SINGAPORE - JAPAN

FAST TRACK PITCH 2024

This is your pathway to open innovation with industry leading companies and visionary startups in ASEAN and Japan.

Find unique co-creation opportunities and grow together to make the world better!



JETRO





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WHY FAST TRACK PITCH?

Z

Fastest way to build new businesses

with leading companies from ASEAN and Japan

Fastest path to connect with supporters driving the innovation eco-system of ASEAN and Japan

Fastest access to grant opportunity Э

for PoCs by companies between ASEAN and Japan

SINGAPORE-JAPAN FAST TRACK PITCH EVENT

IETRO JBR!DGE

CONNECTING STARTUP ECO-SYSTEM BETWEEN ASEAN AND JAPAN

Contribute to connecting startup eco-system by organizing the event in four innovation centers in 2023. Received about <u>500 proposals</u> for collaborations and about <u>1,400 audiences</u> participated in the event.



Fast Track Pitch Event 2023

Leading companies from Singapore and Japan present challenge statement to call for proposals from startups, SMEs, and university labs, etc. from all over the world. Selected finalists pitch their solutions directly to the challenge owners at the pitch event in Singapore.



& startups



SCHEDULE: SINGAPORE-JAPAN FAST TRACK PITCH 2024









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CHALLENGE OWNERS & CHALLENGE TITLES





₽.07



INNOVATIVE MATERIALS FOR A MORE SUSTAINABLE FUTURE





BLUE: The New Resilient Green

P.12

₽.15



SOCIAL CONTRIBUTION BY "ONLY-ONE" MATERIALS

Mitsui Chemicals Group € Р.20

DRIVING GLOBAL WEB3 ADOPTION

P.24

AGC

EXPLORE FOR INNOVATIVE TECHNOLOGIES AND SOLUTIONS FOR SUSTAINABLE DEVELOPMENT AND MANUFACTURING:

(1) GLASS RECYCLING

(2) WATER ELECTROLYSIS MEMBRANE TECHNOLOGY

(3) HIGH-THROUGHPUT METHODS FOR BIOTECHNOLOGY DEVELOPMENT

About AGC

AGC, "an everyday essential part of our world". AGC Inc is a world-leading glass solutions provider and supplier of flat, automotive and display glass. As a materials provider, we offer chemicals, ceramics, high-tech materials, and components for electronics. It is also the largest CDMO player in Japan, with a focus on growing in Cell & Gene Therapy and Biologics. Our unique materials and solutions make people's lives better around the world every day.

Our Brandstatement, "Your Dreams, Our Challenge"

We aim to continue being the "first choice" solution provider for our customers by building long-term trusted relationships with them through unique materials and solutions developed using our wide-ranging material and production technologies. Nurtured and handed down for over 110 years, our founding spirit remains the driving force for value creation of innovation by AGC. Our spirit, "Never take the easy way out, but confront difficulties." Through the provision of unique materials and solutions, we aim to contribute to the realization of a sustainable society and become an excellent company that continuously grows and evolves.

.0GY INOLOGY DEVELOPMENT

Challenges Challenge 1 - Technology and business platform for glass recycling at reasonable cost Glass is indispensable for comfortable environments and convenient living, however, it is not small in terms of CO2 emissions during its manufacture. The realization of glass recycling will greatly reduce CO2 emissions during manufacturing.

> Challenge 2 - Technologies related to PEM-type water electrolysis membrane and non-precious catalyst The polymer electrolyte membrane (PEM)-type water electrolysis is attracting attention as a clean hydrogen production technology with promising applications. Non-precious metal catalysts that combine high durability and high reaction rates are needed to make water electrolysis membrane technology more sustainable for the next generation of hydrogen energy.

<u>Challenge 3</u> - High Throughput Screening Technologies related to Automated evaluation or continuous production development for biotechnology

The development of automated evaluation and continuous production technologies in manufacturing is critical to sustainable production processes. Process optimization increases resource efficiency and reduces material and energy use. In addition, controlling the process minimizes waste and emissions and minimizes environmental impact. The implementation of highthroughput screening, which combines digital technology with experimentally obtained data sets, makes this possible.

AGC

Collaboration Needs

- <u>Challenge 1</u> Technology and business platform for glass recycling at reasonable cost
- (1) Technology to separate glass from finished products such as buildings, windows, home appliances, solar panels, etc.
 - (2) Technology to remove impurities from so as to be used as raw materials.
 - (3) Supply chain for smooth supply of recycled raw materials to glass manufacturers.

Challenge 2 - Technologies related to PEM-type water electrolysis membrane and non-precious catalyst

(1) Development of abundant non-precious metal materials to replace precious metal catalysts

<u>Challenge 3</u> - High Throughput Screening Technologies related to Automated evaluation or continuous production development for biotechnology

- (1) Automated Evaluation Technology
- (2) Continuous production technology
- (3) High-throughput screening integrated with digital technology



AGC

Business

Opportunity

Challenge 1 - Technology and business platform for glass recycling at reasonable cost

- Reduction of disposal of industrial waste
 - Creation of a new glass recycling industry.
 - Reduction of environmental impact associated with raw material mining and production
 - Expand the business model to other countries and regions as an advanced business model.

Challenge 2 - Technologies related to PEM-type water electrolysis membrane and non-precious catalyst

- Design and prototype new solutions
- Potential for long-term strategic and commercial partnerships
- Collaboration with R&D

<u>Challenge 3</u> - High Throughput Screening Technologies related to Automated evaluation or continuous production development for biotechnology

- Joint research in R&D or production sites
- Potential strategic partnerships
- Potential of communication with business development team Assets/Support
 - Potential of collaboration with R&D
 - Potential funding for pilot/PoC
 - Possibility to support PoC Prize
 - Possibility to be considered for R&D collaborations and business partnerships



Takako Kanoh

Senior Manager Business Development Division

MESSAGE FROM LEADERSHIP

Our Mission is "AGC, an everyday essential part of our world and to ensure that AGC's unique materials and solutions make people's lives better around the world every day.

For many years, AGC has been supporting wide industrial and social evolution and development, such as architecture, automotive, electronics, chemicals and life-science, by providing differentiated various materials and solutions. We are proud that we have various unique inorganic and organic materials technology, such as glass, ceramics, chemicals and biologics.

We continue to discover breakthroughs that can unlock material`s power which can transform the world. AGC is committed to support open innovation, entrepreneurship and crosspollination of ideas across industries and regionals. We look forward to embarking on a journey with great start-ups to help ensure a bright future for our planet. ARKEMA INNOVATIVE MATERIALS FOR A SUSTAINABLE WORLD

INNOVATIVE MATERIALS FOR A MORE SUSTAINABLE FUTURE

About Arkema

Arkema is a leader in specialty materials. The Group is structured into three segments (Adhesive Solutions, Advanced Materials, and Coating Solutions). Sustained by the collective energy of its 21,100 employees, Arkema operates in 55 countries and reports sales of €9.5 billion.



t-ups developing speciaty materials with cor nd strengthening materials, Bonding and as cus on areas covered by our major innovatio
fo

on platforms: Light weight materials, New energies, Electronic solutions, Living comfort and home efficiency, Natural ressources management. The sustainable development and environmental impact control are key selection criteria as well.

Business Opportunity	 Joint devlopment on new material solutions Integration of products into Arkema product portfolio
Assets/Support	 Financial support R&D support in terms of equipment and expertise Business development support Distribution and supply chain support

To address our customers' needs for high-tech, the megatrends, Arkema is looking for startups ble solutions.

e know-how in material science and complimentary sembling materials or Protecting and modifying





Armand AJDARI Chief Technology Officer

MESSAGE FROM LEADERSHIP

The Asian innovation ecosystem is thriving, with a lot of start-ups developing every year new and exciting products.

Arkema is a specialty material company with sustainability at the core of its strategy. We are happy and proud to be part of this event in Singapore : it will allow us to bring our support to these start-ups, to promote the development of new materials for a sustainable world.



BLUE: THE NEW RESILIENT GREEN

(1) DEVELOPING AN END-TO-END DIGITAL SORTING AND CLASSIFICATION SYSTEM FOR SHIPBREAKING PROJECTS

(2) DEVELOPING AND DEPLOYING HIGH-POWERED GREEN TUGS, RUNNING ON ALTERNATE SUSTAINABLE FUELS

(3) DEVELOPING SAFE, ENVIRONMENTAL CONSCIOUS, AND EFFICIENT CUTTING METHODS FOR DECOMMISSIONED VESSELS

About ASL

- Owns and operates two shipyards in Singapore & Batam (Indonesia) with combined land area of over 770,000 m2
- Provides one-stop marine engineering, ship repair / conversion & marine logistics services to customers
- Proven track records in designing and building small to medium sized vessels
- Comprehensive range of ship repair and conversion services
- Diversified fleet of vessels catering for variety of needs



Challenges Challenge 1

Developing an end-to-end digital sorting and classification system for shipbreaking projects

Japan: A technologically advanced society having one of the world's most sophisticated recycling and waste sorting system. ASL Marine: Shipbreaking entails hundreds of different metal materials, parts and equipment that need to be sorted and subsequently to be recycled.

Challenge 2

Developing and deploying high-powered green tugs, running on alternate sustainable fuels.

Tugsboats ("Tugs"): Are small but powerful propulsion vessels (mainly diesel fueled), designed to tow and push, barges and large ships respectively. Tugs are not only essential to docks and ports in maneuvering large ships in-and-out of berths, but also a vital maritime logistics to archipelago countries e.g. Indonesia and Philippines and international straits

Challenge 3

<u>Developing safe, environmental conscious, and efficient cutting methods for decommissioned vessels</u>

Shipbreaking is an extremely dangerous and health hazardous work. Laborers are often exposed to deadly toxins, falling steel plates and flammable gases etc.



Challenge 1 - Developing an end-to-end digital sorting and classification system for shipbreaking projects Collaboration Needs Having a digital and automated end-to-end sorting and classification system for shipbreaking waste materials and its byproducts. For example, reusable parts and equipment, recyclable raw materials (including but not limited to steel and copper etc.) and proper handling and disposal of hazardous waste. For example, sludges and slops.

<u>Challenge 2 - Developing and deploying high-powered green tugs, running on alternate sustainable fuels.</u> Developed by the Maritime and Port Authority of Singapore ("MPA"), the Maritime Singapore Decarbonization Blueprint: Working Towards 2050 charts ambitious and concrete long-term strategies to build a sustainable Maritime Singapore. As one of the leading shipyards in Singapore, we are committed in supporting the realisation of the initiative. We envisage partnering with sustainable fuel technology providers for tug vessels i.e. domestic harbour crafts and ocean tugs to region. Sustainable fuel includes adopting lower-carbon energy solutions such as blended biofuel, LNG, methanol, ammonia, hydrogen, diesel-electric hybrid propulsion, and full-electric propulsion and eventually net zero fuels.

Challenge 3 - Developing safe, environmental conscious, and efficient cutting methods for decommissioned vessels Having a safe and an automated (Al-driven) cutting technique in dismantling decommissioned vessels. Current common vessels cutting methods include waterjet cutting (which can potentially cause ocean and land contamination) and fire torched cutting

(which may cause explosion or workers in risk of being hit by falling steel plates)



Challenge 1 - Developing an end-to-end digital sorting and classification system for shipbreaking projects Business **Opportunity** Opportunity to develop a complete sorting and classification system for shipbreaking waste materials. This could effectively assist in reducing the carbon footprint to the environment.

<u>Challenge 2 - Developing and deploying high-powered green tugs, running on alternate sustainable fuels.</u>

Opportunity to deploy new sustainable energy technology in government supported maritime projects.

Challenge 3 - Developing safe, environmental conscious, and efficient cutting methods for decommissioned vessels Opportunity to provide a safer and to reduce hazardous conditions in shipbreaking projects. With the vision of the new cutting method potentially becoming an industry adapted safety and vessels cutting standard.

Assets/Support

- Potential government grants and awards
- Joint venture collaboration
- Listed company financial support.
- Real-life practical experience at an established shipyard





Yow Seng Leong

Head of Corporate Affairs Chief Sustainability Officer

MESSAGE FROM LEADERSHIP

Ocean is our cradle of life and covering more than 70% of mother earth. It also distinguishes our lifeform from other uninhabited (as far as we know...) planets in our solar system.

Coastal regions are our last line of defense between land and ocean cross-contamination.

As ASL Marine's Chief Sustainability Officer, we hold the responsibility and commitment in balancing between the commerciality & survival of the business and preserving the environment for our future generation. It is a route with many bumps ahead, but the vision is clear and profound.

Progress of sustainability and AI are undoubtedly "here-to-stay"



SOCIAL CONTRIBUTION BY "ONLY-ONE" MATERIALS

About Mitsui Chemicals

Mitsui Chemicals is an influential chemical manufacturing giant with its origins deeply rooted in the Mitsui coal mines. Established in 1912, the company has expanded to become a powerhouse in the chemical sector, with its headquarters in Tokyo, Japan. Today, Mitsui Chemicals presides over a sprawling network of about 160 group companies not only in Japan but also in Asia, Europe, and the Americas. Tackling a wide range of social challenges arising from accelerating environmental changes, the Mitsui Chemicals Group will continuously provide solutions making full use of the power of chemistry- the very thing that allows us to create diverse value. Currently, we are working to transition away from businesses centered around the supply of materials and focus instead on businesses with a social issues perspective. To help us make this transition, we have move to a new setup of four business portfolios in the name of VISION 2030: Live & Healthcare Solutions, Mobility Solutions, ICT solutions, Basic & Green Materials.

For R&D, we are with the aims of realizing a circular society in harmony with the environment; and inclusive society creating diverse value; and a comfortable society that lets people lead healthy, happy lives. Mitsui Chemicals continues to forge ahead with its commitment to innovation, focusing on high-performance materials including only-one materials, renewable resources, and circular economy principles.



- Challenges To ignite a brighter future through the transformative power of chemistry, we are dedicated to addressing pressing societal challenges amidst the ever-evolving landscape. Our mission is to cultivate a culture of innovation by fostering collaborations with industry, government, academia, and dynamic startups. Together, let's pave the way for a brighter tomorrow driven by the boundless possibilities of chemical excellence.
- 1. Development of new applications utilizing friction-resistant resin materials Collaboration Needs Our innovative resin materials reduce friction, extending the lifespan of parts and reducing noise across various industries such as automotive, electronics, construction, and home appliances. We seek fresh ideas and technologies to enhance our resin materials for creating novel applications. We are especially interested in solutions that cater to region-specific needs, aiming to unlock new value in the process.

2. Development of new applications utilizing stain-resistant resin materials We are proud to offer a diverse range of stain-resistant resin materials designed to tackle various types of stains, from tough food residues like meat sauce to both water-based and oil-based stains. Our innovative materials find applications across different industries, from food containers to preventing algae buildup on walls. By possessing unique stain-resistant properties or enabling easy cleaning with minimal water usage, these materials not only enhance efficiency but also promote cost savings in resources and maintenance.



3.Development of new applications utilizing resin materials with excellent gas permeability or gas barrier properties We are excited to present our cutting-edge resin materials that offer exceptional gas permeability and gas barrier properties. These transparent and chemical-resistant materials have a wide range of applications. Our gas-permeable resin is expected for cell culture tools, while the gas barrier resin is suitable for tablet packaging sheets, syringes, and more. We are now seeking innovative proposals from industry stakeholders to explore new opportunities in the healthcare sector by leveraging the unique characteristics of these transparent resin materials with superior gas permeability and gas barrier properties.

Business

Opportunity

- Co-design, prototype and market-test novel solutions with Mitsui Chemicals.
- Opportunity to gain access and leverage Mitsui Chemicals resources and know-how for polymer R&D
 - For partner companies, consideration of introducing new products to AP regional market with Mitsui Chemicals' innovative materials.
 - For start-ups, opportunity to be team up for R&D to bring new technology solutions with Mitsui Chemicals' materials.
 - Opportunity to potential longer-term strategic and commercial partnership.
- Resources and know-how to develop proof of concept with Mitsui Chemicals group. Also, we are ready for in-kind support, Assets/Support mentorship support, global network and access to our customer base/customer insights.





Yasuyuki SOEDA

General Manager of Technical Support Division

MESSAGE FROM LEADERSHIP

Just imagine, there is a world where every groundbreaking technology is intertwined with the transformative essence of chemistry—a force so vital that it realises the innovations shaping our future.

Through the over 100-year history of Mitsui Chemicals, from our beginnings in coal chemicals operations, we have contributed a great many things to society in accordance with the times. We are visionaries, dream weavers, and architects of change.

At this pivotal event, we will lay the groundwork for symbiotic partnerships, fostering an environment for co-creation and mutual growth. Together, we will chart new territories in the business landscape, driven by the spirit of collaboration and the shared pursuit of excellence. Join us at this seminal event. With Mitsui Chemicals, let's inspire, let's innovate, let's create a future so radiant that it will be remembered for generations to come.

docomo

NTT DOCOMO ASIA Pte. Ltd.

DRIVING GLOBAL WEB3 ADOPTION: PARTNERING FOR MAINSTREAM ACCESSIBILITY

About NTT DOCOMO

NTT DOCOMO ASIA Pte. Ltd., a subsidiary of NTT DOCOMO, Inc., a leading Japanese telecommunications company, extends DOCOMO's activities into Southeast Asia. While renowned for its expertise in mobile technology, DOCOMO also spearheads developments in web3 technology. NTT DOCOMO Asia leverages this multifaceted expertise to drive innovation and enhance telecommunications services across the region. As part of NTT Group, it upholds the same commitment to innovation, quality, and reliability that defines DOCOMO's reputation worldwide. NTT DOCOMO Asia collaborates closely with local partners and stakeholders to develop tailored solutions that address the unique needs of Southeast Asian markets. By fostering partnerships and driving technological advancements in both mobile and web3 spheres, NTT DOCOMO Asia plays a pivotal role in expanding DOCOMO's presence and influence in the dynamic telecommunications landscape of Southeast Asia. Through collaboration and innovation, NTT DOCOMO Asia aims to enrich the lives of people in the region and contribute to the growth and development of the digital economy.



Challenges	Our challenge lies in overcoming the negative perceptions surrounding well collaboratively. Additionally, we aim to serve as the gateway to web3 by lev (scramberry Wallet for business). By partnering with entities possessing exis a shared passion for innovation, we can collectively navigate the web3 land
Collaboration Needs	We are looking for partners who: • Have solutions and customer bases with use cases that can integrate effe currently possess web3 technology. • Are willing to collaborate towards achieving mass adoption of web3 tech
Business Opportunity	 PoC opportunities to execute concrete use cases utilising our wallet APIs v Opportunity for further R&D collaborations and commercial partnerships
Assets/Support	 wallet APIs (scramberry Wallet for business) Other resource support for PoC utilisation of DOCOMO group assets/resources (if needed) including involutions
Prize	Budget allocated for Co-PoC initiatives

eb3 and fostering blockchain's mass adoption everaging our web3 non-custodial wallet APIs sting technological capabilities, customer bases, and adscape and drive widespread adoption.

ectively with our Wallet APIs, even if they don't

nnology.

with our resource support

vestment funding opportunities





Tomoya Hasegawa

Director of Partnershipsand Business Development

MESSAGE FROM LEADERSHIP

We're embarking on a journey to promote web3 adoption amidst the negative news surrounding the technology. I strongly believe that blockchain technology serves as an invaluable infrastructure like mobile network.

Our goal is to leverage the advanced technologies cultivated through through our "scramberry Wallet", a service we launched in March 2024, to drive mass adoption of web3 technology.

By combining these innovations with your technology and customer base, we aim to trailblaze new frontiers together in the digital landscape.

SUPPORTERS





SCHEDULE OF THE FAST TRACK PITCH 2024[TENTATIVE]



VIDED OF THE LAUNCH EVENT



Download the presentations in PDF: https://www.jetro.go.jp/newsletter/spr/2024/240426 Launch Event Master FIINAL SHARE.pdf

Launch Event of the Singapore-Japan Fast Track Pitch Event (April 26th, 2024)

VIDEOS OF PAST EVENTS

Singapore-Japan Fast Track Pitch Event (April 20th, 2023)



SINGAPORE-JAPAN FAST TRACK PITCH EVENT \Box