



SINGAPORE - JAPAN

FAST TRACK PITCH 2025

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!

Co-Organized by



WHY FAST TRACK PITCH?

- 1 **Fastest way to build new businesses**
with leading companies from ASEAN and Japan
- 2 **Fastest path to connect with supporters**
driving the innovation eco-system of ASEAN and Japan
- 3 **Fastest access to grant opportunity**
for PoCs by companies between ASEAN and Japan

CONNECTING STARTUP ECO-SYSTEM BETWEEN ASEAN AND JAPAN

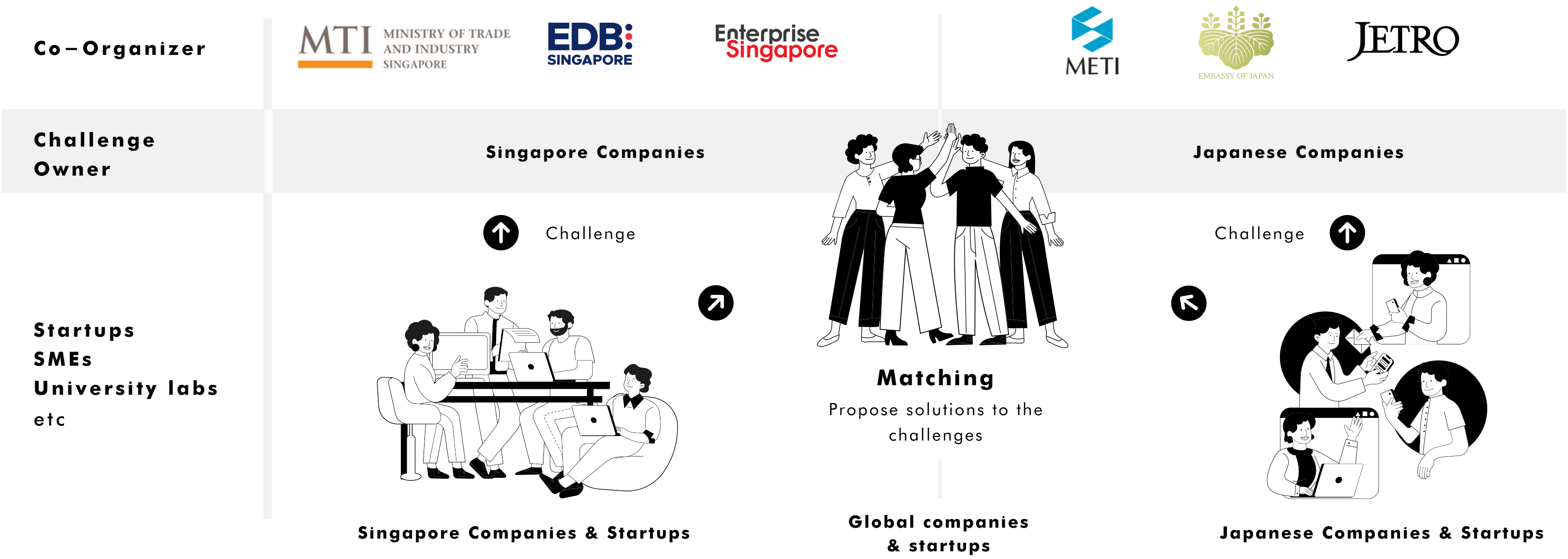
Contribute to connecting startup eco-system by organizing the event in four innovation centers in 2023 and 2024.
Received about 850 proposals for collaborations and about 2,650 audiences participated in the event (total over 2 years).



Past Event

SINGAPORE-JAPAN FAST TRACK PITCH EVENT 2025

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.



SCHEDULE: SINGAPORE-JAPAN FAST TRACK PITCH 2025

Submit proposal
to challenges

[SUBMIT HERE](#)

Challenge Owners



Deadline: **11:59PM, Nov. 25** (Singapore Time)



Selection of finalists

Finalists will be selected by Challenge Owners



Final Pitch Event in Singapore on **Jan. 14** *Venue will be announced when confirmed (Live streaming will be available as well)

Co-creation with
challenge owners



Supports by Singapore and Japan

SCHEDULE OF THE FAST TRACK PITCH 2025[TENTATIVE]

	10	11	12	1	2
 SINGAPORE	Application Open Oct.24@SG	Call for proposals → Deadline Nov.25		Pitch Event Jan.14@SG	
 VIETNAM		Application Open Nov.4@Hanoi	Call for proposals →	Pitch Event Jan.27@Hanoi	
 MALAYSIA		Application Open Nov.13@KL	Call for proposals →	Pitch Event Feb.3@KL	
 INDONESIA		Application Open Nov.20@ Jakarta	Call for proposals →	Pitch Event Feb.12@ Jakarta	

CHALLENGE OWNERS & CHALLENGE TITLES



MANUFACTURER OF RUBBER AND PLASTIC PRODUCTS, GLOBALLY SUPPLYING BELTS AND COMPONENTS TO AUTOMOTIVE, MACHINERY, CONSTRUCTION, MEDICAL, AND DECORATION INDUSTRIES, WHILE PROMOTING ENVIRONMENTALLY CONSCIOUS MANUFACTURING.

➔ P.8



ASIA CONNECTED: CO-CREATING THE NEXT MOBILITY BREAKTHROUGHS

➔ P.13



CO-CREATING BIO-MANUFACTURING, HEALTHY AGING, AND FEMTECH SOLUTIONS

➔ P.17



CHALLENGE FOR ADVANCING EARLY DISEASE DETECTION: SMARTER LIQUID HANDLING, INNOVATIVE LIQUID BIOPSY, AND DATA-DRIVEN DIAGNOSTICS

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CO-CREATION AND APPLICATION OF STRESS SENSOR TECHNOLOGY AND FLEXIBLE SENSOR TECHNOLOGY IN HEALTHCARE AND WELL-BEING

➔ P.27



TO BE UPDATED

➔ P.XX



TRANSFORMING HV (HIGH-VOLTAGE) AND MV (MEDIUM-VOLTAGE) EQUIPMENT PROCUREMENT TO ACCELERATE OFFSHORE SUBSTATION DELIVERY

➔ P.32



MANUFACTURER OF RUBBER AND PLASTIC PRODUCTS, GLOBALLY SUPPLYING BELTS AND COMPONENTS TO AUTOMOTIVE, MACHINERY, CONSTRUCTION, MEDICAL, AND DECORATION INDUSTRIES, WHILE PROMOTING ENVIRONMENTALLY CONSCIOUS MANUFACTURING.

(1) ENHANCING THE VALUE OF RADIATIVE COOLING FILM (SILVER ARROW®)

(2) ELIMINATING COUNTERFEIT PRODUCTS FROM THE MARKET TO ENSURE CUSTOMER SAFETY

(3) EXPANDING NEW APPLICATIONS FOR ELASTOMERS (RUBBER)

About BANDO (SINGAPORE) PTE. LTD.

We are an industrial materials manufacturer specializing in elastomer technology, celebrating our 120th anniversary in 2026. Our integrated business model covers everything from material combination, design, and processing to delivering products that meet downstream customer needs. In addition to our core technologies of “transmitting” and “conveying,” we are expanding into new businesses in healthcare and electronic materials. We have established bases in the ASEAN region and actively promote open innovation.



Challenges

Challenge 1 - Enhancing the Value of Radiative Cooling Film (Silver Arrow®)

Globally, energy consumption related to cooling—and the resulting CO₂ emissions—is continuously increasing. We are seeking companies that can help enhance the value of our radiative cooling film by reducing energy usage or providing innovative solutions for improving thermal environments for people and goods.

Challenge 2 - Eliminating Counterfeit Products from the Market to Ensure Customer Safety

Currently, a significant number of counterfeit products are circulating in the market, posing risks to customer safety. To address this issue, the Bando Group is implementing measures such as warning vendors who handle counterfeit items and trialing the introduction of authenticity verification seals. We are looking to collaborate with companies that can further accelerate these initiatives.

Challenge 3 - Expanding New Applications for Elastomers (Rubber)

We offer a wide range of elastomer materials, from those capable of withstanding harsh environments such as automotive engines, to highly abrasion-resistant urethane, and stretchable elastomers for use in medical devices. The possibilities are limitless. We are eager to collaborate with companies that can leverage Bando Group's materials and technologies to pursue new initiatives and applications.



**Collaboration
Needs**

Challenge 1 - Enhancing the Value of Radiative Cooling Film (Silver Arrow®)

Technologies for Improved Workability (Adaptation to Curved Surfaces) / IoT Solutions (Visualization of Energy-Saving Effects), etc.

We are seeking partners with technologies such as large-area processing, flexible substrate development (since our current film uses PET substrates and lacks stretchability), energy-saving effect visualization (to demonstrate the value of our film), and thermoelectric generation technology (to utilize the temperature difference between the film's surfaces for micro-power generation).

Challenge 2 - Eliminating Counterfeit Products from the Market to Ensure Customer Safety

Authentication Technologies / E-Commerce Support Services, etc.

Recently, counterfeit transactions via e-commerce have increased. We aim to collaborate with companies that possess technologies capable of developing algorithms to authenticate products based on information listed on e-commerce platforms. Through such partnerships, we hope to resolve these challenges and deliver safer products to our customers.

Challenge 3 - Expanding New Applications for Elastomers (Rubber)

Companies with Technologies for New Applications of Elastomers (Rubber)

We seek to develop indispensable products that offer higher functionality, lighter weight, and greater added value, contributing to carbon neutrality. To achieve this, we are interested in partnering with companies that possess technologies such as metamaterial design, biomimetics, and the use of bio-based materials.



**Business
Opportunity**

For all Challenges

We have established a “midstream” business model, maintaining extensive pipelines with various material manufacturers and customers. By integrating our technologies and services into our products or through joint development, we expect to achieve scale-up. With production bases in the ASEAN region, we are also exploring collaborations beyond sales and technical aspects.

Assets/Support

- In-house sales channels
- In-house assets (equipment, factories, etc.)
- Consideration of providing core and sub-core technologies

Prize

- PoC (Proof of Concept)
- Joint development
- Capital alliance (investment), etc.



Shigenori NAKASHO

BANDO (SINGAPORE) PTE. LTD.
Managing Director

MESSAGE FROM LEADERSHIP

Don't be afraid to fail; be afraid of not trying.
Together, we create new value for the future!



ASIA CONNECTED: CO-CREATING THE NEXT MOBILITY BREAKTHROUGHS

(1) SCALABLE SOFTWARE & AI INTEGRATION FOR AUTOMOTIVE PLATFORMS

(2) PROJECTION TOPICS - LIGHTFIELD, WAVEGUIDE AND METASURFACE

(3) HEAT DISSIPATION

About co—pace

At AUMOVIO, it is our mission to redefine mobility. We are ahead of the curve, reliable, collaborative, and determined to be successful. As a powerhouse for future mobility, we operate in 28 countries and are one of the world's leading partners in automotive electronics and software solutions. We make mobility safer, more connected, and increasingly autonomous. Driving the transformation of the industry through innovation is the core of our strategy.

Co-pace plays a key role in our mission as the catalyst for transformation, enabling us to leverage external innovation. Through co-pace, we connect with ambitious, forward-looking startups to help realize the ideas that will shape the future. Co-pace enables AUMOVIO to engage more closely, quickly, and effectively with the startup ecosystem and acts as a bridge between startups, OEMs, and the entire automotive industry. AUMOVIO—supported by co-pace—ensures that groundbreaking ideas are not only developed but also implemented and scaled. Our goal is to build the foundation today that will enable us to solve the challenges of tomorrow.

**Challenges
&
Collaboration need**

Challenge 1 - Scalable software & AI integration for automotive platforms collaborating

Modern vehicles demand scalable software and AI solutions across diverse hardware.

This challenge invites startups to create a unified toolchain that refactors legacy automotive software into modular layers with standardized APIs, enabling seamless integration with next-gen vehicle OS. Simultaneously, the solution should adapt AI models, e.g., image processing for camera, to run efficiently across various SoCs—from low-grade ECUs to high-performance chips—without model re-designing or re-training, while optimizing performance and preserving accuracy.

Challenge 2 - Projection topics collaborating

As the current trend in the automotive business demands a shift toward immersive projection, legacy components fall short in size, efficiency, and image quality. We seek innovations in lightfield, waveguide, and metasurface technologies to project critical information directly into the driver's field of view.

These solutions are key to enhancing safety and experience across our UX product portfolio, especially in head-up and advanced display systems, including 3D displays, foldable display, and shytech displays.

Challenge 3 - Heat dissipation collaborating

As computing power in automotive systems increases, thermal stress on components like (head-up) displays, HPCs, and lighting modules becomes critical.

To prevent overheating, we seek fanless active and passive cooling technologies. These solutions must integrate seamlessly into our product portfolio in our Business Areas to ensure performance and reliability.

Business Opportunity

Partnering with AUMOVIO empowers startups to accelerate their innovation cycles by unlocking access to our advanced resources for development, testing, and production. This enables faster iteration and allows startups to build on proven automotive systems, simplifying integration and ensuring compatibility with industry standards.

By leveraging AUMOVIO's manufacturing expertise and deep understanding of production processes, startups can transform their innovative ideas into market-ready solutions. We help thought leaders to create products that are not only innovative but also deliver real value to the automotive industry and end users. With early access to real-world validation, startups can quickly refine their offerings and generate initial revenue.

Additionally, our network enables strategic partnerships through our 3-Way Proof of Concept model — a collaboration between AUMOVIO, the startup, and OEMs simultaneously. This approach allows startups to integrate their products early on — giving them the edge they need to succeed in a competitive landscape.

Assets/Support

We offer in-depth manufacturing expertise and comprehensive knowledge of production processes and standards in the automotive industry. As a Tier 1 supplier, our established relationships with leading OEMs give us direct access to the market. However, our most important resource is our 3-way proof-of-concept model: a unique collaborative approach between AUMOVIO, the start-up, and an OEM. This approach enables start-ups to connect directly with the industry's leading OEMs, supported and backed by AUMOVIO, to ensure that their products meet industry requirements. By aligning with OEM expectations at an early stage and leveraging our infrastructure, startups can integrate their technologies faster, adapt more efficiently to industry requirements, and reach market readiness in a significantly shorter time frame.

Prize

Opportunity to do a PoC together with AUMOVIO and leading OEMs using our 3 Way collaboration approach.



Wilson Khoo

Director, Head of co-pace APAC
excluding Mainland China

MESSAGE FROM LEADERSHIP

AUMOVIO is exploring innovative technologies and startups across Asia Pacific—including Singapore, Japan, Korea, China, and Taiwan—that support our efforts in expanding and optimizing our product portfolio and improving cost efficiency.

As a globally operating company, we view successful collaboration in Asia as a strong foundation for broader, long-term partnerships. Once a technology proves its value regionally, we are open to applying it across our global operations.

Together, we aim to integrate breakthrough technologies throughout our entire value chain—creating real-world impact.



CO-CREATING BIO-MANUFACTURING, HEALTHY AGING, AND FEMTECH SOLUTIONS

- (1) BIO-MANUFACTURING
 - (2) AGING CARE
 - (3) FEMCARE/FEMTECH
-

About Meiji Holdings Co., Ltd.

Meiji Holdings operates two main businesses: food products (including confectionery and dairy) and pharmaceuticals (specializing in infectious diseases and CNS disorders). Under the corporate slogan "Now ideas for wellness," the company is committed to advancing wellness for people, animals, and the global environment. Building on its long-standing scientific expertise and technological capabilities in areas such as fermentation, nutrition, and lactic acid bacteria research, Meiji Group creates new value at the intersection of food and medicine. Additionally, Meiji actively harnesses bioscience, digital technologies, and open innovation, collaborating with partners around the world to drive research, development, and commercialization to advance a healthier, more sustainable society in the future.

Challenges

Challenge 1 - Bio-manufacturing

Meiji Group aims to develop “bio-manufacturing” as a next-generation production platform, leveraging its strength in fermentation and microbial technologies. By establishing efficient, large-scale cultivation and purification processes using genetically modified microorganisms, Meiji is promoting industrial-scale production and commercialization of target molecules. The Group is committed to creating cutting-edge bio-manufacturing technologies that create and deliver new value to society while reducing environmental impact and advancing sustainable resource utilization.

Challenge 2 - Aging Care

Meiji Group aims to integrate its expertise in nutritional science and bioscience to create solutions that prevent or improve age-related diseases and physical decline, thereby extending healthy life expectancy. The Group is committed to developing evidence-based technologies and products that help people live healthily throughout their lifetime.

Challenge 3 - Femcare/Femtech

Meiji Group is dedicated to supporting women across all life stages by advancing scientific insights and developing science-based solutions to gender-specific health challenges such as menstruation, pregnancy (including infertility), childbirth, and menopause. The Group aims to help create a society that proactively addresses women’s health issues through scientific innovation.

**Collaboration
Needs**

Challenge 1 - Bio-manufacturing

Companies or research groups with strengths in synthetic biology, fermentation, and process engineering, as well as those focusing on data-driven technologies and process optimization. We are particularly interested in partners aiming to advance sustainable bio-manufacturing and open to collaborating in PoC development and practical implementation.

Challenge 2 - Aging Care

Companies or research groups developing technologies for the prevention, early detection, and prediction of age-related diseases such as dementia, diabetes, and cancer. Those possessing bio-digital convergence, digital health, biosensing, or technologies that enable the assessment and visualization of aging to help extend healthy life expectancy are also of interest. We are particularly interested in partners for joint research and co-development leading to commercialization and clinical implementation.

Challenge 3 - Femcare/Femtech

Companies or research groups developing technologies that scientifically address gender-specific health challenges—such as menstruation, pregnancy (infertility), childbirth, and menopause—or those with digital health or biosensing technologies that monitor and visualize hormonal fluctuations and physical conditions.

Business Opportunity	<u>For all Challenges</u> • Promotion of co-creation of new products and technologies through joint research and development in the fields of food, nutrition, healthcare, and wellness • Provision of PoC opportunities • Support for social implementation and market expansion in Japan and ASEAN markets • Provision of joint marketing and promotional opportunities
Assets/Support	• Access to Meiji Group’s manufacturing technologies for large-scale production of high-quality food products • Access to Meiji Group’s R&D capabilities and expertise in nutritional science, fermentation, lactic acid bacteria, and functional foods • Product development know-how for the Japanese and ASEAN markets • Access to sales and distribution networks in Japan and ASEAN regions
Prize	To be discussed (joint research and development with Meiji Group and provision of PoC testing opportunities in Japan)



Kei Yamana, Ph.D.

Meiji Holdings Co., Ltd.
Wellness Science Lab
Head of New Business

MESSAGE FROM LEADERSHIP

Let's create a better future together with passion and technology!



ADVANCING EARLY DISEASE DETECTION: SMARTER LIQUID HANDLING, INNOVATIVE LIQUID BIOPSY, AND DATA-DRIVEN DIAGNOSTICS

- (1) SMARTER LIQUID HANDLING AND TESTING DEVICE
 - (2) LIQUID BIOPSY AND SAMPLE ANALYSIS INNOVATION
 - (3) BIOLOGICAL AND HEALTHCARE DATA FEDERATION PLATFORM
-

About Mirxes Pte Ltd

Our mission is to make diagnostic solutions for the early detection of diseases accessible on a global scale.

We are a Singapore-headquartered RNA technology company that is a pioneer and leader in developing and commercializing accurate, non-invasive, and affordable blood-based miRNA test kit products for the early detection of cancer and other diseases.

We will develop un-paralleled solutions for patients, researchers and industry collaborators to gain deep scientific insights. We are oncology focused and will enable end-to-end precision medicine from early disease detection to effective interception to help alleviate disease burden, reduce healthcare cost and improve patients' quality of life.

Challenges

Challenge 1 - Smarter Liquid Handling and Testing Device

Biological products and services center on accurate manipulation of small liquid volumes.

We welcome challengers with innovative solutions that revolutionize point of care, laboratory scale liquid handling and testing.

Solutions utilizing IoT, robotics, AI, automation, or other advanced technologies are also encouraged.

Challenge 2 - Liquid Biopsy and Sample Analysis Innovation

Liquid biopsy and novel sample analysis technologies are the key to molecular early diagnosis.

Consistency, quality and ease of use are top considerations.

We welcome challengers with cutting edge solutions for collecting, preserving, and analyzing biological samples, such as blood, urine, or saliva. Technologies addressing environmental samples that may work in medical contexts are also welcome to apply.

Challenge 3 - Biological and Healthcare Data Federation Platform

Accurate, reliable and secure data sharing will be the next challenge in leveraging the multi-dimensional, biological and healthcare data generated by research and clinical care globally.

We invite challengers with innovative solutions to integrate, federate, and utilize biological and healthcare data, enabling better collaboration, insights, and outcomes across the research, translational and clinical sectors.

**Collaboration
Needs**

Challenge 1 - Smarter Liquid Handling and Testing

- (1) Advanced Liquid Handling Devices (e. g. point of care devices, PCR (Polymerase Chain Reaction) and NGS (Next-Generation Sequencing) devices, miniaturization, reagent-efficient designs)
- (2) Process Intelligence and Automation (e.g. error detection and self correction)
- (3) Customizable and Flexible Operations
- (4) Any other innovative technology that can improve ease of use, consistency and accuracy in laboratory workflows

Challenge 2 - Liquid Biopsy and Sample Analysis Innovation

- (1) Innovative Sample Collection Devices (e.g. devices for collecting whole blood, plasma, serum, cerebral spinal fluid, urine, saliva)
- (2) Advanced Liquid Biopsy and Multi-Analyte Analysis Solutions
- (3) Any other innovative technology that can improve consistency, quality and ease of use in sample acquisition, handling and processing

Challenge 3 - Biological and Healthcare Data Federation Platform

- (1) Federated and Distributed Data Infrastructure (e.g. federated architecture, distributed data platforms)
- (2) Secure Data Management and Compliance (e.g. secure multi-party computation, tamper-proof logs for data access and compliance tracking, cross-border regulatory compliance solutions)
- (3) Data Utilization and Analysis (e.g. data visualization, AI model training on distributed or federated datasets)
- (4) Any other innovative technology that addresses gaps in modern biological and clinical data management

Challengers who believe they have a solution critical to our success but outside the areas above are welcome to pitch, subject to our agreement.

**Business
Opportunity**

- Opportunity to be Mirxes' business partner in delivering next generation healthcare solutions globally
- Discussions with Mirxes strategic leadership, R&D and operations on the impact of the proposal
- Open to various models of partnership, including co-branding, joint news releases, conference collaborations etc.

Assets/Support

- Mirxes may become a PoC partner, licensee, joint development partner or other forms of partnership as appropriate to the project.



Cheng He

Senior Vice President,
Technology and Artificial Intelligence

MESSAGE FROM LEADERSHIP

At Mirxes, we believe that true innovation happens when bold ideas meet practical impact. Today, liquid biopsy have come to a crossroads—where precision, accessibility, and trust must converge to shape the future of healthcare.

We invite you to offer solutions that push boundaries: from orchestrating the entire lifecycle of biological samples—collection, stabilization, processing, and analysis—to creating patient-friendly approaches for molecular insights, and building secure frameworks for sharing complex multi-omic data globally. These challenges are deeply interconnected, and solving them will accelerate breakthroughs.

This is more than a competition. It's an opportunity to collaborate with experts, access curated resources, and turn your vision into reality. If you're ready to lead the next wave of innovation and transform diagnostics and data for a healthier world, we want to work with you. Together, we can make a healthier world a reality for all.



CO-CREATION AND APPLICATION OF STRESS SENSOR TECHNOLOGY AND FLEXIBLE SENSOR TECHNOLOGY IN HEALTHCARE AND WELL-BEING

- (1) APPLICATION OF THE STRESS SENSOR TECHNOLOGY IN HEALTHCARE FOR ENHANCING THE WELLBEINGS OF WORKERS AND STUDENTS
- (2) APPLICATION OF THE FLEXIBLE SENSOR TECHNOLOGY IN HEALTHCARE FOR BETTER REHABILITATION ENGINEERING

About Nitto Denko Asia Technical Center PTE. LTD.

Nitto Denko is a high-performance materials manufacturer that develops niche top products in the electronics, automotive, medical, and infrastructure fields, based on eight core technologies including adhesion, coating, and polymer design. Under the slogan "Innovation for Customers," the company aims to contribute to the resolution of social challenges.

Nitto Denko Asia Technical Center serves as a hub for technology and business development in the Asia and India regions, actively pursuing new businesses such as stress sensors and flexible sensors. The center has implemented over 10 PoC projects in Indonesia, India, Singapore, and Taiwan, dedicated to creating new value through both environmental contribution and contribution to humanity.

Challenges We are advancing business development using the following two technologies to contribute to humanity. While we are considering applications such as those listed below, we are not limited to these.

Challenge 1 - Application of the stress sensor technology in Healthcare for enhancing the wellbeings of workers and students
Nitto Denko possesses "stress sensor" technology that analyzes and visualizes biometric information (changes in blood flow) as stress levels in real time. By applying this technology in the healthcare field, we aim to improve the well-being of workers and students and to realize appropriate mental care.

Challenge 2 - Application of the flexible sensor technology in Healthcare for better rehabilitation engineering
Nitto Denko has a highly durable "flexible sensor" technology capable of measuring angles up to 180 degrees and large deformations of several tens of percent. We aim to use this technology to support rehabilitation and to advance gait analysis techniques.

**Collaboration
Needs**

Nitto Denko is seeking collaboration with flexible companies that can start with simple PoCs (proof-of-concept) and work closely with on-site challenges and user feedback, utilizing our proprietary "stress sensing technology" and "flexible sensor technology." The specific collaboration needs for each challenge are as follows:

Challenge 1 - Application of the stress sensor technology in Healthcare for enhancing the wellbeings of workers and students

Companies with solutions that can utilize stress sensing technology to improve worker well-being or student care, such as:

(1) Heat stress safety (construction, manufacturing, airports, etc.), (2) Driver safety management, (3) Stress management for call centers and BPOs, (4) Improving educational outcomes and providing mental care in schools

Challenge 2 - Application of the flexible sensor technology in Healthcare for better rehabilitation engineering

Companies with expertise in rehabilitation engineering or related healthcare businesses for the implementation of flexible sensor technology, specifically those with technologies related to: (1) Rehabilitation, (2) Orthopedics, (3) Gait analysis, (4) Smart gloves, (5) Goniometers (devices for measuring the range of motion in human joints)

**Business
Opportunity**

For All Challenges

- Opportunities to leverage Nitto Denko's unique optical and material capabilities, sensing expertise, and applied solutions such as stress and flexible sensors.
- Opportunities for connection to Nitto Denko's ecosystems—including startups, current clients and partners—in locations such as Singapore, Indonesia, India, and Taiwan.

Assets/Support

- Sharing best practices for effective operation of PoCs utilizing AI
- Nitto Denko's capabilities in hardware, software, and algorithm development
- Nitto Denko's development facilities

Prize

- Provision of PoC opportunities and their associated costs



Ryota Masuda

President

MESSAGE FROM LEADERSHIP

We are seeking partners who combine passion and a strong sense of speed with a desire to expand into the Southeast Asian market and a spirit of co-creation.

Regardless of your field of expertise or company size, if you are ready to take on new challenges and move forward together with us, we invite you to join us in making a meaningful impact.



TRANSFORMING HV (HIGH-VOLTAGE) AND MV (MEDIUM-VOLTAGE) EQUIPMENT PROCUREMENT TO ACCELERATE OFFSHORE SUBSTATION DELIVERY

(1) OVERCOMING LONG LEAD TIME OF HV/MV EQUIPMENT FOR THE DELIVERY OF OFFSHORE SUBSTATIONS

About Seatrium Energy (Fixed Platforms) PTE. LTD.

Founded in the 1970s as a small pressure vessel manufacturer, Seatrium Energy Fixed Platforms Pte Ltd has grown into a leading engineering, procurement, and construction (EPC) service provider for offshore fixed platforms, serving both renewable offshore wind and oil & gas sectors.

Operating from Admiralty Yard in Singapore and additional overseas facilities, Seatrium manages a combined total area of 470 hectares. Over the decades, the company has successfully delivered projects across Europe, the US, Taiwan, and other international markets.

With deep engineering expertise, global reach, and a track record of delivering complex offshore projects, Seatrium is well-positioned to support innovative solutions in the energy sector, driving both sustainability and efficiency in offshore platform development.

Challenges **Challenge 1** - Overcoming long lead time of HV/MV equipment for the delivery of Offshore Substations

The prolonged lead time of high-voltage (HV) and medium-voltage (MV) electrical equipment—particularly transformers, switchgear, and auxiliary systems—has become a critical bottleneck in Seatrium’s offshore substation (OSS) projects.

These long-lead items often dictate overall delivery schedules, leading to cost and timeline overruns.

This issue stems from complex manufacturing processes, limited qualified suppliers, and global logistics constraints.

As Seatrium continues to expand its offshore wind portfolio, addressing this challenge has become strategically vital.

We seek to better understand which parts of the manufacturing and supply process contribute most to these delays, and to explore innovative, sustainable, and technically robust solutions—potentially including joint ventures or co-development initiatives with leading equipment manufacturers—to mitigate this recurring risk.

**Collaboration
Needs**

Seatrium is seeking partners and startups that can help develop modular, standardized, or prefabricated HV/MV solutions for offshore substations—enabling faster fabrication, delivery, and installation without compromising safety or performance.

Collaboration Needs 1 - Technologies for Design, Procurement, and Production

- (1) Advanced manufacturing and modular design technologies to shorten lead times
- (2) Automation and efficiency solutions for prefabrication
- (3) Sustainable and resilient supply chain models leveraging alternative materials or other innovative solutions that enable faster fabrication, delivery, and installation—without compromising safety or performance. This may include substitutes for traditional steel or copper components used in HV/MV equipment, as well as regionalized production through co-creation with local manufacturers or engineering partners to enhance supply security and reduce logistics-related emissions

Collaboration Needs 2 - Technologies for Construction and Installation

- (1) Visualization and risk management tools leveraging AI and IoT for digital supply chain forecasting

Collaboration Needs 3 - Technologies for Overall Optimization

- (1) Predictive analytics to assess and optimize environmental impact across the full lifecycle

Solutions should demonstrate comparable or superior strength and fatigue resistance to conventional designs, while minimizing lifecycle carbon footprint and aligning with ISO 19901, API RP 2A-WSD, DNV-GL, and sustainability standards (e.g., LEED, ISO 14064).

**Business
Opportunity**

Partnering with Seatrium offers startups access to one of Asia's largest offshore and marine EPC companies with over 50 years of engineering and fabrication expertise. Collaborators will have the opportunity to co-develop real-world solutions that could be deployed across Seatrium's global offshore wind and substation projects. Successful partnerships may lead to long-term collaborations, technology licensing opportunities, and access to Seatrium's extensive global client base.

Startups can also gain deep insights into the operational challenges of large-scale offshore fabrication, positioning themselves as strategic technology providers in the rapidly expanding offshore wind and renewables sector.

Assets/Support

Startups will gain access to Seatrium's engineering teams, technical datasets, and yard infrastructure for prototype testing and validation.

Depending on project alignment, Seatrium may offer joint development funding, pilot site access at its Singapore or overseas facilities, and mentorship from senior engineering and supply chain leaders.

The collaboration may also provide exposure to Seatrium's extensive supplier and partner network across Asia and Europe, helping startups scale faster and adapt their solutions for real-world offshore energy applications.

Prize

- Proof-of-Concept (PoC) funding for prototype or pilot testing at Seatrium's facilities
- Potential for co-development agreements or JV discussions
- Fast-track consideration for inclusion in Seatrium's innovation or supplier ecosystem



Wayne Siek

Assistant Vice President,
Business Development

MESSAGE FROM LEADERSHIP

To better serve the global offshore wind industry, the supply chain bottleneck pose a challenge to our ability to deliver Offshore Substations in a timely and efficient manner. We need to think of innovative ways to overcome this challenge.

SUPPORTERS

