

May 23, 2012

**-- Chemical Technologies Awarded for Efforts to Support Future --
44th Annual JCIA Technology Award Winners Announced**

The Japan Chemical Industry Association (JCIA) has announced the winners of its 44th Annual Technology Awards.

The "JCIA Technology Award," which commends companies that have developed technologies that contribute to the development of chemical industry and the economy, presents awards in the following categories: Grand Prize, Special Technology Prize, and Environmental Technology Prize. From this year's eleven nominees, JCIA's Technical Affairs Committee selected the following three winners:

Grand Prize (For contributing to the progress of scientific technology by enhancing an original technology to therefore create a highly functional industrial technology)

Fujifilm Corporation

"Expanding Business by Developing Fujitac High-quality, High-efficient Film Formation Technology of Solution"

By applying a solution of triacetylcellulose (TAC), the company produced a film formation technology with outstanding transparency and anisotropy enabling high-quality protective film for the polarizers. Developing and applying four new technologies, the company established both high-quality and high-speed production, thereby significantly contributing to efforts to make liquid crystal displays highly functional and larger in size. Additionally, just 10 years after beginning the project in 2000, while the company increased its production tenfold, it was able to reduce its solvent emissions and achieve a 99.9% recovery rate of solvent.

Special Technology Prize (For contributing to the progress of scientific technology with an original/improved technology)

Sumitomo Chemical Co., Ltd.

"Industrialization of a Compound Semiconductor Epitaxial Wafer by Metal Organic Chemical Vapor Deposition (MOCVD) Method"

In wireless communications (cellular phone, mobile PC, etc.), high-speed transistors using an epitaxial wafer are widely used for the function of receiving and transmitting radio signals in ultra-high frequency bandwidths. Because the company had

previously tackled issues with the development of epitaxial growth technology based on the metal organic chemical vapor deposition method, it established high-quality crystal growth technology, design technology, and production technology, and has succeeded in industrializing the epitaxial wafer, thereby greatly contributing to the rapid progress of ultra-high-speed communication devices.

Environmental Technology Prize (For contributing to the progress of scientific technology with outstanding effects on reducing environmental burdens through an original/improved technology)

Mitsubishi Chemical Corporation, National Institute for Materials Science, and Tokyo University of Technology

“Development of Red Phosphor for White LED (CASN Phosphor)”

Since a conventional white LED lacked red luminescent substance, its application has been limited to the products which a natural color tone is not needed. We have succeeded in developing and making a practical red phosphor (named “CASN”) that gives a red luminescent substance to a white LED by absorbing blue light from an LED chip and converting it to red light. The CASN phosphor has been applied for energy-saving home electric appliances, including an LED light bulb with a more natural color tone and a large size LCD TV with LED back light which we have seen a significant market expansion.

The awards ceremony will be held on May 28, 2012 during the 21th JCIA General Assembly.