



## **Prof. Endo and SDK to Form Carbon Nanofiber Joint Venture**

PROF. MORINOBU ENDO  
SHOWA DENKO K.K.  
September 30, 2003

Prof. Morinobu Endo, Faculty of Engineering, Shinshu University, and Showa Denko K.K. (SDK) have agreed to establish a joint venture for research of advanced carbon materials and their application to energy devices. The new company, MEFS Co., Ltd., will focus on R&D of carbon nanofiber in the category of “multi-walled carbon nanotube” (MWCNT) that has great potential for wide-ranging applications.

Prof. Endo discovered carbon nanotube while he was a researcher at the University of Orléans, France (in around 1975). Since then, he has been engaged in the study of the basic science of a wide variety of advanced carbon materials, including carbon fiber and carbon cluster, as well as application of these materials to high-performance batteries for portable electronic equipment and electric vehicles, and power source systems.

In 1982, Prof. Endo and SDK started joint researches into *VGCF* (vapor-grown carbon fiber), a typical MWCNT. While promoting application of *VGCF* as high-performance additive in lithium-ion secondary batteries, the two parties established the world’s first volume production technology of very fine *VGCF* products.

Based on this achievement, SDK has become the sole producer/marketer of carbon nanofiber in Japan, operating a 40-ton-per-year commercial plant.

In addition to carbon nanofiber, MEFS Co., Ltd. will promote R&D of advanced carbon materials for use in fuel cells and capacitors. Through speedy and strategic R&D efforts, the company will acquire intellectual property for its achievements.

Under the ongoing medium-term consolidated business plan (the Sprout Project), SDK is expanding the fine carbon business as one of its “strategic growth businesses” and developing battery materials based on the “strategic market unit” (SMU) concept. From now on, SDK will step up expansions in this field by commercializing R&D accomplishments of MEFS Co., Ltd.

### **[Profile of the New Joint Venture]**

Company name: MEFS Co., Ltd.

Capital: ¥10 million

To be established in: November 2003

Head office: Nagano City, Nagano Prefecture

Officers: Chief Executive Officer: Toyoharu Fujii (Director & Executive Officer, Inorganic Materials Sector, Showa Denko K.K.)  
Chief Technology Officer: Prof. Morinobu Endo

Scope of business: R&D as entrusted by SDK and its related companies regarding carbon materials and energy devices; provision of consulting services; all relevant activities

**For further information, contact:**

Prof. Endo's Office (Phone: 026-269-5201)

PR & IR Group, Showa Denko K.K. (Phone: 03-5470-3235)