

May 21, 2009

## **41<sup>st</sup> Annual JCIA Technology Award Winners**

Japan Chemical Industry Association

The Japan Chemical Industry Association (JCIA) recently announced the winners of its 41<sup>st</sup> Annual Technology Awards. The awards were established to promote the advancement of chemical technology and further development of the chemical industry.

The "JCIA Technology Award" commends technologies that contribute to the chemical industry and the global economy in the following categories: Grand Prize, Special Technology Prize, and the Environmental Technology Prize. From among the nominees this year, JCIA's Technology Committee, headed by Mr. Yasuhisa Chiba, Representative Director & Vice President of Ube Industries, Ltd., selected the following two winners:

### **JCIA Technology Award (Special Technology Prize)**

#### **Kaneka Corporation**

#### **"Research & Development and Commercialization of Isobutylene Block Copolymer (SIBSTAR)"**

Although butyl rubber has superior gas barrier properties and is a common industrial material which uses the isobutylene monomer, it is a cross-linked rubber. Therefore, a substitute to the styrene thermoplastic elastomer (a raw material which is similar to plastic and rubber) that is easy to mold has been developed by Kaneka. This product satisfies the need in the marketplace for a butyl thermoplastic elastomer that has the characteristics of butyl rubber.

Because of its superior pliability, intensity, gas barrier properties, mechanical damping properties, and thermostability, SIBSTAR has already been used in a wide variety of fields such as earthquake-proof material and adhesives, sealants, and tubing in Japan and worldwide.

This represents an extremely high level of technology. Kaneka responded to needs in the marketplace by selecting appropriate solvents and initiators and developing separation technology that efficiently recovers polymers. Kaneka is currently the only commercial-scale supplier of butyl thermoplastic elastomers.

### **JCIA Technology Award (Environmental Technology Prize)**

#### **Kao Corporation**

#### **"Development of Runner for Casting (EG Runner)"**

The disadvantages of traditional runners used in casting include heavy transportation weight, bad working environment because of the dust they create when processed, and the production of a large amount of waste. Kao has used the pulp mold method to mold containers with a thin opening for products such as liquid detergent. The company has also developed an injection molding product that can maintain its shape and performance during cast iron molding even when exposed to temperatures as high as 1400 degrees C. This was accomplished by adding inorganic fibers and thermo-hardening resins. In addition, because the

product is made of paper and can be cut by a knife, it can handle various shapes and its weight has been reduced to one-tenth of the ceramic product. This contributes significantly to the improvement of the environmental performance of the industry. The EG Runner has already occupied over 80% of the domestic market and its use overseas has also been increasing.

The technology was highly praised because it made possible paper runners to replace traditional ceramic runners for casting by using original molding technology, which is indispensable for manufacturing cast iron, thereby contributing to the environment.

The awards ceremony will be held at the 18<sup>th</sup> JCIA Annual Convention on May 28, 2009.

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