

Research & Development

The Shin-Etsu Group's R&D policy is to develop innovative technologies which will further differentiate our products and add higher value to avoid competition based on price. The R&D Department is committed to developing and then speeding up the commercialization of new products through its activities.

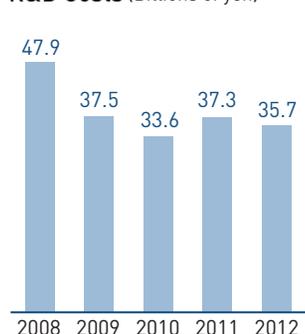
The first step of R&D activities is to define and determine new materials that are marketable, promising, and profitable. Those activities are intended to utilize our own original technologies and to contribute to low carbon dioxide emissions and also to meeting the needs of an aging society. Periodical management review will be held once a decision has been made to start an R&D project, and then business launch will follow the screening process.

The Shin-Etsu Group is engaged in activities which

require more than one R&D organization to work jointly in order to maximize its resources, reduce duplicated studies, and bring efficiency to new products releases. It is one recent trend.

The Shin-Etsu Group is well aware that intellectual property is an important asset for our business. As of March 31, 2012, the Group has 5,551 patents in Japan and 6,882 overseas patents, which include 211 patents in the United States in 2011. Those numbers place in the top class among Japanese chemical companies.

R&D Costs (Billions of yen)



Number of Patents by Region

	Number of patents acquired during the year ended March 31, 2012	Cumulative number of patents acquired as of the end of FY 2012
Japan	762	5,551
North America	212	2,398
Asia/Oceania	314	2,146
Europe	354	2,318
Other Areas	0	20
Total	1,642	12,433



Dr. Hiroshi Komiyama
External director,
Former President of
The University of Tokyo

Director Komiyama's Comment

Looking back on my experiences as an external director of Shin-Etsu Chemical over the past year, one very noteworthy event was the occasion of Chairman Kanagawa's being awarded a doctoral degree in July 2011. His dissertation was highly evaluated as a quite significant research study that analyzes in detail the PVC business, one of Shin-Etsu's main business pillars, from the perspectives of both technology and management. His thesis proposed and tested a model for effectively managing a commodity business and turning it into a highly profitable business. This was quite a valuable achievement, particularly in Japan, which has sometimes had some bitter experiences in the kind of business endeavor where specialty products, starting with semiconductors, could not advance to become commodity products.

Toward the end of 2011, I participated in a special roundtable discussion event at the Head Office, the contents of which

were reported in the New Year's edition of Shin-Etsu's in-house PR magazine. My keynote address dealt with the theme: "Toward the Realization of a Platinum Society.*" In the type of high-quality Platinum Society that Japan is aiming to become, the key to its realization rests on three innovation processes: "Green" innovations related to the environment, resource, and energy fields for which Shin-Etsu Chemical has already been providing the world with various superior technologies and products; "Silver" innovations in fields related to the aging of society for which Shin-Etsu's silicones and cellulose derivative products are proving to be quite useful; and "Gold" innovations related to the IT field for which human resources are being nurtured to work on basic research studies to achieve breakthroughs. I believe that in the building of a Platinum Society, Shin-Etsu Chemical is going to play quite an enormous role.

*As proposed by Dr. Hiroshi Komiyama, a Platinum Society will be the next demand of people who are satisfied with their physical possessions. This society will be achieved by combining innovation in three categories – Green, Silver, and Gold.