 492          | 489          | 507          | 523          | 516          | 531   |
|                | Fine Chemicals and Other Products | 1,955        | 2,164        | 2,365        | 2,516        | 2,741        | 2,957        | 2,810 |
|                | Others                            | 34           | 39           | 36           | 33           | 34           | 33           | 29    |
|                | Subtotal                          | 2,501        | 2,695        | 2,890        | 3,056        | 3,298        | 3,506        | 3,370 |
| <b>Total</b>   | <b>4,271</b>                      | <b>4,609</b> | <b>5,019</b> | <b>5,494</b> | <b>6,076</b> | <b>6,577</b> | <b>6,494</b> |       |

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Creating materials for the future through materials innovation

### R&D Structure



### R&D Organization:

#### A global approach to technology innovation centering on four R&D facilities in Japan

JSR currently has R&D facilities in Yokkaichi and Tsukuba in Japan. These R&D facilities support existing business activities while also helping to create new businesses. They therefore participate in highly innovative and exploratory research initiatives with customers, domestic and international universities, and research institutes. For example, in existing businesses, JSR Micro Korea and JSR Micro Taiwan have both built R&D facilities with clean rooms, allowing them to set up local integrated systems for Display materials, which serves not only the local production of products but also supports consistent development and innovation of technologies.

This capability allows them to promote their business by giving timely support to customers in South Korea and Taiwan.