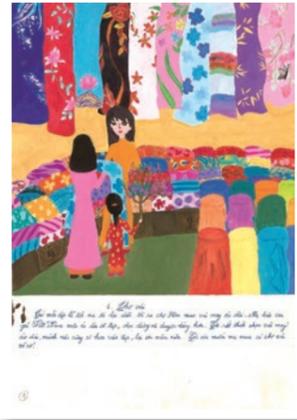


Grand Prix Winners 2017-2018

Started in 1990, the Mitsubishi Asian Children's Enikki Festa is a program that seeks to promote literacy education and to stimulate cultural exchange among children by allowing them to learn about each other through "enikki" (illustrated diaries).

■ <http://enikki.mitsubishi.or.jp/e/index.html>



Nguyen Mai Trang
Age 12
Viet Nam

Fabric Vendors
At the Tet New Year's holidays, my mother always takes me to Hom market to buy fabric for making ao dai ethnic apparel. She says that wearing ao dai makes Vietnamese girls more beautiful, gentle and graceful. I like to choose fabric for ao dai. Each piece has a beautiful pattern and feels soft. I wanted my mother to buy everything that the vendors had to sell.



Jiang Yuhang
Age 8
China

My parents and I said, "Cheese!" and had a family photo taken. They asked me why I didn't smile for the photo. Ha, ha. The reason is I'm missing a front tooth.

* The Enikki entries above, when necessary, have been translated into English from the language they were originally written in.

Japanese Persimmons Hanging to Dry in Koshu

Known for its large size and rich sweetness, the *Koro* persimmon is a local specialty produced around Koshu City in Yamanashi Prefecture. The fruit is so named because it is frequently turned (*Koro*) to ensure that the whole fruit catches the sunlight as it dries. Harvesting starts towards the end of October, when lower temperatures in the morning and evening cause the persimmon's orange color to darken. The fruit is peeled and hung to dry. Allowing the hanging fruit to slowly ripen over a month or so produces the *Koro* persimmon with its concentrated natural sweetness. The sight of persimmons hanging from the eaves of farmhouses like a bamboo blind conveys an elegant feeling of late autumn.



©Jiji Press Photo

For more information about the Mitsubishi companies, see "mitsubishi.com" ■ <https://www.mitsubishi.com/en/>

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■ <https://www.mitsubishi.com/en/csr/mpac/monitor/>

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A Bimonthly Review of the Mitsubishi Companies and Their People Around the World



Feature

The Coming Growth in Agriculture

▶ **World Scope**

▶ **Global Spotlight**

A group company of Mitsubishi Paper Mills
A subsidiary of Mitsubishi Materials

▶ **Annual Events in Japan**

Japanese Persimmons Hanging to Dry in Koshu

▶ **We are going digital-only from the next issue.**
See page 5 for details.

2020
October
|
November



The Bright Food Group plant factory system

Mitsubishi Chemical Holdings

Delivery of Plant Factory System to China's Bright Food Group

Mitsubishi Chemical Holdings (MCHC) group company Mitsubishi Chemical Corporation (MCC) has delivered one of China's largest plant cultivation systems fed with both artificial and solar light to Bright Food Group Shanghai Wusi Co., Ltd. The plant factory system developed by MCC subsidiary Mitsubishi Chemical Agri Dream Co., Ltd. features a hybrid greenhouse that combines the use of artificial light to raise seedlings and then sunlight to efficiently produce plants from the seedlings. The advantages of the system include year-round harvesting, reduced water consumption, and proper use of fertilizers. Mitsubishi Chemical Agri Dream established Wuxi Lingyang Green Agricultural System & Technology Co., Ltd. as a local subsidiary in 2014. In recent years, the Chinese market has seen a rapidly growing trend toward more fresh and appetizing food, in addition to rising concerns about food safety and security. The Bright Food Group has been producing leafy vegetables since 2017, when it introduced the MCC Group's leafy vegetable plant factory system. In this the second phase of the project, the company has now introduced the MCC Group's fruit and vegetable factory cultivation system.



■ https://www.m-chemical.co.jp/en/news/2020/1208228_7667.html

Mitsubishi Fuso Truck and Bus

Employees with Disabilities Grow Vegetables at FUSO Green Village Farms

Farms operated by Mitsubishi Fuso Truck and Bus (MFTBC) in Miyoshi City (Aichi Prefecture) and Iwatsuki City (Saitama Prefecture) have been employing people with disabilities for agricultural work. The farming teams began by setting up rows of hydroponic culture plants in polytunnels, and have learned the processes of planting, watering, thinning, harvesting, and shipping of plants in different seasons. This experience has enabled them to cope with various weather conditions such as typhoons, heavy rain, and high temperatures. At the beginning of the year, they delivered vegetables to the Miyoshi City Hall "Children's Cafeteria" as well as to MFTBC headquarters.



FUSO Green Village in Miyoshi City, Aichi Prefecture



Different vegetables are planted in each row

AGC

Creating Sustainable Food Supply Systems

F-CLEAN™ from AGC is a fluorine film with excellent transparency and durability that opens up the possibility of using solar energy effectively in many ways and in various applications—for example solar water desalination systems, food drying systems and greenhouses. In one application, F-CLEAN has been used since 2016 in greenhouse cultivation in the Republic of Sakha in the far east of Russia, where winter temperatures can drop below -60°C, allowing the local population to eat freshly grown tomatoes even in the depth of winter. This is one solution F-CLEAN film offers, and AGC strongly believes the product can deliver direct benefits to the lives of people around the world.



Possible applications of F-CLEAN film

■ <https://www.agc.com/en/hub/society/f-clean.html>



Feature

The Coming Growth in Agriculture



From ancient times agriculture has been the backbone of global industry the fall in rates of food self-sufficiency, and environmental destruction has taken on a new shape in recent years with the introduction of smart companies in their efforts to

and of our daily diet. The drop in the number of people employed in agriculture, on a global scale all pose a variety of issues. In the face of these, agriculture agriculture and with the move toward upsizing. Much is expected of Mitsubishi support the future of agriculture.

Tata Consultancy Services Japan

The Growing Role of Technology in Feeding the World

Only by harnessing technology and working together can the way we produce food be transformed. What is becoming known as Agriculture 4.0 uses big data analytics, robotics, remote sensors and drones to help farmers make the most of their land without harming the environment. As an initiative against food shortages, the rural mobile services platform mKRISHI from Tata Consultancy Services (TCS) shares data on climate, soil conditions, and seed and market prices with hundreds of India's farming collectives across 10 states. The service has cut input costs and boosted farm incomes.

Video clip

» <https://www.youtube.com/watch?v=HKPLznEvzd4>
<https://www.youtube.com/watch?v=uuVspvQIUCw>



mKRISHI is a mobile application jointly developed by Tata Trusts and TCS

■ <https://digitailempowers.com/the-growing-role-of-technology-in-feeding-the-world/>

Mitsubishi Electric

Quasi-Zenith Satellite System & AQLOC Receiver Help in Large-Scale Farming

The quasi-zenith satellite system developed by Mitsubishi Electric is able to send steady positioning signals even to urban areas with many high-rise buildings and to mountainous areas. While positioning signals from normal GPS satellites can have an error of several meters, the quasi-zenith satellite system's supplementary signals can correct this to an accuracy of several centimeters. Mitsubishi Electric has also developed the AQLOC high-precision positioning receiver that acquires high-precision positioning information sent by a quasi-zenith satellite system. The expectations are that the AQLOC receiver can be used in the automated operation of agricultural machinery and thereby help to promote efficiencies in large-scale farming.



Right: A quasi-zenith satellite sends high-precision signals from space
 Left: The AQLOC terrestrial high precision positioning receiver



World Scope

Mitsubishi Monitor introduces some of the latest news about Mitsubishi companies as they play an active role on the world stage.



Four Nikon products receive the TIPA WORLD AWARDS 2020



Four **Nikon** products received awards, as described below, at the prestigious TIPA WORLD AWARDS 2020 sponsored by the Technical Image Press Association (TIPA), a global authority in the photography and imaging industry. The Nikon D780 digital SLR camera was selected for the “Best DSLR Expert Camera” award, the mirrorless camera Nikon Z 50 for the “Best APS-C Camera Advanced” award, the AF-S NIKKOR 120-300mm f/2.8E FL ED SR VR for the “Best DSLR Professional Lens” award, and the NIKKOR Z 58mm f/0.95 S Noct for the “Best Mirrorless Prime Standard Lens” award.



Top: Nikon D780
Bottom: NIKKOR Z 58mm f/0.95 S Noct

■ https://www.nikon.com/news/2020/0518_award_01.htm

Collaboration Begins on Building Drone Station Network



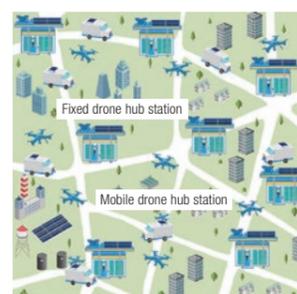
ENEOS Holdings has begun collaboration with **SENSYN ROBOTICS, Inc.** on uses for the SENSYN DRONE HUB fully automatic operation drone system. With an eye toward a society fully employing drones coming in the near future, the drone stations are envisioned as a hub for drones taking off and landing as well as a supply base for solar and other environmentally friendly energy. To that end, with a 2023 target, the companies are developing equipment and conducting demonstration testing as they work toward the development of new solutions relating to the use of drones in facility inspections, disaster response, security and surveillance.



Image showing collaboration between the two companies (drone hub station network)



Provision of different services from drone hub stations



Drone hub stations deployed in town

New Materials Informatics Development Center



Mitsubishi Materials (MMC) and National Institute for Materials Science (NIMS) have signed a memorandum covering the establishment of the MMC—NIMS Center of Excellence for Materials Informatics Research. The Center will, under the NIMS materials informatics development infrastructure, build informatics-driven materials development systems which, through the synthesis of experimental data, analytic models and experience built up by MMC, will predict the performance and life of practical materials to be manufactured using a combination of multiple materials and processes. The Center is aiming to build systems for non-ferrous materials, thin film materials and inorganic-organic composite materials by 2025.



Château Mercian Fuefuki Koshu Gris de Gris 2017 Wins Gold at Sommelier Wine Awards 2020, London



Kirin Holdings group company Mercian Corporation won a Gold Medal at the Sommelier Wine Awards 2020, held in London, for its Château Mercian Fuefuki Koshu Gris de Gris 2017. This was the first time a Japanese company has been acclaimed at this competition. Started in 2007, the Sommelier Wine Awards is one of the major competitions held by the English company Imbibe Media Ltd. As the Britain's only on-trade wine competition, it focuses entirely on wines aimed at the on-trade. The judges include Master Sommeliers and Masters of Wine and it has grown to become the first point of reference for the UK's on-trade wine buyers and sommeliers.



Château Mercian Fuefuki Koshu Gris de Gris 2017

Taking Action to Support Communities Combatting COVID-19



Mitsubishi Fuso Truck and Bus (MFTBC) and its partners around the world are providing support to communities fighting COVID-19. Wholly owned subsidiary Mitsubishi Fuso Truck Europe is supporting the efforts of medical workers in Tramagal, Portugal, through the production and donation of face protectors. Partner company Daimler India Commercial Vehicles has pledged financial aid to relief funds, while providing medical equipment to government administrations and charities in India. In Kenya, Simba Corporation, the general distributor of FUSO products, has been distributing food and soap to 200 families in disadvantaged communities. And Daimler



Distributing supplies in Kenya

Trucks Asia Taiwan, joint venture and exclusive distributor of FUSO products, has donated reusable mask covers to children's homes in all regions across Taiwan.

■ <https://www.mitsubishi-fuso.com/news/2020/05/18/mitsubishi-fuso-takes-action-to-support-communities-combatting-the-coronavirus-pandemic/>

Second Consecutive Gold Award for Vessel Speed Reduction along West Coast of North America



NYK Line (NYK) has received a gold award for the second consecutive year for the company's participation in the Protecting Blue Whales and Blue Skies program, a vessel speed reduction (VSR) incentive program along the West Coast of North America conducted by the National Marine Sanctuary Foundation. To protect whales and cut air pollution, this program encourages voluntary vessel speed reduction in the Santa Barbara Channel region and the San Francisco Bay area. For about six months from May 15, 2019, the program's partners analyzed each participating company's automatic information system (AIS) data and evaluated the company's adherence to a request that

© John Calambokidis, Cascadia Research



vessels transit at 10 knots or less through the VSR zones. NYK-operated ships were thereby recognized for having cooperated with the request.

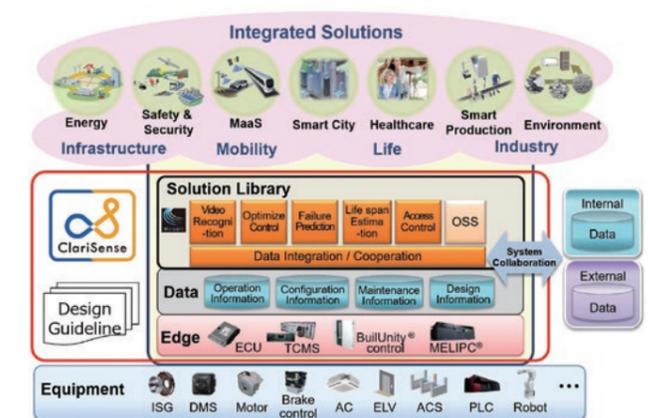
NYK vessel navigating in a zone designated for speed reduction to protect whales

■ https://www.nyk.com/english/news/2020/20200605_01.html

Rollout of ClariSense Integrated IoT Suite



ClariSense of **Mitsubishi Electric** is an IoT suite that integrates the company's extensive equipment expertise with its Maisart® AI technology, security and other technological assets under a unified design guideline and solution library. With ClariSense, Mitsubishi Electric will now share its extensive IoT-related experience, device expertise and technological assets, including AI and security, throughout its corporate group for the accelerated creation of added-value products and services to meet needs in infrastructure, mobility, daily life and industry.



MaaS: Mobile as a Service
OSS: Open Source Software
ECU: Electronic Control Unit
TCMS: Train Control and Monitoring System
ISG: Integrated Starter-Generator
DMS: Driver Monitoring System
AC: Air Conditioner
ELV: Elevator
ACS: Access Control System
PLC: Programmable Logic Controller

Solution development with the ClariSense IoT suite

■ <https://www.mitsubishielectric.com/sites/news/2020/pdf/0528.pdf>

Important notice

Mitsubishi Monitor will be moving to an all-digital format from the next issue. You will now be able to access all the content previously published in the paper edition on your computer, smartphone and other information devices. This will bring an end to the publication and distribution of the paper edition.

Please access the digital format Mitsubishi Monitor from this link.

<https://www.mitsubishi.com/en/csr/mpac/monitor/>



Global Spotlight focuses on employees from the Mitsubishi companies who are excelling in their respective fields around the world. In each issue we will get to know different employees, who will tell us about their hometowns, businesses, culture, and pastimes.

from
Mexico

Ciudad Juarez – A Multicultural City of Industry with Historical Significance



Buildings in Ciudad Juarez

I arrived in this city 12 years ago. Like many other people, I was in search of a better career opportunity.

As I became part of this city, I realized how big and extensive the manufacturing industry is here. We have everything from small, family-owned local companies up to large multinational companies. As a result, many Mexican people come to this city seeking jobs to enhance their ability to provide for their families. Because we have people from several states of Mexico, we enjoy a diversity of cultures, resulting in a vast choice of entertainment and food. Historically, Ciudad Juarez played a decisive role in the Mexican Revolution of 1911. The revolution started in this city as did the revolutionary movement, resulting in the nation that we are now. Also, as we are on the border with El Paso, Texas, USA, we are influenced by American culture and both societies live together in an exchange of cultural diversity.

Free time devoted to relaxing mind and body

In my free time, I like to relax by watching a TV series, hiking, practicing online yoga or, if I am inspired, return to my hobby of painting which gives me a lot of satisfaction. I enjoy hiking very much and Ciudad Juarez has one of the biggest dunes on which you can practice sandboarding. Also, the food is good from very small corner shops to very nice fancy restaurants; the flavor is great! Even Pope Francisco I, enjoyed our food when he visited Ciudad Juarez back in February 2016.



One scene on my day off

Together we enjoy our work and overcome difficulties

I began working at MP JUAREZ in the Human Resources Department in June 2015, and the first thing I noticed about the working environment was the high level of commitment of all the workers to the company and to the goals set, creating an atmosphere of cooperation. I enjoy my work and I try to do my best to include all the other department's ideas in order to not only achieve our target, but also enjoy together the small accomplishments. In the current difficult situation of the COVID-19 pandemic, I try to help our workers with their understanding of the guidelines to mitigate this situation. I also try to make them feel comfortable in their work environment and, with this, also mitigate the higher stress levels we are all affected by. I am confident we will get beyond this situation and we will learn from it. In my time here, I have known the greatness of people and MP JUAREZ has a bunch of them, which makes us a very special, committed company.



Ms. Guadalupe Arellano Meraz

Human Resources Manager

MP JUAREZ, L.L.C.
A group company of Mitsubishi Paper Mills

Chicago is the world's best city for having it all



The Chicago skyline

Chicago is America's 3rd biggest city, with a population of nearly 3 million people, located in the Midwest, on the shores of Lake Michigan. I have lived in Chicago for over 20 years. Chicago is the absolute best place to live. There are so many things that I love about Chicago, a blend of big-city culture, famed restaurants, world-class museums, a jaw-dropping waterfront, groundbreaking music, award-winning theaters, iconic architecture by legendary architects, and urban adventure and Midwestern hospitality!

Electronic Materials (EM) division of Mitsubishi Materials U.S.A. Corporation (MMUS) is located in Schaumburg IL, a northwestern suburb of Chicago. EM Division, whose operations center on the Sanda Plant, supplies fine materials for assembly including low-alpha ray soldering materials, gold-tin alloy solder pastes, sol-gel solutions, various types of sputtering targets, silicon products and DBA substrates. I am a sales specialist. When I started working in this position 4 years ago, I didn't have any sales experience; it has been a great learning experience. I appreciate all the support given to me. EM is the smallest division in MMUS, but we perform big. Our customers are spread throughout the US. I enjoy traveling all over the US to visit customers. I am looking forward to visiting my customers again after the COVID-19 situation gets better.

Spread the Cheer! Chicago Spirit Brigade!

I spend most of my free time with 2 amazing organizations.

Dance is my passion. I have been a dance squad member of a cheerleading organization called Chicago Spirit Brigade (CSB). CSB is a community-based, fundraising organization whose purpose is to raise money and awareness for non-profit groups that provide direct care services to individuals with life-altering challenges. We perform our cheerleading routines at local events, festivals, and parades in the spring to summer season. We cheer, dance and twirl to spread the cheer!



The cheerleading team Chicago Spirit Brigade

My soul, Sanshin and Okinawan Music!

After moving to Chicago, I had a chance to visit the Japan Festival and saw an Okinawan folk music and dance performance. I was really touched by the music, especially the Okinawan 3-string musical instrument called the Sanshin. I joined the Sanshin group of the Chicago Okinawa Kenjinkai and I learned how to play the Sanshin and how to sing. The Chicago Okinawa Kenjinkai is an organization dedicated to the preservation of Okinawan customs and traditions. The members



Sanshin

are comprised of both Okinawans, Okinawan descendants and non-Okinawan members who share our love for the Okinawan culture. I have been with the Sanshin group for 10 years. I enjoy performing Okinawan music with the group at international events in Chicagoland. The Sanshin is considered the soul of Okinawan folk music and truly, my soul music. Unfortunately, due to COVID-19, cheerleading and Okinawan performances have been cancelled for the summer.



The Japan Festival

from
the USA



Ms. Yaeko Minamikawa

Sales Specialist, Electronic Materials Division

Mitsubishi Materials U.S.A. Corporation
A subsidiary of Mitsubishi Materials