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INTERVIEW

“With our know-how and expertise, we can support biotechnologies”

Interview with Mr. Tsuneji Sawai and Dr. Daisuke Nojima from Yokogawa Innovation Switzerland

Yokogawa Innovation Switzerland has been created in 2020 by Yokogawa Electric Corporation, a global leader of industrial automation and test and measurement solutions. The newly created structure is part of a long-term business framework to achieve a more sustainable society. We meet Mr. Tsuneji Sawai and Dr. Daisuke Nojima who told us more about this new company.

Can you introduce Yokogawa Electric Corporation to our readers?

Yokogawa is a global provider of industrial automation and test and measurement solutions based on measurement, control, and information technologies. We are an over century old company with over CHF 3 billion of revenue, and 18,000 employees worldwide. Our overseas activities account for 70% of our revenue and staff. The headquarters is in Tokyo.

What is/are Yokogawa Electric Corporation’s main business?

We are a business-to-business company (B2B). Most of our customers operate in the petrochemical, energy, and material industry as well as life-related infrastructure areas. To put it



Yokogawa’s office are located in the Switzerland Innovation Park in Basel

simple, we help other companies increase their productivity, avoid risks, reduce their workloads, and ensure worker safety through our products and services.

Yokogawa Electric Corporation is number 1 in Japan and Asia in this field. We are fourth in Europe where our main competitors are companies such as ABB or Siemens. Unlike them, we are focused on our core business. Hence, we are a smaller and dedicated company.

In 2020, Yokogawa created a Swiss entity called Yokogawa Innovation Switzerland, what is its purpose?

In Yokogawa’s long-term business framework, a sustainable society is defined as one of the focus areas.

Yokogawa Innovation Switzer-

land has been established to achieve the sustainable development goals (SDGs) and contribute to the development of a circular economy from the viewpoint of research and development.

Energy production is going to adapt to reduce carbon emissions and achieve the SDGs. Yokogawa is willing to be part of this trend by developing bio-economy and bio-technologies.

We are already working in this field. In 2018 we invested into AlgaEnergy a Spanish company specialist of microalgae. The potential for food, agriculture, and bioenergy is considerable.

More recently, we invested in Bloom, an EPFL spin-off that produces petrol-substitutes using bio-mass.

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“With our know-how and expertise, we can support biotechnologies”

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INTERVIEW

(continued from page 1)

We will continue to support those two companies, but the major part of our team in Switzerland is to find new area for future activities. With our know-how in industrial automation, measurement solutions and expertise in energy related industries we believe we can support and develop biotechnologies.

Was the Basel area a natural choice for your specific purpose?

Yes, indeed. Switzerland in general is recognized worldwide for being innovative. There are a lot of talented people, great companies and excellent universities. For our purpose, Basel was an obvious choice as it is a global center for the pharmaceutical industry but also for food and beverages that are some of our focus industries. In that sense, the Basel area is the best place to gather customer voices and novel biotechnologies. To be accurate we are located in Allschwil, in the Switzerland Innovation Park. It is a great facility with many innovative companies.

Can you give us an example of a project you are working on?

We are now exploring potential collaborations with various universities, startups, and governmental hubs. Then we are going to start the actual R&D and business development. Additionally, we are gathering expertise regarding bio-economy in Yokogawa and starting new R&D projects with Yokogawa Technology Solutions India and Yokogawa Electric Corporation.



Mr. Sawai, Managing Director, and Dr. Nojima, Chief Science Officer

We are also working on technologies regarding the smart cell industry. With Yokogawa Bio Frontier we support the creation of those new products derived from biomass. We are also interested in medical science and machine-learning technology.

In fact, we potentially cover a very broad spectrum of technologies and application because bio-product and bio-process is a broad definition. It can be sophisticated technologies like the one developed by Bloom, but the definition also applies to Miso or Soy sauce. They are bio-processed too!

What are Yokogawa Innovation Switzerland's priorities for the coming months/years?

We are now working on algal genome editing technologies with single-cell manipulation and development of metabolic prediction algorithm. In parallel, we are always looking for new fields to enhance our activities as mentioned earlier. We are enhancing our activities as Bio-Center of Excellence in

Yokogawa to maximize Yokogawa's competency and incorporate external capabilities.

We want to develop the technology we are working on. We have developed some measurements tools and process we want to promote. We also want to strengthen the collaboration with start-ups and academia with joint R&D.

Yokogawa is not well known here. So, we are trying to introduce ourselves to Swiss companies and universities. We are very open and happy to discuss with everyone. When Yokogawa decided to enter the bio-economy in 2018, we created “a Life Business Headquarters” back in Japan. We are working both from Tokyo and Switzerland meaning that our partners here also benefit from the leading position of Yokogawa in Asia.

In a way, our small team is painting on a white canvas. It is an interesting challenge.

“A Hub for Life + Science”

Switzerland Innovation Park in the Basel Area will be the most dynamic life science cluster in Europe. There are already over 700 companies working in this field in the Basel Area. Next year, it will scale up with the inauguration of the

[Main Campus](#), a beautiful building designed by Herzog & Meuron and developed by SENN. It will open in 2022 with 50,000 square meters dedicated to innovation and life science.



State-of-the art working environment

行事

EVENT

New travel restrictions because of Omicron

Originally, we were going to publish an article called “Business trips to Japan are possible with a three-day quarantine”, but everything has changed within 24 hours.

Currently, both Japan and Switzerland have inbound restrictions.

This is no longer true, but for your information, on November 5 the Japanese government agreed to significantly [reduce the quarantine for vaccinated foreigners](#) visiting Japan for business purposes. For some countries, including Switzerland, it was shortened to 3 days. This was a significant improvement for Swiss companies that needed to send staff to Japan. Un-

fortunately, the Omicron variant has forced the government to adapt quickly. These are the current measures in force:

[Japan to Switzerland](#)

Entry to Switzerland from Japan is still possible but with several restrictions. Since November 30 Japan is on the [list of countries where a risk variant is circulating](#), since a positive case of Omicron has been detected.

All passengers have to fill in a form, have a negative test before departure and four to seven days after return. A ten-day quarantine applies after return.

[Switzerland to Japan](#)

Japan has banned all inbound foreign travellers from entering Japan as of November 30, as stated by PM Kishida in a [press conference](#).

Japanese citizens are still allowed to return to Japan but a strict quarantine in a designated location is mandatory for countries where Omicron is circulating. Currently about 20 countries and regions are listed. Switzerland is not excluded but this could change fast. Italy, UK, Netherlands, Germany, France and Austria are already listed with quarantine of 3 to 4 days in a designated facility ([check the COVID page](#) for the latest update).

動向

SITUATION

COVID and supply chain issues undermined Japan’s economy in Q3

It was expected that the Japanese economy would be impacted by the wave of COVID that hit the country during the third quarter (July to September). The country faced record-high infection rates for several weeks, forcing the authorities to reintroduce the state of emergency. This situation had a direct

consequence on consumption that dropped significantly (-1.4%). Besides COVID, the supply chain issues (bottlenecks, shortages, etc.) have affected foreign trade, with both exports (-2.1%) and imports (-2.7%) plummeting. As a result, the Gross Domestic Product (GDP) decreased more than anticipated by

experts with -0.8% (quarter-on-quarter). In annualized figures, this represents a 3% contraction of the economy.

The fourth quarter is expected to be better, but it seems unlikely that it can save the year.

Source: [Cabinet Office of Japan](#)

分析

ANALYSIS

革新

INNOVATION

Fifth AI Edge Contest organized by METI

The Japanese Ministry of Economy, Trade and Industry (METI) regularly organizes contests to stimulate innovation.

This time the focus is on AI and object identification and tracking. This is especially relevant for self-driving cars and other autonomous vehicles. The closing date is February 15, 2022, and already 128 participants have registered.

Purpose

With the progress of artificial intelligence (AI) technology, social implementation such as image recognition using AI technology, automatic driving, and natural language processing are rapidly progressing, and this is especially true in the edge computing field. Since it is necessary to realize AI technology with higher efficiency, startups mainly in the United

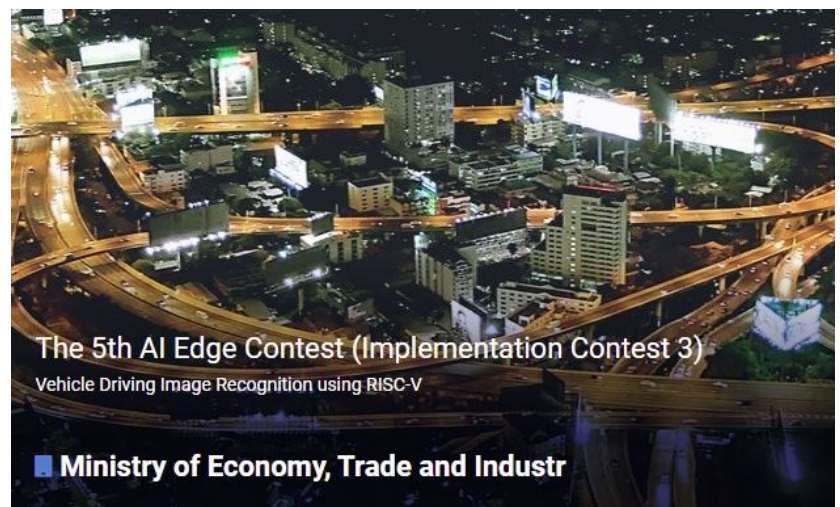
States and China, and major vendors, are accelerating their entry into AI hardware, even in Japan. In this contest, we will develop AI hardware equipped with the "RISC-V" chip, which is currently attracting attention, and set the hardware system development that considers edge computing, including hardware and software as an issue.

Details

Specifically, the team taking part in the contest must develop an algorithm that will identify cars, pedestrians and other road users.

The algorithm must be able to identify clearly, quickly, and based on a limited number of frames (3) from a selected video.

Source: [METI](#)



Agenda

日程

AGENDA

✓ “Automne de la culture japonaise”

Once more, the Japanese consulate in Geneva collaborates with specialists and local associations to promote the Japanese culture in the western area of the country. Several conferences, exhibitions, shows, tasting events, and initiation to traditional handcraft will take place from late-September to mid-December.

The [full program](#) is available on the website of the Consulate.

JETRO is a government-related organization that works to promote mutual trade and investment between Japan and the rest of the world. Originally established in 1958 to promote Japanese exports abroad, JETRO's core focus in the 21st century has shifted toward promoting foreign direct investment into Japan and helping small to medium size Japanese firms maximize their global export potential.

The JETRO Switzerland Newsletter can also be viewed and/or downloaded online: <http://www.jetro.go.jp/switzerland/newsletter>

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