## **Advance Innovation**

Sumitomo Chemical believes that innovation, which is generated by our "ability to develop innovative solutions by leveraging its technological expertise in diverse areas," one of our core competencies, is the source of our future value, and we have designated "advance innovation" as one of the material issues for future value creation. We will continue to strive to enhance our corporate value through innovation, focusing on four priority areas: the related fields of environment, food, healthcare, and ICT.

## Research and Development

# **Basic Policy**

Amid increasing uncertainty in the business environment surrounding our company, the role played by the chemical industry in solving societal issues, such as climate change, food security, and infectious diseases is significant, and our business opportunities are expanding.

Our research and development is based on the following basic policies.

### ■ Basic Policy

- 1. Early commercialization of development items
- 2. Building the foundation of next-generation businesses
- 3. Building and operating a system to continuously create innovation
- 4. Promoting R&D based on business (commercialization) strategies and intellectual property strategies

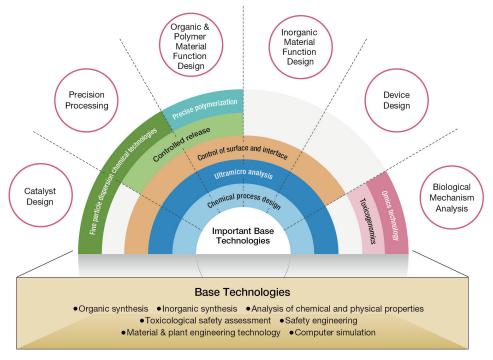
#### Strengths of Sumitomo Chemical's R&D

Through extensive research activities over the years, Sumitomo Chemical has acquired six core technologies: catalyst design, precision processing, organic and polymer material functional design, inorganic material functional design, device design, and biological mechanism analysis. We have cultivated research and development assets in the three areas of Green, Digital, and Bio. We are engaged in research and development to create new solutions to social issues and trends around the world by fully leveraging these assets. Based on our belief that "creative R&D is what will build a new era," we will

continue to strengthen our solution development capabilities.

Moreover, in addition to developing new materials, we are also emphasizing linkages with the business of materials solutions, which encompasses the development of downstream businesses and businesses of different industries. In order to quickly and efficiently apply the fruits of our R&D efforts toward the development of high value-added businesses, we will aggressively pursue technological collaborations with academic institutions and companies from other industries around the world.

#### ■ Six Core Technologies



# Sumitomo Chemical's Innovation Ecosystem Accelerates the Creation of Next-Generation Businesses

Sumitomo Chemical is building an innovation ecosystem (a system that continuously creates innovation) to steadily link R&D and business development to the creation of next-generation businesses.

In each of the four priority areas, we have formulated focus areas for our efforts, have identified core technologies that we own and core technologies that we do not own, and we are acquiring nonowned technologies through collaboration with startups and academia. As for business competence, we are also supplementing the lacking areas with alliances and investments with outside companies and startups, considering designing a business model that leverages our strengths and thematizing. At each stage of promoting themes, we communicate closely with relevant internal departments, external partners, and customers, and appropriately reflect their feedback to promote research and development. We also thoroughly utilize

digital technologies such as Al and Ml\* to accelerate development. In addition, we will incorporate new ideas and technologies that emerge in the course of theme promotion and dialogue with partners, and link this to the continuous creation of innovations.

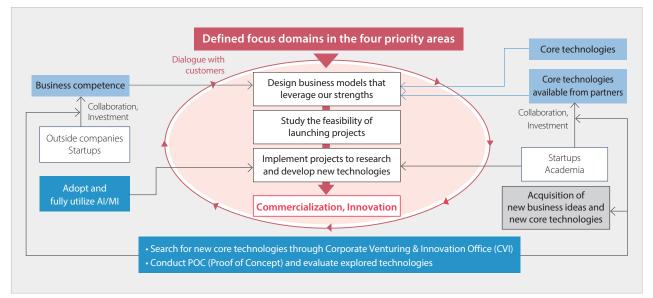
#### Stage-gate Management System

In considering projectization, the Stage-gate Management System for Corporate Research Projects was introduced in earnest in FY2019, and research projects are managed in four stages, from the idea stage to commercialization. Phases 0 and 1, the initial stages, are combined as the "incubation" stage, and Phases 2 and 3, the more advanced stages of research, are designated as the "development and industrialization" stage. We will proactively incorporate internally proposed projects in the idea stage as Phase 0. On the other hand, we clarify the requirements for passing through the gate in each

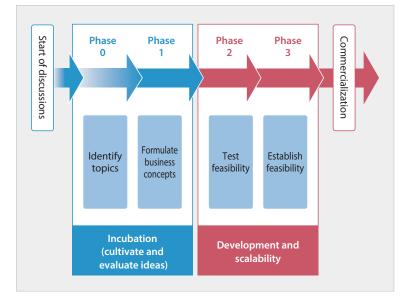
phase, and determine whether or not to pass through the gate through deep discussions not only with the research division but also with the business divisions.

As a result, we can now promptly create new projects and make decisions on their discontinuation, taking into account their future potential, thereby accelerating the turnover speed of research projects.

#### Innovation Ecosystem



## Overall Picture of the Stage-gate Management System



<sup>\*</sup> Materials Informatics