

Fukagawa Factory under reconstruction

FUJIKURA HISTORY

End of war and reconstruction: The Great Tokyo Air Raid, the fall of Okinawa and air raids spread nationwide. Finally in 1945, Japan declared the end of war and set about the task of reconstruction. After many days of meetings, president Matsumoto announced the company's reconstruction plan. All the employees proceeded with painstaking restoration work apace.

Shaping the future with "Tsunagu" Technology.

FUJIKURA NEWS 2018 No.446 9



CEATEC JAPAN 2018 Information on Fujikura Exhibition

Dates

October 16 (Tue) -19 (Fri), 2018
10:00 a.m.-5:00 p.m.

Venue

H037, Device/Technology Area, Hall 6,
Makuhari Messe

We thank you for your continued patronage of our products. We will be exhibiting at CEATEC JAPAN 2018 to be held from October 16 (Tue) to 18 (Fri) at Makuhari Messe. This year's exhibition purpose is "Harnessing CPS/IoT to create business opportunities based on co-creation involving a wide range of industries and fields, this event brings the technologies together

in one venue that is ideal for the exchange of information. This facilitates the realization of Society 5.0, the ultra-smart society designed to further economic development and the solution of social problems." Fujikura's booth shows how its product can contribute to the realization of Super Smart Society in an easy to understand manner.

つながる社会、共創する未来



Corporate R&D Management Department

wwwadmin@jp.fujikura.com

Fujikura's "Tsunagu" (Connecting) Technology Accelerate to Realize Super Smart Society (Society5.0)

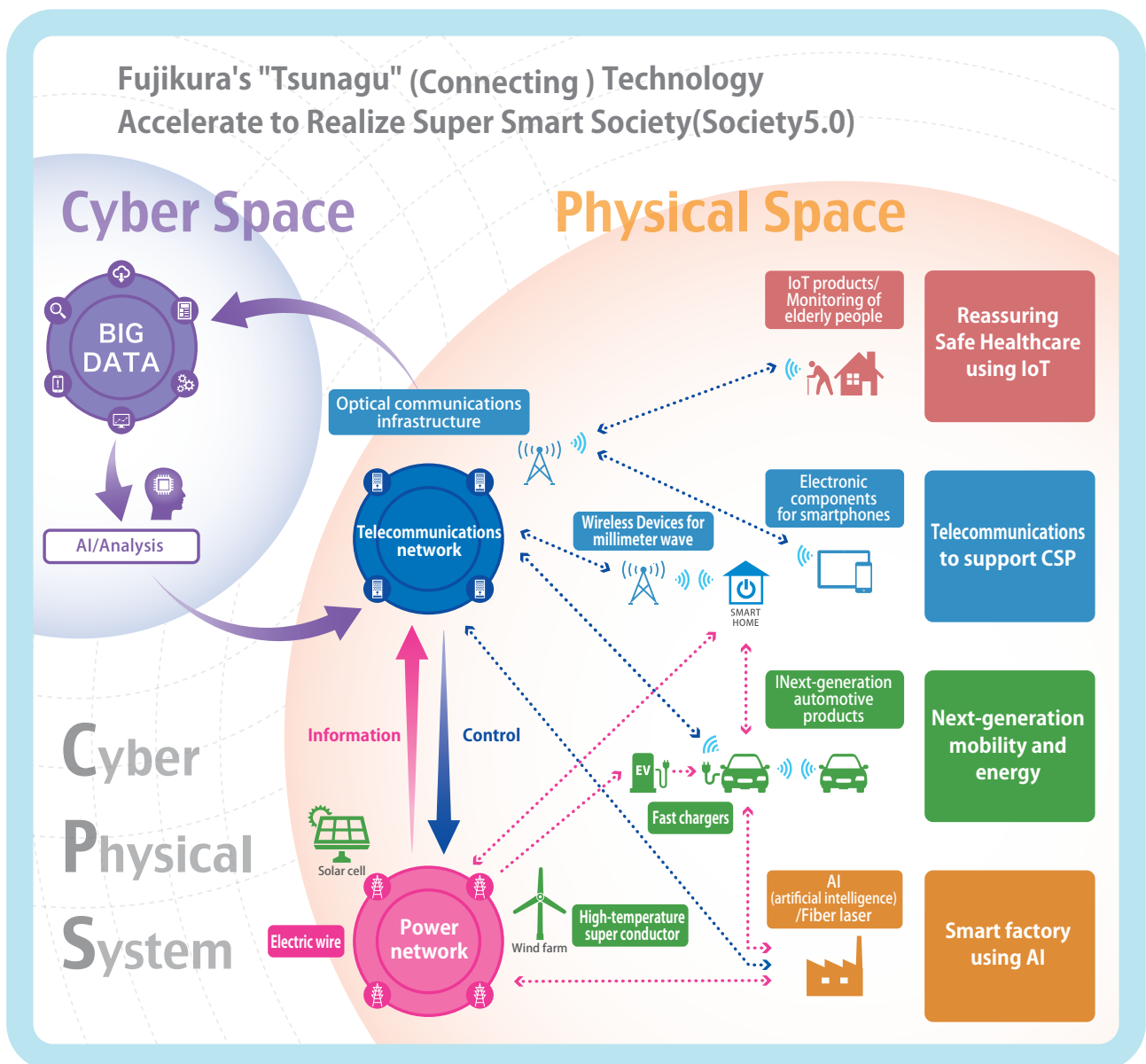
Super Smart Society (Society5.0), which was proposed by the government as a future society that Japan should aspire to, is a human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space."

The diagram below shows how Fujikura products can contribute to

Super Smart Society. Cyber Physical System consists of power and telecommunications networks, both of which are part of Fujikura's conventional businesses. Our exhibits this time are divided into four sections so that visitors can easily understand.

The following pages cover each section and product on display.

We look forward to meeting you at our booth.





Reassuring Safe Healthcare solutions using IoT

In the Super Smart Society concept, a variety of goods and people are connected by IoT. We introduce IoT products such as ones for monitoring elderly people indoors and out, which contributes to an aging society, and wearable ones for healthcare.



● Energy harvesting sensor system

We have developed the 920 MHz multi-hop wireless sensor system powered by a die-sensitized solar cell, which is capable of collecting data of temperature and humidity, illuminance, illumination, pressure and motion.

At our booth, an application for monitoring single elderly person is on display.



● GPS shoes and outdoor monitoring system

To address a social problem of missing elderly people, we have developed a pair of shoes embedded with GPS to collect positional information and a monitoring system to detect the position.

An improved-version of the GPS shoes that were used for verification testing carried out in Kagoshima Prefecture in March is displayed.



● Stretchable membrane

We have developed a technology for stretchable printed circuit, which can be applied to wearable devices to obtain biological information of each person by using IoT.

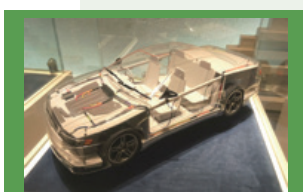
Visitors can experience a foot pressure sensor at our booth.

Society5.0



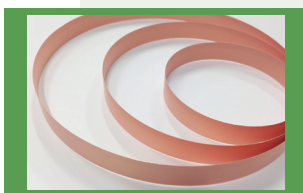
Next-generation mobility and energy solutions

In the Super Smart Society concept, it is expected that electric vehicles are plugged into a power source of each household and that their battery become part of power supply network. The exhibits also cover super conductivity, which contributes to the realization of a future high-efficiency energy society.



● Next-generation Automotive Products

Next-generation vehicles are experiencing rapid technical innovations including electrification, automated driving, and connectivity. This time, especially, our exhibits include connectors for fast chargers and high-voltage cables as the products to deal with the electrification. A 250-amp liquid-cooled cable for charging, which halves the time taken for charging before, is also on display.



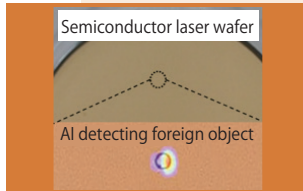
● High-temperature superconductor

Fujikura's rare-earth-based high-temperature superconducting wire is expected to be used in various industrial applications including healthcare. Fujikura will further improve performance of the superconducting wire and make a contribution to future smart society by supplying high-quality and reliable superconducting wire. In this exhibition, our superconducting technology is introduced with a demonstration.



Smart factory solutions using AI

The Super Smart Society concept sets the application of AI (artificial intelligence) forth as a premise. We have already introduced AI to an actual manufacturing process. The application example is shown here.



● AI Image Inspection System

Fujikura is establishing our own AI technology platform as manufacturing innovation using AI. AI has already been introduced to the appearance inspection of semiconductor laser chips for fiber lasers and succeeded in automated inspection, exceeding the accuracy of inspection performed by persons before. Demonstrations of appearance inspection by AI take place at the booth.



● Fiber Laser

An increasing number of fiber lasers have been used with Smart Factory proceeding. Here is the lineup of Fujikura products (pulse, air-cooled mid-power output CW, water-cooled high-power output CW) and their features. In addition, demonstrations of laser marking by a pulsed fiber laser are also held.

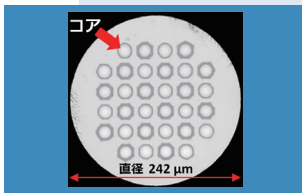
*CW: Continuous Wave

Society 5.0



Telecommunications solutions supporting CPS

Super Smart Society is based on CPS (Cyber Physical System). Many Fujikura products are used for the construction of telecommunications network, which is the foundation of CPS.



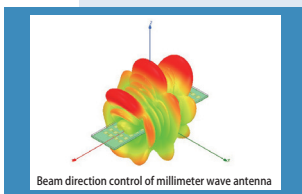
● Optical communications

Visitors will find ultra-multi-fiber small-diameter high-density optical fiber cables to handle increasing data volume, high-density wiring solutions most suitable for data centers, and fusion splicers that keep contributing to constructing optical communications network worldwide. In addition, there is a display of a multi-core optical fiber, which has multiple cores and is being developed.



● Electronic components for smartphones

Smartphones have become indispensable for modern life. To extend their features, we supply electronic components such as FPC, electronic wires, thermal components, connectors and other components. At our booth, the usages, requirement specifications, and lineup of these components are presented in moving images for easy understanding.



● Devices for millimeter wave band

We develop built-in telecommunication modules for the millimeter wave bands, that meet global demands to provide broadband services in areas where optical fiber installation is difficult. We offer optimal solutions in achieving high-speed, long-distance communications by applying our excellent antenna design techniques and manufacturing technologies nurtured in the electronics field.



Fujikura Ltd.

"Tunagu" Technology New Product News No.446
 1-5-1, Kiba, Koto-ku, Tokyo, Japan 135-8512
 TEL. +81 (0) 3 5606 1112 FAX. +81 (0) 3 5606 1501
 Issue : September 2018, No. 446 Editor in Chief : Tomoharu Morimoto
<http://www.fujikura.co.jp>

Market Research & Planning Department	+81(0)3 5606 1092
Kansai Office	+81(0)6 6364 0373
Chubu Office	+81(0)52 212 1880
Tohoku Office	+81(0)22 266 3344
Kyushu Office	+81(0)92 291 6126