August 22, 2024

Dexerials Corporation

Dexerials Joins IOWN Global Forum
– Helping Build communication Infrastructure for Providing New Value –

Dexerials Corporation (Headquarters: Shimotsuke-shi, Tochigi; Representative Director and President: Yoshihisa Shinya; hereinafter, "Dexerials") is pleased to announce its participation in the Innovative Optical and Wireless Network (IOWN) Global Forum*1, an international forum for the realization of next-generation information and communications infrastructure technologies through the use of innovative technologies centered on optics.

In recent years, further transformation of information processing, communication, and network infrastructure is required to realize a smart world*2. The IOWN vision*3 aims to promote research and development of future communication infrastructure utilizing cutting-edge optical-related technologies such as all photonics network (APN) *4 and information processing technologies, and to share and realize them in a global ecosystem.

Dexerials develops, manufactures, and distributes functional materials in anticipation of changes in the times and technologies. They include electronic parts, adhesive materials and optical materials that are indispensable to smartphones and other electronic devices, as well as to increasingly electrified automobiles. It operates eight manufacturing and sales locations in Japan, including those of its subsidiaries, and 12 overseas.

It has defined the photonics business as one of its growth domains in its five-year-long Mid-Term Management Plan*5. Currently, demand for high-speed photodiodes (PDs)*6 for optical transceivers is rapidly growing amid a rise in communication traffic and an increase in data centers following the spread of generative AI. In addition, next-generation high-speed communication technologies are also sought. In April 2024, Dexerials Photonics Solutions Corporation*7 came into operation. It will accelerate the development of high-speed PDs for optical transceivers and has already embarked on the project for developing complex semiconductor devices that may be helpful to next-generation high-speed communication technologies.

To mark its announced participation in the IOWN Global Forum, Dexerials will make a broad contribution to the evolution of next-generation high-speed communication technologies that will lead to the realization of the IOWN vision through the development of new photonics technologies and products that incorporate advanced photoelectric integrated technologies.

Going forward, Dexerials aims to contribute to the realization of a sustainable society, achieve sustainable growth, and increase corporate value by continuing to provide high-value-added products, technologies, and solutions that are essential for the evolution of digital technologies that support the resolution of social issues, while adhering to its corporate philosophy of "Integrity," even in a changing society and environment.

*1: An international forum for the realization and dissemination of the IOWN vision together with partners in different sectors

*2: A generic term for initiatives for addressing issues facing society and for creating an better environment by accumulating and utilizing diverse data with information and communication technologies (ICT)

*3: A vision for network and information processing infrastructure, including terms, that opens the way to offer high-speed and high-capacity communication, huge computing resources and other features with the use of optical and other innovative technologies

*4: A system in which photonics-based technologies are introduced to everything ranging from networks to terminals

It delivers low power consumption and high-quality transmission with high capacity and low latency, something that is difficult to achieve with the existing electronics-based technologies, and involves no photoelectric conversion.

*5: Formulation of Mid-Term Management Plan 2028 "Achieving Evolution" and the Purpose

*6: A photodetector for photoelectric conversion, or transformation of the intensity of light radiated into electric current, which is used to detect optical signals in optical communication

*7: Notice of Commencement of Operation of Dexerials Photonics Solutions Corporation as Integrated Company Leading Growth in the Photonics Domain

<Corporate Profile>

Dexterials develops, manufactures and distributes electronic components, junction materials, optical materials and other functional materials that are indispensable in smartphones, laptops and other electronic devices, in addition to components for automobiles, which are increasingly becoming electronic, making electronics parts ever more indispensable. Also, as a starting point in contributing toward the realization of further growth and a sustainable society, the Company has defined its Purpose: "Empower Evolution. Connect People and Technology," as explained in the website section "Corporate Philosophy, Vision and Purpose | About Dexerials | Dexerials"

Company name: Dexerials Corporation

Head office: 1724 Shimotsuboyama, Shimotsuke-shi, Tochigi

Representative: Yoshihisa Shinya, Representative Director and President

Established: June 20, 2012

* In 2012, Sony Chemical & Information Device Corporation changed its company name to Dexerials Corporation and started operating under the new name.

Official website: https://www.dexerials.jp/en/