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Sumitomo Chemical to Strengthen Compound Semiconductor Materials Business

Sumitomo Chemical Co., Ltd. (“the Company”) will expand its facilities for production of compound semiconductor materials at the Chiba Works (Sodegaura, Chiba Prefecture) to further strengthen this business and enhance a stable supply of such materials to customers.

Compared to single elemental semiconductors such as silicon, compound semiconductors generally have such characteristics as high-speed signal processing capabilities and excellent heat resistance. In particular, gallium arsenide (GaAs) compound semiconductors are widely adopted for high-frequency devices used in mobile phones and other equipment because of their outstanding signal processing at high frequencies and low power consumption. In recent years, demand has been growing rapidly for applications for antenna switches and power amplifiers used in multifunction mobile phones typified by smartphones. As such, demand is expected to continue to increase in the future. Compound semiconductor materials for which the Company will expand production are GaAs epitaxial wafers (GaAs epiwafers) prepared by thin film crystal growth of materials, such as GaAs, on GaAs substrates.

Up to now the Company has been manufacturing GaAs epiwafers at the Chiba Works and Sumika Electronic Materials, Inc., its US subsidiary, with production capacity expanded stepwise in the past. Given expectations of a continued increase in demand for GaAs epiwafers, the Company has decided to double the compound semiconductor materials production capacity at the Chiba Works with an investment of about four billion yen for the purpose of establishing a fully secured system for stable supply as well as expanding the business.

In addition, capitalizing on its technology cultivated through the GaAs epiwafers business, Sumitomo Chemical is engaged in the development of new compound semiconductor materials. Specifically, the Company will participate in the government-private sector joint project for next generation

power semiconductors at the Nagoya Institute of Technology where it undertakes R&D on gallium nitride (GaN), one of the next generation power semiconductor materials. Next generation power semiconductors are capable of being operated at high voltage and high temperatures. They are expected to contribute to the improved performance of home electrical appliances and personal computers, as well as electric vehicles, solar cells, and other equipment for wind power or geothermal power generation, etc.—areas likely to show market expansion in the future. Also, these semiconductors are believed to contribute to energy saving.

Positioning the compound semiconductor materials business as one of the priority areas of the IT-related Chemicals Sector, the Company will enhance existing operations through this expansion of production capacity as well as to seek to further expand its business by focusing efforts on the development of new materials.