

Ball Wave selected for FY2021 NEDO TRY:

Promotion of development of a ball SAW sensor to detect airborne viruses in less than a minute

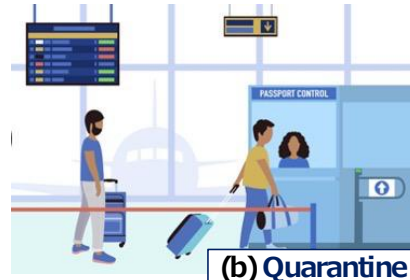
Ball Wave Inc. (Head office: Sendai City, Miyagi Prefecture; CEO: Dr. Shingo Akao) has applied for and been selected for the second round of the TRY program offered by the New Energy and Industrial Technology Development Organization (NEDO). The TRY program aims to promote Technology-based startups that innovatively Respond to economic changes to Yield social benefits as part of the Technology-based Startup Support Program. (https://www.nedo.go.jp/koubo/CA3_100316.html)

Applications for the TRY program were accepted from technology-based startups with specific business plans that take the sudden upheavals in the market environment since the start of 2020 as a business chance, and the program offers assistance in the form of grants, in principle up to 100 million yen and with a grant rate of two-thirds or less of the eligible expenses.

The novel coronavirus disease (COVID-19) has spread around the world since the start of the 2020, and it has become clear that this novel infectious disease has an unprecedented difficulty of control. The virus is spread by the dispersal of viral particles into the surrounding air as aerosols from the exhaled breath of patients before the onset of illness or asymptomatic infected people. This means that the spread of the virus must be controlled by rapid detection of infected people who do not display symptoms. PCR tests and antigen tests of nose and throat swabs or saliva are used to check for infection, but these tests require nose and throat swabs or saliva samples to be taken from each individual to be tested, which is laborious and time-consuming. Also, there is the difficulty that antigen tests take over 10 minutes, while PCR tests may take several hours or more. There is therefore a pressing need that has yet to be met for a rapid detection technology that can somehow detect viruses non-invasively in asymptomatic patients or in the air.



(a) Hospitals



(b) Quarantine



(c) Classrooms



(d) Airport lounges

This is a critical situation, and Ball Wave has responded by commencing joint development aimed at commercialization of a virus sensor with Toyoda Gosei Co., Ltd., one of our shareholders, and Tohoku University. This device is based on a sensor that uses the ball SAW,¹ Ball Wave's proprietary core technology, which is capable of detecting chemicals in gas with ultra-high sensitivity and ultra-fast response. The addition of bioengineering technology allows the device to detect viruses directly from airborne aerosols.

<http://ballwave.jp/images/20210925.pdf>

With this grant from NEDO TRY, we will aim for early commercialization of the virus sensor, in particular by speeding up the development of the bioengineering technology.

■ About Ball Wave

Ball Wave is a venture company that was launched by Tohoku University. The company aims to bring about a safe, secure, clean, and sustainable society through the use of the ball SAW sensor, a chemical sensor² developed by the university as an early-stage, innovative technology. The ball SAW sensor is capable of rapid, highly sensitive detection of trace amounts of moisture and various different gases. It combines the high resistance to temperature, pressure, and corrosion of quartz balls with approximately 100 times the sensitivity and response speed of conventional sensors. Ball Wave is currently working on the development, manufacture, and sale of trace moisture meters and gas chromatographs equipped with ball SAW sensors.

Website: <http://ballwave.jp/>

¹ Ball SAW: Ball surface acoustic wave (SAW: Surface Acoustic Wave)



Ball Wave NEWS RELEASE

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Ball Wave Inc.

²Sensor technology for detecting chemical changes in materials

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