

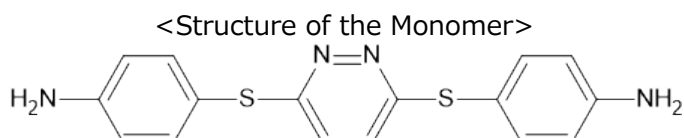
July 5, 2023

Japan Material Technologies Corporation

JMTC concluded a license agreement with JSR and Tokyo Institute of Technology for pyridazine and sulfur containing diamine compounds and high refractive index resins that use these compounds

Japan Material Technologies Corporation (Head Office: Chuo-ku, Tokyo; President: Koyu Urata; "JMTC") has entered into a license agreement ("the Agreement") with JSR Corporation (Head Office: Minato-ku, Tokyo; President: Eric Johnson; "JSR"), and Tokyo Institute of Technology ("Tokyo Tech") concerning pyridazine and sulfur containing diamine compounds and high refractive index resins that use such compounds.

The Agreement covers 3,6-bis (4-aminophenylene sulfanyl) pyridazine ("the Monomer") and polymers that use the Monomer, which were discovered through joint research conducted by JSR and Professor Emeritus Mitsuru Ueda and Professor Shinji Ando of the School of Materials Science and Engineering of the Tokyo Tech. The Monomer has a pyridazine skeleton and sulfur atoms that contribute to providing a high refractive index, making it a raw material for polymers with a high refractive index and high heat resistance. The Monomer can also be polymerized with tetracarboxylic dianhydride to make polyimide, which can impart transparency, high refractive index, low birefringence and heat resistance, depending on tetracarboxylic anhydride, etc. to be combined. JMTC intends to commercialize the Monomer as early as possible by supplying it to optical resin material manufacturers, etc., utilizing the non-registered exclusive license acquired through this Agreement.



JMTC has worked on the industrialization of resin materials with high refractive index, heat resistance and transparency, such as double-decker silsesquioxane and VSTCD with tricyclodecane structure. Market needs for transparent resins used for lenses, prisms, and optical waveguides are rapidly expanding and diversifying as sensors, cameras, and communication modules for automotive and information communication applications become more sophisticated. JMTC will continue to be actively involved in the commercialization of innovative optoelectronics-related materials.

JMTC also registered as a Tokyo Tech Membership Member (formerly known as Tokyo Tech Industry-Academia Collaboration Member (Type I)) in March 2018 and is reviewing the commercialization of material-related technologies invented by Tokyo Tech. The material of this Agreement is the third project in which JMTC aims to commercialize research results from Tokyo Tech, following BNFO, a negative thermal expansion material for which a joint research agreement was concluded in September 2018, and VSTCD, for which a non-registered exclusive license agreement was concluded in February 2020.

JMTC has been working to commercialize innovative technologies developed by domestic companies, universities, and research institutes through license-outs and carve-outs. JMTC will continue to contribute to creating innovation in Japan's materials industry by promoting the commercialization of unused innovative material technologies.