

February 14, 2019

To whom it may concern,

Company: Tamagawa Holdings, Co., Ltd. Representative: President, Toru Masuzawa

(JASDAQ Code: 6838)

Contact: Management Planning Division, Junya Tokumoto

Tel: 03-6435-6933

Notice on Commencement of Joint Research with Tohoku University (Sendai City, Miyagi Pref.)

Please be informed that we have entered into a joint research agreement with Tohoku University team (representative: Yasubumi Furuya / Tohoku University, Micro System Integration Center / Specially-appointed Professor), an international research hub for electromagnetic energy materials, micro processing technology, communication devices with abundant research achievement in order to drive more multifunctional and advanced product development.

The employees of our subsidiary, Tamagawa Electronics, Co., Ltd. have been provided by Tohoku University with technical instruction for millimeter wave technology through the commissioned research associate system where the employees are dispatched to Tohoku University.

This research especially includes optimization device control / monitoring in the natural energy field expanding domestically and internationally (photovoltaic, wind power, biomass and hot spring heat, etc.), and new business structuring using surplus power thereof, evaluation of storage battery for IoT devices mounted in mobile bodies, signal transmission test, etc. under various extreme environmental conditions. We will conduct research and development of integration products of these element technologies, engage in enhancement of collaboration with the related domestic and foreign institutions and endeavor to construct operationalization system to meet the society reformation including Japan's next generation concept of society "Society5.0" (goal for 2025)\*.

Our group will develop and expand the accumulated technologies of the three constituent companies up to this point to proceed with management as an ESG general trading company willing to engage in environmental power generation and green business, communication infrastructure development, and by strategically analyzing and integrating them, also willing to engage in new business creation and corporate reorganization.

\*Source: Cabinet Office website