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FEATURE ARTICLES:

EDUCATION DEVELOPMENT

NEST Education: Bridging Science, Technology, and Nature for Young Scientists

HUMAN DEVELOPMENT

The Pillars of Entrepreneurial Growth: Nurturing Talent to Drive the Knowledge-Based Economy

RESEARCH DEVELOPMENT

From Labs to Lives: Redefining Asia's Quality of Life through Advanced Research

FRONTIER DEVELOPMENT

Driving Change from the Inside Out: An Intrapreneur's Edge in Modern Society





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ON THE COVER

Mr. Kama Bestari

Executive Vice President, Operations
Yayasan Peneraju

Executive Vice President, Operations of Yayasan Peneraju shares on pages 18-19 how Yayasan Peneraju shapes future leaders of the knowledge-based economy.

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ASIAN ECOSYSTEM PARTNERS

SINGAPORE/THAILAND



MALAYSIA/INDONESIA



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Young scientists collaborate to bridge nature and technology through engineering experiments.



Exploring the wonders of science through hands-on learning and experimentation.



Future engineers design and build robotic innovations inspired by nature and technology.

NEST Education: Bridging Science, Technology, and Nature for Young Scientists

Leave a Nest has adopted the NEST Education approach, which stands for Nature, Engineering, Science, and Technology. At its core, NEST emphasizes the cycle of learning from nature, uncovering the science within, and using this knowledge to engineer and create technologies. This cycle, we believe, is a timeless and essential concept, regardless of how much the world may change in the future.

While STEM (Science, Technology, Engineering, Math) and STEAM (Science, Technology, Engineering, Art, Math) education have gained prominence in recent years, we feel there is a critical element missing: Nature. We believe in learning process not only on subject learning.

Nature is the foundation of all learning, shaping engineering for survival, science to explain phenomena, and technology to enhance life. However, rapid advancements have also led to challenges like environmental destruction, revealing the limitations of science and technology and the need for a deeper understanding of nature's laws.

Science and technology serve as tools to deepen our understanding of nature, and a true scientist acknowledges the limits of their knowledge while striving to bridge the gap. The next generation must develop the skills to learn from nature, ask meaningful questions, and test their hypotheses, recognizing that science and technology are ever-evolving.

FUTURE OF EDUCATION: BUILDING THE HUMANITY CENTRIC TALENT

By Farha Husna Ramli, MSc

The education landscape has undergone significant changes since the global pandemic of COVID-19. The rapid adoption of disruptive technologies has played a critical role in helping educational institutions adapt to new challenges, ensuring that learners stay on track despite disruptions. Tools such as online learning platforms, virtual classrooms, and AI-driven personalized learning solutions have become integral to the education system.

Moreover, uncertainties about the future, particularly issues related to planetary health such as climate change, pandemics, job employment and other global crises have reshaped the priorities and focus of education. There is an increasing emphasis on equipping learners with critical thinking skills, adaptability, and awareness of global challenges to prepare them for an unpredictable future. Significant efforts have been made worldwide to ensure that learners receive not only quality education but also the knowledge and skills necessary to navigate a rapidly changing world with a sense of responsibility.



How COVID-19 Transformed the Education Landscape

Building a Competitive and Inclusive Workforce Through Education in Southeast Asia

In the context of Southeast Asia, education is a cornerstone that lays the groundwork for the future workforce. From ensuring access to primary, secondary, to tertiary education, each level plays a vital role in shaping a well-rounded and skilled workforce. For example, compulsory primary and secondary education in most Southeast Asian countries lays the foundation for basic literacy and numeracy skills. Tertiary education, offered by a number of private and public institutions, provides specialized knowledge for various occupations. In recognizing lifelong learning's importance, many Southeast Asian countries conduct adult learning programs and vocational training. However, achieving the ideal education landscape faces challenges, such as disparities in accessing quality education between urban and rural areas and inconsistent funding and resource allocation. For instance, rural schools have lesser resources affecting the students' learning outcomes due to their remote area. To combat these challenges and improve education quality, teacher training and professional development opportunities are crucial. These will equip educators with the

necessary skills to deliver quality education uniformly, transcending geographic boundaries. Looking ahead, education in Southeast Asia seeks to prioritize innovation, strengthen regional unity, and overcome existing obstacles. This focus aims to better equip education systems to cultivate a globally competitive workforce, nurture entrepreneurship, and drive sustainable development. To achieve this, teacher training is crucial. It should focus on how to harness Southeast Asia's rich natural resources, providing a field for students to develop critical thinking and creative problem-solving skills by addressing issues within their own communities.



Fostering Collaboration from an Early Age

Fostering Humanity-Centric Talent for a Sustainable Future

Building humanity-centric talent is at the forefront of this evolution where it involves a shift from emphasizing individual achievements to prioritizing the welfare of society, communities, and the environment while fostering an entrepreneurial mindset. This can be built by encouraging exploration and turning everyday wonders into scientific discoveries is crucial for this talent development. This approach seeks to address global issues by nurturing talent who are committed to making decisions and taking actions that benefit society and the planet. Individuals with humanity-centric talent continuously strive to expand the scope (magnitude and reach) of their influence across various levels, such as family, society, nation, global, and environmental aspects. These individuals possess not only essential knowledge and skills (future-ready skill) but also embrace strong values and ethics, which underpin their dedication to humanity-centric principles and innovative solutions with responsibility.



Nurturing human-centric talent creates a better world through innovation, growth, equity, and sustainability

The future of education is not merely about imparting knowledge. It is about shaping individuals who are equipped to navigate an increasingly complex and interconnected world. By emphasizing humanity-centric talent, a generation of learners who prioritize societal welfare and environmental stewardship alongside personal achievement could be cultivated. As education systems evolve in response to global challenges, it is crucial that we foster critical thinking, adaptability, and ethical decision-making among students. The initiatives underway within the region illustrate the potential for collaborative efforts to enhance educational quality and accessibility, ensuring that all learners are prepared for the demands of the future. By embracing innovative teaching methods, focusing on the development of essential skills and strengthening regional cooperation, an educational landscape that not only meets the needs of today but also anticipates the challenges of tomorrow can be created.

BRINGING STEM TO LIFE: HOW EDUCATORS INSPIRE FUTURE SCIENTISTS AND ENGINEERS IN SINGAPORE

By Ruchira Karjee, BEng



Singapore's push for STEM (Science, Technology, Engineering, and Mathematics) education is well-known, but how do educators bring these subjects to life for students in an engaging and impactful way? Dr. Gary, a physics teacher at Nexus International School, offers valuable insights from his experience in nurturing the next generation of scientists and engineers.

In local schools, STEM education is firmly embedded, with dedicated STEM coordinators ensuring that the subjects are adequately prioritized. However, in international schools, there's a broader range of interests, such as sports, that may take precedence. *"I've noticed an emerging trend of international schools hiring STEM coordinators to keep up with the growing interest in STEM fields,"* Dr. Gary explained.

In order to address this, a key part of Dr. Gary's approach is giving his students exposure to international platforms like *Science Castle Asia (SCA)*, a flagship program run by Leave a Nest. Science Castle is one of the largest conferences in Asia where junior and senior high school student researchers gather to present and discuss their research. For Dr. Gary, SCA wasn't just another competition—it was a way to inspire his students, allowing them to present their ideas to a global audience and network with other like-minded individuals. *"Participating in SCA helped students build their university portfolios while also inspiring them to envision themselves as future scientists and engineers,"* he said.

Before SCA, Dr. Gary's students had participated in competitions like NASA's Dream with Us program. While these competitions were valuable, he felt there was something missing. *"Most competitions required submissions of prototypes or essays, with little to no face-to-face interaction. SCA stood out by enabling students to directly engage with others, fostering real connections and a sense of community."*

When asked about the role of external organizations like Leave a Nest in enhancing school programs, Dr. Gary was enthusiastic. *"Programs like NEST (Nature, Engineering, Science, and Technology) are invaluable. They offer fresh perspectives and opportunities that complement what schools are already doing, giving students experiences they might not otherwise have access to."*

Dr. Gary's advice to fellow educators? *"Let your students fail. It's in those moments that they learn the most—how to pick themselves up and try again. And always encourage them to attend international conferences. Those experiences broaden their perspectives and ignite their passion for discovery."*

NEST EDUCATION: A FRONTIER TO HONING HOLISTIC STEM AND RESEARCH EDUCATION WITHIN THE PHILIPPINE EDUCATION LANDSCAPE

By Bill Joseph Mercado, BSc



Dr. Johnny Pornel, chair of the Professional Education Division at UP Visayas College of Arts and Sciences shares his insights on how participating in various Leave a Nest Education programs such as Science Castle implementations and Tsunagu Research Project influenced, changed, and inspired both himself and the students within his institution.

Filipino Students have been underperforming in recent international assessments such as the PISA. One of the main reasons according to Dr. Pornel is the insufficient cultivation of critical thinking skills among the students. He advocates for innovative pedagogical approaches to better engage students and overcome various issues faced nowadays within the education system.

Holistic Approach to Address the Issue

Nature, Engineering, Science, and Technology (NEST) Education is Leave a Nest's approach to fostering Research Education in its programs. NEST Education puts equal emphasis and importance on discoveries from simple inquiry to complex and intricate inventions – and Dr. Pornel considers this as an inclusive framework and environment within its programs. He says that this fosters more of a collaborative atmosphere rather than a competitive one. With a focus on genuine curiosity, collaboration, creativity and deeper appreciation of knowledge found, it has made a difference on how students tackle and understand the process of doing research.

Testimony of Deep Impact

Dr. Pornel has seen this effect first-hand as his students are the ones volunteering and encouraging themselves and their classmates to participate in Leave a Nest Education Programs, compared to before, when he and his colleagues needed to push the students to participate. This allows the fostering of an environment wherein research and STEM is a journey that can be enjoyed, is accessible, and open to all. This approach ignites student interest and hones their research skills, democratizing access to science exploration and nurturing future Filipino scientists.

NEST Education for All

Dr. Pornel has observed how these activities encourage students to pursue their passions and delve into discoveries that address meaningful societal challenges. He hopes that by fostering a supportive environment for STEM and research, initiatives like the NEST Education can contribute, even in small ways, to the growth of Philippine education and showcase the potential of Filipino talent and excellence on the global stage.

ACCELERATING BORNEO'S STEM JOURNEY THROUGH SCIENCE CASTLE MALAYSIA 2025

By Muhammad Basril Muhammad Asri, MSc



Science Castle Malaysia is set to make a transformative comeback on July 31, 2025, in Kuching, Sarawak, after a six-year hiatus. This revitalized event aims to revolutionize STEM education across Borneo and beyond, addressing the urban-rural education divide and unlocking the region's untapped potential. Drawing inspiration from the Japanese philosophy of castles as catalysts for societal progress, Science Castle strives to accelerate growth in science and technology appreciation among young leaders.

The event's foundation rests on three key pillars designed to create lasting impact and foster inclusive scientific growth. The first pillar focuses on **establishing an inclusive and accessible platform throughout Borneo**, prioritizing participation from B40 and rural students. This approach creates an environment where learners from all backgrounds can freely explore their STEM interests, effectively removing socioeconomic barriers to education.

The second pillar involves cultivating a multifaceted scientific forum that seamlessly **integrates local biodiversity, indigenous wisdom, and regional collaborations**. This unique approach not only celebrates Borneo's rich natural and cultural heritage but also positions the region as a living laboratory for cutting-edge research. By doing so, Science Castle Malaysia 2025 aims to showcase Borneo's significant contributions to global scientific discourse.



The third pillar concentrates on **fostering long-term STEM engagement across the island**. Through strategic partnerships between schools, local industries, and research institutions, the event aims to create sustainable pathways for students to pursue STEM careers. This collaborative approach is designed to contribute significantly to the region's technological advancement and economic development.



Science Castle Malaysia 2025 is a pivotal platform fostering collaboration between Peninsular Malaysian corporations and local Borneo entities. This prestigious event showcases regional talent and creativity through diverse programs, including hands-on workshops, innovative project exhibitions, and industry mentorship initiatives. By facilitating cross-regional synergy, it brings valuable resources and expertise to Sarawak, elevating its national and global scientific presence.

In conclusion, Science Castle Malaysia 2025 signifies a transformative moment for STEM education in Malaysia, particularly in Sarawak and Borneo. By championing inclusivity, collaboration, and regional scientific advancement, the event is set to cultivate a new generation of STEM leaders and innovators. Through its comprehensive approach and focus on sustainable progress, Science Castle Malaysia 2025 promises to leave a lasting legacy on the nation's scientific and technological landscape for years to come.

Showcase your research at Science Castle Malaysia 2025! Open to all secondary school students. Apply by scanning the QR code below or visit <https://s-castle.com/registerSCSeries25>



SCIENCE CASTLE SINGAPORE MAKES A COME BACK IN 2025

By Mark Chiam, BSc

Science Castle started in Osaka Japan to provide a place for secondary school students' researchers to share their research to like minded people. Since then it has expanded cross borders catering to the needs unique to the respective countries. Science Castle aims to showcase the research efforts of local Singaporean secondary school students, We also welcome participation from international schools and educators. With this program we hope to contribute to the desired outcome of education here in Singapore. Especially in the aspect of "self-dedicated learner" which can be triggered with intellectual curiosity and inquisitive mindset. Moreover, it can also contribute to becoming active contributors.

Crossroads for Research and Learning



Unlike the first time we launched the Science Castle in Singapore back in 2014, the education environment surrounding students has changed drastically. There may be enough opportunities for students to showcase research outcomes and compete for prize money. We bring Science Castle to Singapore in hopes to create this crossroads for students to be exposed to non subject based learning. To highlight the fundamentals of presenting research.



A Conference for Every Student

Unlike other science conferences, it fosters cross-interest exchange of ideas and knowledge. Scientific methods can assist in navigating through uncharted terrain. Students nowadays are expected to excel in the world which requires cross border team work and tackling global challenges. Under such circumstances, students are asked to make decisions with limited prior information and/or knowledge. We would like to see young "researchers" with interest in Science as well as those who may not be familiar with Science yet willing to explore. This kind of knowledge exchange helps broaden perspectives and encourages the development of innovative solutions to worldwide problems.

Science
Castle
Singapore
2025

DATE:
Saturday, April 12 2025

TIME:
9:00 AM – 5:30 PM

VENUE:
Science Centre Singapore

If you would like to receive updates about Science Castle please register via the QR code



THE YOUNG RESEARCHER NEXT DOOR

by Alexander Gali, BSc



Faith Nicole M. Recesio

Grade 12
Bansud National High School—Regional Science High School for MIMAROPA

Team Members: Sherina B. Mauhay & Kent Amiel Mikho Y. Amboy
Adviser: Romnick M. Ureta

What sparks a young researcher's journey?

I believe that the path to becoming a researcher often begins with a deep personal experience. For me, it was the loss of a loved one to ischemic heart disease that ignited my passion for research. This loss pushed me to focus on bridging the gap between cardiovascular diseases—still the leading cause of death in the Philippines—and the accessibility of public healthcare, particularly for underserved communities.

How were you able to overcome the challenges that you had when doing research?

My team collaborates closely with institutions such as the Philippine Heart Center and the Department of Health to ensure that our work adheres to rigorous testing and complies with regulatory standards. Overcoming challenges like sourcing specialized materials, refining compound extraction processes, and balancing time and financial constraints required a great deal of persistence. My teammate, Sherina, also mentioned to me before that *“transporting samples to distant testing centers was exhausting, but seeing tangible progress made every effort worth it.”*

What's your advice for curious beginners in research?

I encourage aspiring researchers to start by identifying a problem they are deeply passionate about, even if it seems small at first. Perseverance is key when challenges arise. I believe in finding alternatives, seeking solutions, and asking for help from friends, family, or even different sectors. I remember Sherina also said, *“Research can feel intimidating, and I understand why many people hesitate to start. That's why I want to emphasize the importance of staying curious and embracing opportunities.”* If you push forward and don't give up, you can create meaningful solutions. Collaboration is equally important—working with others can help bring your ideas to life and ensure success in your journey.

Faith Nicole Recesio is a “Heartfelt Catalyst in Healthcare.” She transforms personal experiences into innovative solutions driven by passion. Faith inspires the youth to view problems as opportunities for innovation rather than mere obstacles. Her dedication turns challenges into powerful catalysts for change.



CELEBRATING PATRIOTISM THROUGH STEM AT SCIENCE CASTLE PHILIPPINES 2025

By Edriel Lee, BSc



On 18 January 2025, a wave of fresh scientific inquiry swept through Ateneo de Manila University as Science Castle Philippines (SCPH) opened its doors for the very first time. This inaugural event marked a significant milestone for Leave a Nest in its mission to establish Science Castles worldwide, bringing together 192 attendees from 35 local and 3 international schools.

A highlight of the program was the research presentations by students of the Ki Ni Naru Project, an initiative by Leave a Nest Philippines that encourages high school students to explore topics they are genuinely curious about and, in the process, teaches them how to conduct research from the ground up. Beyond this, the Oral and Splash Presentations featured 32 teams creatively conveying their research on various pressing national issues. Meanwhile, the poster sessions provided an interactive space where students could share their work and forge meaningful connections, thus establishing the foundation for the next generation of researchers.

Special Poster Awardees

P-04N University of the Philippines High School in Iloilo



In silico Screening of Selected Aratiles (*Muntingia calabura L.*) Flavonoids as Potential Anti-angiogenic Agents

P-12S Bansud National High School - Regional Science High School for MIMAROPA



Antiuro lithiatic Potential of *Ardisia elliptica* Using Synthesized Aggregated Kidney Stones Tested via Nucleation Assay-In-vitro and In-Silico Molecular Docking of Its Alpha-amyryn for Autosomal Dominant Polycystic Kidney Disease

P-21S Naguilian National High School



The Health-O-Matic: PET Repurposing as Filament and Thread Innovation

Focus Systems Award

P-03N Trece Martires City National High School



Molluscicidal Activity of Akapulko (*Cassia alata*) Ethanolic Leaves Extract Against Golden Apple Snails (*Pomacea canaliculata*)

Best Poster Award

P-06E Bansud National High School - Regional Science High School for MIMAROPA



Pellicleanse: Nano TiO₂-Loaded Bacterial Cellulose Pellicle for Heavy Metal and Oil Contaminated Water Filtration

Grand Winner Award

O-02E Bansud National High School - Regional Science High School for MIMAROPA



Development and Characterization of a Silk Fibroin-Chitosan-Agar-Polyvinyl Alcohol (SCAP) Composite Hydrogel for Arterial Scaffold Applications and Its Mechanical Properties and Biocompatibility

Undoubtedly, SCPH 2025 not only showcased the ingenuity of youth in STEM, but also underscored their love for the field and country, as well as their potential to drive scientific progress and innovation. Needless to say, the event would not have been possible without the support of main partners Focus Systems Corporation, AVAD K.K., Azumi Filter Paper Co., Ltd., and strategic partners Philippine Coding Camp, Ateneo de Manila University, and Ateneo Intellectual Property Office, all of whom share the belief in the power of youth and science as the driving force behind the national progress.



Details of each conference and abstract submissions can be found on the Science Castle website <https://s-castle.com/en/>



SCIENCE CASTLE SERIES 2025

APPLY NOW

Science Castle, a science conference for junior and senior high school students, started in Japan in 2012 as a “gateway for aspiring researchers.” It has grown into a vibrant community where over 1,000 students and next-generation researchers from across Japan gather each year. The platform also connects researchers from universities, companies, and startups, fostering collaboration across generations and fields to build a brighter future together.

In 2025, Leave a Nest Group is proud to present the Science Castle Series 2025, which will take place across Japan and its subsidiaries in Singapore, Malaysia, and the Philippines. The series will kick off in the Philippines, followed by Japan (Osaka), Singapore, and Malaysia (Sarawak), culminating in the Asia-level conference. This grand finale will unite young researchers from across the region to celebrate their achievements and inspire further collaboration.

Philippines

Date	18 January 2025
Event Venue	Ateneo de Manila University
Registration Deadline	9 December 2024
Language	English

Malaysia

Date	31 July 2025
Event Venue	Kuching, Sarawak
Registration Deadline	30 April 2025
Language	English

Japan (Osaka)

Date	22 March 2025
Event Venue	Kansai University (Senriyama Campus)
Registration Deadline	29 January 2025
Language	Japanese

Asia (Cyberjaya, Malaysia)

Date	18-19 October 2025
Event Venue	Multimedia University (MMU)
Registration Deadline	30 June 2025
Language	English

Singapore

Date	12 April 2025
Event Venue	Science Centre Singapore
Registration Deadline	28 February 2025
Language	English

World (Tokyo, Japan)

Date	13-14 December 2025
Event Venue	Tokyo, Japan
Registration Deadline	17 September 2025
Language	Japanese & English





**Science
Castle
Grant**

THE SCIENCE CASTLE GRANT 2025: EMPOWERING MORE YOUNG INNOVATORS ACROSS MALAYSIA

The Science Castle Grant 2025 Ajinomoto (Malaysia) Berhad Award, is back with an even bigger vision! This year, the program expands to include **10 secondary schools**, doubling the opportunities for young researchers to embark on groundbreaking projects.

In this edition, Ajinomoto (Malaysia) Berhad offers **research grants worth RM 2,000** to each of the 10 selected teams. The program aims to empower students to address real-world challenges through research, collaboration, and mentorship.

OBJECTIVES

To connect and involve participants from all over Malaysia, particularly from Sabah and Sarawak. Teams of young researchers from these regions will be chosen as grant recipients, promoting greater inclusivity and expanding outreach efforts.

To outline the structure of the application process for the Science Castle Grant 2025, highlighting its benefits to grant recipients and encouraging more schools to participate.

To provide valuable insights from industrial experts through mentorship by Leave a Nest Malaysia and Ajinomoto (Malaysia) Berhad. Participants will also benefit from the NEST School Attack program, which offers enriching sessions during the grant's selection process.

Building on the success of previous years, the Science Castle Grant has continued to inspire young minds across Malaysia. Last year, five schools were awarded grants, allowing students to pursue innovative research projects with the guidance of mentors from Leave a Nest Malaysia and Ajinomoto (Malaysia) Berhad.

As part of our engagement efforts, the **NEST School Attack program** brought Leave a Nest Malaysia Sdn. Bhd. team members to schools across Malaysia, where they conducted **interactive sharing sessions** to inspire students by sharing their personal journeys through science. These sessions provided students with practical insights into the research process, fostering excitement and curiosity for scientific exploration.

This year, we strongly encourage schools from all regions of Malaysia, particularly those in Sabah, Sarawak, and rural areas, to participate in this program. With dedicated spots available for schools from these regions, we aim to foster diverse perspectives in scientific research and provide students with unique opportunities to address region-specific challenges. This approach not only enriches the overall quality of research but also empowers local communities through science and innovation.

The Science Castle Grant 2025 by Ajinomoto kicks off with applications open from January to March. After the selection process, the program officially begins in May with a kickoff and grant presentation ceremony. Over five months, participants will work on their research projects, guided by mentors through online and in-person sessions. Their hard work will be showcased at Science Castle Asia 2025, where they'll present their findings on an international stage.

The highlight of this year's grant will be the recognition of the **best research project**, which will represent Malaysia at the prestigious **Science Castle World in December 2025**, offering students a global platform to showcase their work.



Science Castle Grant 2025 Ajinomoto Timeline

Join Us in Shaping the Future:

The Science Castle Grant 2025 Ajinomoto (Malaysia) Berhad exemplifies our dedication to nurturing the next generation of STEM leaders. By expanding the program and continuing to engage directly with schools, we aim to inspire and empower students to make meaningful contributions to the scientific community.

For more information, please contact us at izzaty@lne.st. Stay tuned for more details on how to apply and seize this remarkable opportunity to innovate, explore, and create a lasting impact!



**Fostering an entrepreneurial mindset:
University students engage Industry leaders**



**Training session to equip with the
skills needed to thrive in the evolving
knowledge-based economy**



**A venture builder-led session sharing
insights on startup ecosystem**

The Pillars of Entrepreneurial Growth: Nurturing Talent to Drive the Knowledge-Based Economy

The knowledge-based economy demands leaders with the right skills, mindset, and innovation. Developing these talents requires collaboration between corporate foundations, universities, and venture builders to bridge skill gaps, foster entrepreneurship, and drive societal impact.

Yayasan Peneraju, a corporate foundation focuses on value-driven professionals, providing industry-recognized certifications to close skill gaps and empower individuals for financial and societal success. Dr. Zalena Mohd from Taylor's University, exemplifies how universities play a critical role in cultivating knowledge-based economy leaders. Well crafted program integrating hands-on learning and industry collaboration, equipping students with entrepreneurial mindsets and tech-driven solutions. Venture builders, such as 1337 Ventures, help startups scale through structured programs emphasizing market research, customer-driven innovation, and prototyping. Entrepreneurship also emerges from academia at a young age, as seen in Dr. Tan Chee How, who co-founded Spinoff Robotics during his PhD.

As the knowledge-based economy evolves, synergy between different stakeholders in talent development remains crucial. The following articles highlight how their efforts shape future leaders and drive innovation.

VENTURE BUILDERS AS GROWTH CATALYSTS: SUPPORTING FOUNDERS TO SCALE STARTUPS

By Hannah Balisi, BSc

The ceaseless evolution of society brings forth novel challenges and deeply ingrained issues. In response, startups consistently endeavor to create innovative solutions. However, this pursuit of innovation is fraught with obstacles. Venture builders, such as 1337Ventures from Malaysia, play a crucial role in addressing these challenges. This article offers insights into the function and significance of venture builders, drawing upon the expertise of Mr. Bikesh Lakhmichand, Founding Partner and CEO of 1337Ventures. Through this examination of a well-established venture capital firm, we aim to illuminate the key contributions of venture builders within the entrepreneurial ecosystem.

Fueling Innovation and Impact

1337 Ventures is a venture capital firm and accelerator committed to fostering innovation and entrepreneurship. The organization prioritizes the establishment of scalable businesses that address real-world problems and contribute to societal advancement. They back ventures with a passion for impact, fostering this through programs like Alpha Startups (investment prep for early-stage companies) and tailored industry-specific support. Through these aforementioned programs, 1337 Ventures employs a design thinking methodology within its programs, encouraging startups to conduct rigorous market research. This involves understanding customer needs, reframing challenges, and prototyping innovative solutions. By integrating critical thinking with practical experience, this approach empowers startup founders to expand their vision, act decisively, and thrive in today's dynamic environment.

Navigating the Complexities of Venture Building

However, the role of a venture builder is not without its challenges. Mr. Bikesh identifies overcoming systemic gaps within the entrepreneurial ecosystem as a significant hurdle. This includes addressing funding gaps and limited access to mentors and advisors for emerging startups. Venture builders also face the challenge of shifting founders' mindsets from profit-only to sustainable impact. Navigating regulations also complicates startup scaling. While venture building presents inherent challenges, Mr. Bikesh underscored the 1337 Ventures' core philosophy: fostering an inclusive and sustainable startup ecosystem that empowers individuals to address significant problems. He further noted that their mission extends beyond simply launching startups to encompass filling critical gaps within the entrepreneurial landscape. This includes providing access to mentorship and funding, as well as cultivating the confidence necessary for startup founders to embrace calculated risks. Mr. Bikesh further conveyed his observation of the transformative potential of entrepreneurship for both targeted communities and economies. As he puts it, "it's the realization – that we have the ability to enable others to create that kind of impact – that drives me." 1337 Ventures defines success as extending beyond the acquisition of funding capital. Their objective is to generate a ripple effect, wherein startup founders evolve into industry leaders, industries themselves adapt and progress, and ultimately, society as a whole reaps the benefits.

Beyond Individual Startups: Nurturing the Entire Ecosystem

As societal challenges grow more complex, 1337 Ventures plans to expand its ecosystem-building initiatives, addressing gaps in early-stage funding, mentorship, and cross-border collaboration. This adaptability is crucial for fostering startup growth, as success depends on supportive networks and communities. As Mr. Bikesh puts it, "Venture builders should look at the bigger picture: How can your efforts create an environment where multiple startups can thrive and feed into one another? By addressing systematic gaps, you're not just nurturing individual talent; you're driving sustainable growth for the entire ecosystem"



SHAPING FUTURE LEADERS OF THE KNOWLEDGE-BASED ECONOMY: FOSTERING VALUE-CREATOR

By Farha Husna Ramli, MSc

In today's global landscape, many developed countries are transitioning towards knowledge-based economies, where knowledge is not just an asset but a valuable commodity that can be traded and leveraged to enhance goods and services. This paradigm emphasizes the critical role of investing in human capital, education, research and development, and protecting intellectual property rights as essential drivers of innovation. By nurturing a culture of continuous learning and creativity, these economies are not only fostering individual growth but also paving the way for sustainable economic advancement.



Forefront of Shaping Future Leaders

Yayasan Peneraju (YP) is at the forefront of shaping future leaders in Malaysia's knowledge-based economy through innovative initiatives to develop value creators. Established to enhance the skills and competencies of Bumiputera talents, the organisation initially plays an important role in addressing the evolving demands of the job market. By offering various financing schemes for professional and technology certifications, YP empowers individuals to acquire industry-recognized qualifications in fields such as accounting and finance, artificial intelligence and deep learning, cybersecurity, cloud-based technology and data analytics.

With over 75,000 talents enrolled in the pipeline, YP's next focus is to scale up professional experts and talents at large towards leadership role. By 2030, the organization envisions cultivating a robust talent pipeline of approximately 10,000 leaders across professional, business, and community roles, strategically aligning with national development goals and regional aspirations.

"In 2012, certified Bumiputera professionals in finance and accounting were below 10%. Today, we've doubled that figure," according to Mr. Kama Bistari Muhammad, Executive Vice President of Operations at Yayasan Peneraju. However, the goal is to further boost these numbers, especially in burgeoning sectors such as cybersecurity, data analytics, and game development. This discussion explores the vital role of Yayasan Peneraju in driving this progress.

YP's efforts go beyond numbers. Their Talent Bank initiative represents a groundbreaking advancement in talent development, integrating a digital platform to connect individuals with tailored certifications, mentorship, and soft skill development opportunities. By leveraging data-driven profiling tools, the platform identifies individual strengths, curates personalized growth pathways, and aligns programs to career aspirations. Beyond offering professional and technical training, Talent Bank fosters meaningful connections with industry leaders and mentors, creating a supportive ecosystem that empowers individuals to reach their full potential. This forward-thinking initiative is a vital step toward cultivating a pipeline of future-ready leaders who will drive Malaysia's progress in the knowledge-based economy.

The transition from Wealth Creators to Value Creators

Yayasan Peneraju has embraced a transformative shift in its mission, transitioning from a focus on wealth creation to becoming a catalyst for value creation. This pivot reflects the organization's commitment to fostering talents who not only achieve financial success but also contribute meaningfully to society and the nation. *"It's beyond dollars and cents, it's about cultivating individuals who create impact whether as professional leaders, entrepreneurs, or community builders."* This shift emphasizes the importance of preparing talents for leadership roles, innovation, and societal contributions, ensuring that they drive Malaysia's economic and social progress on a global stage, Kama added.

Inclusivity is a cornerstone of YP's mission, with a dedicated focus on increasing participation from underrepresented groups, including indigenous communities in Borneo. The organization strives to create equal opportunities for all while simultaneously advocating for global competitiveness. By addressing gaps in professional representation and fostering a mindset that transcends local competition, YP aims to position Malaysian talent on the global stage. He added, *"We need to shift from competing among ourselves to thinking globally"*. He cited examples of Khairul Aming, a Malaysian entrepreneur and professional who has expanded their businesses regionally showcasing the importance of a global outlook. This global perspective ensures that the nation's talent remains competitive and contributes to Malaysia's progress in the international arena.

Sustainability Through Financial Prudence and Future-Ready Initiatives

Acknowledging fiscal challenges, Yayasan Peneraju has transitioned from grant-based funding to a sustainable financing model. Talents are now provided zero-interest loans for certifications and training, instilling financial responsibility and ensuring the continuity of funding for future generations. *"Gone are the days of free money. This approach not only reduces dependency but also fosters a mindset of self-reliance,"* he explained. With this in mind, YP has introduced a new financing scheme at the end of February, aimed to further benefit 7,200 individuals to upskill themselves. These individuals will also have the opportunity to be further selected for leadership building alongside other YP talents in the Talent Bank ecosystem.

As Malaysia transitions into the next phase of its economic development, Kama highlighted the needs for readiness to embrace emerging technologies such as artificial intelligence, nanotechnology, and bioinformatics. The vision is to position Malaysia as a global leader in technology innovation and application.



"We must anticipate what's beyond AI and prepare ourselves for a future where boundaries between technology and humanity blur," Kama said, stressing the importance of futuristic thinking and preparedness.

A Collective Effort for National Progress

Kama emphasized the critical role of collaboration among stakeholders – government, academia, industry, and community to build a resilient and globally competitive workforce. With strategic initiatives such as the Talent Bank platform, Yayasan Peneraju exemplifies how targeted efforts can shape the future of Malaysia's knowledge-based economy.

"At the end of the day, it's about creating value and ensuring that our talent contributes not only to their families and communities but also to the nation and the world," he concluded.



Mr Kama Bestari,
Executive Vice President, Operations
Yayasan Peneraju

NAVIGATING NEW FRONTIERS: EDUCATION AS INNOVATION

By Siti Shazwani Ahmad Suhaimi, MSc

In an era defined by rapid technological advancements and shifting economic paradigms, universities are no longer just centers of academic learning—they are incubators for innovation, entrepreneurship, and leadership. Dr. Zalena Mohd, Program Director for the Team Entrepreneurship Program at Taylor’s University, exemplifies how higher education institutions are playing a critical role in cultivating a knowledge-based economy. Through innovative teaching methods and faculty-led initiatives, universities are empowering the next generation of leaders to bridge the gap between theory and practice, fostering a culture of creativity, resilience, and real-world problem-solving.

HUMAN DEVELOPMENT

The Role of Universities in a Knowledge-Based Economy

The knowledge-based economy thrives on innovation, intellectual capital, and the ability to adapt to rapid changes. Universities, as hubs of knowledge creation and dissemination, are uniquely positioned to drive this transformation. Dr. Zalena emphasizes that the key to preparing students for this dynamic landscape lies in equipping them with an entrepreneurial mindset. At Taylor’s University, this is achieved through initiatives like the Team Entrepreneurship Program, which integrates hands-on learning, industry collaboration, and cutting-edge technologies such as AI and digital marketing. By encouraging students to develop tech-driven solutions and sustainable business models, the program not only enhances their intellectual capital but also prepares them to contribute meaningfully to the economy.



Dr. Zalena’s approach to teaching is deeply rooted in her 16 years of industry experience and 5 years as an entrepreneur. She believes that traditional lecture-based methods are no longer sufficient in preparing students for the complexities of the modern business world. Instead, she advocates for experiential learning, where students engage in real-world projects, develop startups, and receive mentorship from industry experts. One of the standout features of her teaching methodology is the emphasis on “fail fast, learn faster.” This experimental mindset encourages students to iterate quickly, adapt to challenges, and grow through failures—a crucial skill in entrepreneurship. By incorporating live business projects, seed funding reviews, and industry-led coaching, she ensures that students gain practical experience that complements their academic learning.



Team entrepreneurship has the power to drive positive change in society. By equipping students with the tools to turn their ideas into impactful ventures, we contribute to creating a more innovative, sustainable, and inclusive world.



Fostering an Entrepreneurial Mindset

Entrepreneurship is more than just starting a business; it's about cultivating a mindset that embraces innovation, risk-taking, and continuous learning. Dr. Zalena's initiatives at Taylor's University are designed to instill this mindset in students, preparing them to navigate the uncertainties of the future. For example, the university's participation in the Malaysia Entrepreneurship Immersion Trek (MEIT) program exposes students to global entrepreneurial practices and social impact initiatives. This not only broadens their perspectives but also inspires them to see entrepreneurship as a vehicle for social good. By engaging with international markets, social enterprises, and diverse cultural contexts, students develop the cross-cultural communication skills and global outlook needed to thrive in today's interconnected economy.

Industry-Academia Collaboration: A Catalyst for Innovation

A key driver of the knowledge-based economy is the collaboration between academia and industry. Dr. Zalena highlights the importance of partnerships with organizations, which provide students with access to real-world business challenges, mentorship, and networking opportunities. These collaborations ensure that students are not only learning theoretical concepts but also applying them in practical, impactful ways. One notable success story from Taylor's University involves a student-led event organizing venture that faced significant setbacks, including difficulty securing sponsors and low initial engagement. Through persistent outreach, mentorship, and strategic refinements, the team successfully generated RM30,000 in revenue and secured full participation from industry leaders. This project underscores the importance of resilience, resourcefulness, and the support of mentorship in overcoming entrepreneurial challenges.

The impact of these initiatives extends beyond the classroom. Students who participate in team entrepreneurship projects leave university with a strong portfolio of real-world experiences, marketable tech skills, and a robust professional network. They are equipped with the confidence, resilience, and adaptability needed to thrive in a rapidly changing business environment. Moreover, these projects help students clarify their career paths, whether they choose to pursue startups, work for innovative companies, or further their education. By fostering an entrepreneurial mindset and providing hands-on learning opportunities, universities like Taylor's are preparing students to become leaders who can drive economic growth and societal advancement.

The Transformative Power of Education

As the world evolves, universities like Taylor's University play a critical role in shaping future leaders by fostering innovation, entrepreneurship, and real-world application. Through industry collaborations and innovative teaching methods, institutions empower students to harness their creativity, preparing them for the challenges of a knowledge-based economy. Dr. Zalena's work exemplifies this transformative power, inspiring the next generation to create sustainable businesses and drive societal impact.

By immersing participants in real-world challenges, connecting them with industry pioneers, and exposing them to cutting-edge technologies, MEIT cultivates a mindset of creativity, resilience, and problem-solving—essential traits for success in today's knowledge-driven economy. Initiatives like MEIT play a pivotal role in shaping the next generation of leaders who can seamlessly integrate science, technology, and societal needs. By equipping entrepreneurs with the skills and networks to turn bold ideas into tangible solutions, MEIT not only strengthens Malaysia's entrepreneurial landscape but also paves the way for a more innovative, inclusive, and sustainable future. Through programs like this, we are not just building businesses—we are building a brighter tomorrow.



**More details of MEIT can be found on the previous volume (Nest Garage Vol. 23 Page 24). Download a copy in <https://nestgarage.com/magazine-download/>*

THINK LIKE A FOUNDER: CULTIVATING INTRAPRENEURSHIP FOR STARTUP SUCCESS

By Ruchira Karjee, BEng

The Power of Intrapreneurship in Startups

Founding a startup is tough, but building a team that shares your vision? That's even harder. The key lies in fostering intrapreneurship—where team members take ownership and drive innovation from within.

Ms. Ririko Takano's Journey and Leadership

Meet Ms Ririko Takano, founder of Midori Climate Partners, a carbon credit developer focused on ecosystem restoration. With over a decade in finance, Ms Ririko took a leap in 2024 to build a business tackling climate change, soil degradation, and biodiversity loss.

For Ms Ririko, thinking like a founder means having a clear mission and the drive to make things happen. Her past corporate experience taught her resilience and adaptability—skills she now instills in her team. “Founders need to navigate ambiguity and take ownership,” she says.



Hiring for Passion and Empowering Growth

To cultivate this mindset, Ms Ririko emphasizes clarity in goals and reminding her team of business priorities. Passion for sustainability is important, but team members must also understand the need for financial viability. Ms Ririko hires people who are passionate, team players, and curious. She values candidates who ask thoughtful questions during interviews, showing a desire for mutual understanding.

“An interview isn't just for us to evaluate the candidate; it's for them to see if we're a good fit too.”

She supports team members stepping out of their comfort zones. For example, a Cambodian soil specialist took on a project management role, creating detailed plans and identifying gaps—proving the value of intrapreneurship. This same soil specialist will soon join Ms Ririko in Japan for training from experts to further strengthen their technical knowledge.

Fostering Ownership and Long-Term Success

With team members in Singapore and Cambodia, Ms Ririko ensures open communication through daily check-ins. Her co-founder is relocating to Cambodia to help embed company culture locally. Working in carbon credits comes with knowledge gaps, so Ms Ririko encourages continuous learning to ensure the team stays grounded in factual, actionable insights.



Ms Ririko's approach empowers her team to take ownership. When employees feel like stakeholders, they become drivers of change. By fostering intrapreneurship, Midori Climate Partners is set for long-term success in a complex industry—proving that thinking like a founder isn't just for CEOs, but for everyone on the team.

THE ATTITUDE FOR ALTITUDE

By Leeyon Lim, BSc

What brings a young entrepreneur to great heights? Dr. Tan Chee How, Research Fellow at the Singapore University of Technology and Design (SUTD), co-founded drone startup Spinoff Robotics during his PhD studies. We heard from him about his unique journey from researcher to co-founder of the Grand Winner of TECH PLANTER Asia Final 2024!

Dr. Tan Chee How holds a B.Eng and Ph.D. from SUTD's Engineering Product Development (EPD) Pillar, and has over a decade of experience in aerial robots for industrial applications.



These are not the drones you're looking for

A defining characteristic of Spinoff Robotics, and Dr. Tan's identity as a researcher, is the element of play. Spinoff Robotics was purposefully incorporated on May 4th, popularly known as Star Wars Day, as a means of preserving the founders' enthusiasm as "tech geeks". However, play is not just for fun; the design thinking process that Dr. Tan mastered at SUTD, specifically the brainstorming phase, is dependent on play. Rather than churning out ideas systematically,

"you try haphazardly and then you realize that there's a certain breakthrough here", Dr. Tan says of his methodology. Keeping his playful spirit has helped Dr. Tan imagine some wild, groundbreaking solutions, such as ALICE, a fluid spraying drone that eliminates the need for humans to work at heights. This makes high elevation maintenance more efficient and, most importantly, safer.



Spinoff Robotics' most well-known product, the Automated Launder and Inspection Corded End-effector (ALICE), delivers targeted and precise high pressure cleaning at high elevations.

The challenge is its own reward

Of course, this journey was not all fun and games. For Dr. Tan, who had never been exposed to entrepreneurship, learning to think like an entrepreneur was a great challenge because, simply, *"we really don't know what we don't know"*. Fortunately, he had open-mindedness and tenacity on his side. To seek the knowledge he lacked, Dr. Tan actively participated in entrepreneurship challenges in and out of SUTD, and also consulted with mentors assigned through the university. Furthermore, his perseverance in fighting through the difficulties helped turn adversity into an ally, as he is now driven by the excitement of balancing his hats as a researcher and as an entrepreneur. In this way, Dr. Tan's youth simultaneously presented him with a challenge in his inexperience, and a way to tame it through his open-mindedness and tenacity.

ASK
AND YOU
SHALL
RECEIVE

Dr. Tan distills his journey into one simple piece of advice for young entrepreneurs, as well as aspiring entrepreneurs: start talking to people. He likens every conversation to an experiment, where you test your idea and how you communicate it, then gain feedback and perspective. At SUTD, where open lab spaces encourage discussion between neighbouring researchers, there is *"a healthy kind of noise that keeps the lab innovation culture going"*. Furthermore, speaking to others unlocks a wealth of resources, from a network of seniors and mentors through the university entrepreneurship office, to the entrepreneurship challenges that forged Dr. Tan into the businessman he is today. Talking to people is the first step to getting support on your budding entrepreneurship journey. **Who will you talk to today?**

BRINGING KNOWLEDGE HOME: RICHARD MILANTE'S JOURNEY TO TRANSFORM EYE CARE IN BICOL

By Jondi Doplayna, BSc

Richard Milante, Chief Operating Officer of Legazpi Eye Center, exemplifies how global experiences can drive impactful change locally. Initially pursuing a career in real estate development, Richard ultimately shifted to healthcare, joining his family's business with a vision to make a difference. His journey took him from corporate roles in Manila to Duke University's prestigious healthcare management MBA program, where he prepared himself to address healthcare challenges back home. *"I always wanted to study abroad for postgrad,"* he shares, explaining his decision to immerse himself in an international program. *"If I don't do it now, I might never get around to doing it."*

HUMAN DEVELOPMENT



Richard's focus on contributing meaningfully to his community guided his studies and career decisions. Before leaving, he spent a year working in the family business, learning its daily operations and challenges. Although he initially considered a specialized healthcare analytics program, a mentor's advice led him toward an MBA. This approach equipped him with a blend of technical skills and commercial acumen to bring global healthcare insights back to Legazpi in ways that would directly benefit the local community.

Bringing Knowledge Back Home

Richard's return to Legazpi Eye Center was driven by a commitment to sustainable, community-focused improvements. Through his experiences at Duke University and at Duke Eye Center, he implemented strategic upgrades such as the modernization of Legazpi Eye Center's IT infrastructure where a hybrid data storage model ensured seamless operations despite frequent power and internet outages in Bicol. By tailoring global insights to the local context, he ensured that his changes would be both effective and enduring.

For staff management, Richard took inspiration from Duke Eye Center's point-based performance system to incentivize Legazpi Eye Center's employees and improve team efficiency and patient care. He believes that driving progress at home requires practical application of the knowledge and experiences he has gained through the years.

Future Outlook

In May 2023, Richard and the Legazpi Eye Center team opened their second stand-alone ambulatory surgical clinic in the Bicol Region. Looking ahead, Richard envisions an expanded Legazpi Eye Center, with facilities and services—including refractive surgery—aimed at making quality eye care accessible throughout Bicol. He emphasizes the importance of understanding healthcare policies to advocate for patient safety and effective regulations in the Philippines. He believes that returning to one's roots, armed with global insights, is a powerful way to advance Philippine healthcare and contribute to nation-building.





Add Venture Forum

ADD VENTURE FORUM 2025 SERIES

Add Venture Forum (AVF), formerly Career Discovery Forum (CDF), is a career fair program that gathers individuals who have the mindset of taking on challenges to contribute to positive social change. There are a lot of researchers who aim to create an impact on society through research. On the other hand, there are also venture companies, such as startups, that focus on creating innovative products to address social issues and small and medium-enterprises leveraging their existing strengths with advanced technology to make meaningful social contributions. Leave a Nest created AVF as a platform for these entities to merge together where young researchers such as university students and graduate students can demonstrate their abilities.

AVF 2025 Series Timeline

February 8

Venue: Adamson University, Metro Manila

Time: 13:00 - 17:30 (PHT)

Highlights:

Career Pitch, Company Mini Workshop, Company Booth Core time

Contact:

onic@ine.st, neil@ine.st, jewel@ine.st



April 19

Venue: Center of Garage (COG), 1-16-3 Yokokawa, Sumida-ku, Tokyo

Time: 13:00 - 17:30 (JPT)

Highlights:

Research and development venture

Contact:

shickawa@ine.st, dateyama@ine.st



April 26

Venue: Osaka Science and Technology Center, Osaka

Time: 13:00 - 17:30 (JPT)

Highlights:

Research and development venture

Contact:

kishimoto@ine.st, shigenaga@ine.st

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February 28

Venue: Scape

Time: 12:00 - 17:00 (SGT)

Highlights:

Startup Pitch Session, Startup Booth Session, QPMI Workshop, Create Life Tech Session

Contact:

ruchira@ine.st



April 26

Venue: Klang Valley (TBC)

Time: 08:30 - 17:30 (MYT)

Highlights:

Keynote Speech, Forum Session, Company pitch, Validate your crazy Idea, Mini Career Workshop, Mini Career Workshop

Contact:

arief@ine.st, farha@ine.st, izwan@ine.st



Add Venture Forum in the Philippines

Under the theme, "Path Discovery Through a Wander-ful Journey," AVF Philippines expands its reach beyond researchers, inviting individuals with a bold, adventurous mindset to join the conversation. Whether they are undergraduate or postgraduate students, the forum encourages those eager to break away from conventional career trajectories. It serves as a platform for exploring diverse opportunities that foster both personal and professional development, inspiring participants to embrace unconventional paths with confidence.

Add Venture Forum in Malaysia

The Add Venture Forum (AVF) in Malaysia brings to the forefront the theme, "Fostering Talent as Innovation Enablers through Technological Advancement." This dynamic platform provides a window into the transformative impact of cutting-edge technologies on various sectors, while opening doors to emerging career opportunities. Participants can explore the expertise and skills shaping today's job market, hear inspiring accounts of success from industry leaders, and uncover practical ways for university graduates to excel in an ever-changing technological environment.



HUMAN DEVELOPMENT



ENABLING THE NEXT GENERATION OF INNOVATORS: JOIN US IN SUPPORTING THE SCENT PROGRAM 2025

Societal progress is inseparable from the evolution of its challenges. As the world grows more complex, so do the problems we face. Addressing these issues requires innovative thinking, a willingness to challenge established norms, and the courage to explore unconventional solutions. Today's youth, more aware and motivated than ever, are eager to contribute to solving these challenges. Their fresh perspectives and passion for innovation make them a vital force for driving change.

At Leave a Nest, we believe in empowering the next generation of problem-solvers. Through our Science and Technology Entrepreneurship Training (SCENT) Program, we aim to equip students and researchers with the mindset and skills needed to transform their ideas into tangible, impactful solutions. By fostering a culture of innovation and entrepreneurship, we hope to address long-standing societal issues and create a brighter future for all.

The SCENT Program: Bridging Research and Entrepreneurship

In 2025, Leave a Nest Philippines will be hosting the second iteration of the SCENT Program. We are seeking industry partners who share our vision of nurturing young talent and supporting their entrepreneurial aspirations. By collaborating with us, you can play a pivotal role in shaping the next generation of innovators.

How You Can Get Involved

As a partner, you will have the opportunity to:

Mentor Promising Teams: Interact with the ten participating groups and choose a team (or teams) to mentor, guiding them as they refine their ideas and develop viable business models.

Share Your Expertise: Participate as a lecturer in one of the fourteen modules, sharing your unique experiences and insights as an entrepreneur or industry leader.

Collaborate During the Program: Engage with participants throughout the program, offering feedback, support, and networking opportunities.

IMPORTANT DATES AND TIMELINE

Application Period: March–April 2025

Training Period: May–November 2025

Demo Day: November 2025

Note: Specific dates will be finalized soon, but the program will take place within the specified months.

Why Partner with Us?

By supporting the SCENT Program, you are investing in the future of innovation and entrepreneurship. Your involvement will not only help students and researchers bring their ideas to life but also contribute to the development of groundbreaking solutions that address pressing societal challenges. Together, we can foster a generation of startups capable of driving technological and scientific advancements.

Join Us in Making a Difference

If you are interested in learning more about the SCENT Program or partnering with us, please reach out to info-asia@lne.st with the subject line **ATTN: Bill Joseph Mercado**.



Accelerating serendipitous innovation through Hyper Interdisciplinary Conference in Singapore City!



Set the stage to uncover algae's important role through Malaysia's Global Algae Summit



Breaking borders and sparking new passion projects in the Philippine research ecosystem through Ignition Sessions!

From Labs to Lives: Redefining Asia's Quality of Life through Advanced Research

2025 arrives with high anticipation as globally-critical concerns have arisen from the past year. Healthcare crises, climate action issues, underwhelming adoption of sustainable practices, and the 2-years-in-a-row of being the “hottest year to date” are just a few of those. These wide-scale concerns have a pivotal role in establishing better Quality of Life (QoL). QoL weaves many of society's issues together into each individual's everyday life. Despite its granular importance, inclusive improvement in QoL has only been seen sporadically in Asia with most of the South East region nations hovering over the bottom half of the spectrum.

However, it is imperative to recognize that pushing successful scientific research from the bench into social implementation becomes a strong foundation to create nuclei crevices to break away from ineffective disparity-burdened lives and further expand one's life span at a higher caliber. In this section, it will be a congregation of several features of promising researchers who are inching closer to providing a better quality of life for its targeted communities and the different projects that provide a visible platform for these budding future-builders to close the QoL disparity.

EMPOWERING MOBILITY IN THE NEXT ERA OF ORTHOTICS AND PROSTHETICS

By Ronrick Arayata, BSc

The field of orthotics and prosthetics deals with individuals who have restrictions in their mobility due to several factors such as physical impairments or functional limitations. Orthoses (Braces) are attachments on intact body parts that require support or stability, while prostheses (Artificial limbs) replace absent body segments. In the Philippines, this field of study is not well known despite its crucial need. The most common cases of amputations in the country are due to diabetes and vehicular accidents, but due to lack of studies, there is actually no exact data regarding the rate and prevalence of amputations in the country.

Low Adoption of Orthoses and Prostheses Due To Lack Of Local Players

In the Philippine General Hospital alone, there is an average number of 200 amputee patients per year ^[1] and a study done in 2018 states that there are currently 600,000 amputees living in the Philippines ^[2]. In 2010, a study stated that out of around 1500 amputees, only 8% of these patients actually used prostheses ^[1]. This low utilization could stem from various factors. A prosthetic leg would cost about 30,000 to 90,000 PHP depending on its materials and specifications – and unfortunately most amputees cannot afford this more than a decade ago due to lack of support and prioritization by the government. The Philippines lacks the resources, professionals, and manufacturers that can fully support this field. In this regard, Dr. Josephine “Penny” R. Bundoc, a Rehabilitation Medicine Physician started her endeavors towards affordable, appropriate and available Orthotics and Prosthetics.



Dr. Bundoc assisting a Person With Disability in her wheelchair.

Stepping Up Because No One Will

Dr. Penny is currently a professor at the University of the East Ramon Magsaysay Memorial Medical Center Inc (UERMMMCI) College of Allied Rehabilitation Sciences – Philippine School of Prosthetics and Orthotics. She made possible the establishment of the only Prosthetics and Orthotics school in the Philippines which has produced one hundred Certified Prosthetists and Orthotists. Dr. Penny had this strong passion to provide what was needed by people with mobility disabilities as well as develop awareness of the general public. Thus, she strived to partner with various stakeholders such as funding agencies, rotary clubs, lawmakers, disabled people’s organizations until she got the attention and support of the Physicians for Peace and Cambodia Trust/NIPPON Foundation which made possible the establishment of the Prosthetics–Orthotics school building and facilities in partnership with UERMMMCI.

Starting from Scratch and Identifying Issues

Dr. Penny identified 5 main problems being faced by this industry in the Philippines – (1) limited data on stakeholders (2) no formal training in prostheses-orthoses production (3) the archipelagic nature of the country (4) the absence of manufacturers of components, rendering supply import-dependent, all of which lead to (5) high cost, low quality and inaccessible prostheses-orthoses. Looking at these issues, they created a roadmap to answer these 5 challenges and they then decided that the very first 2 things to work on are pushing for policy on Financing while increasing the number of trained professionals.



Dr. Josephine R. Bundoc, pioneer of the Philippine School of Prosthetics and Orthotics.



Students of the Philippine School of Prosthetics and Orthotics in the process of creating prostheses in their university laboratory.

Moving Forward Bit by Bit to Challenge Issues with Collaborators That She Has Gathered



Dr. Bundoc with her team in front of the P.O.W.E.R Van deployed in the community.

In the past 10 years, Dr. Penny, along with various people from different sectors, were able to create a lot of impact in this field. They were able to develop and implement prostheses-orthoses Z Philhealth packages which made braces & artificial limbs more affordable to acquire for all ages. They also currently have a mobile biomedical device unit called the P.O.W.E.R (Prostheses, Orthoses, Wheelchairs, Empowerment and Rehabilitation) Van which is grassroots -based and fabricates these medical devices within the community setting, particularly for the disabled who experience difficulties going to hospitals – due to accessibility and logistical issues.

Making Things More Efficient with the Dawn Of Digital Technology

With the world taking the path of digitalization and artificial intelligence, Dr. Penny believes that this field could also adopt these technologies but with caution. Through the DOST-NICER Neolimb, they are currently investigating 3D printing which is said to lower the cost as well increase the efficiency of manufacturing orthotic-prosthetic devices. However, integrity and quality of the 3D printed prostheses still remains problematic as current local experience reveals it breaks easily. Dr. Penny stated that the field of orthotics and prosthetics is very much open to future innovations in technology, but since these devices are closely tied to human life, there is a need to confirm its safety and functionality before patients actually use it.



Students of the Philippine School of Prosthetics and Orthotics showcasing the ankle-foot orthosis that they made.

More People are Still Needed to Create a Difference

In the future, Dr. Penny hopes that the future generations would also help develop the field of Orthotics and Prosthetics further. She encourages other universities to also establish schools for Prosthetics and Orthotics to increase the professionals under this field. Collaborations with other medical, engineering, and allied health professions are needed in further refinement and localization of these so high technology-low cost prosthetic-orthotic devices can truly be rendered accessible, appropriate and available to every Filipino needing them. Dr. Penny looks forward to a future where Persons With Disabilities are able to “Walk Free” and regain their independence in society once again.

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BOLSTERING ASIA THROUGH RESEARCH: INSIGHTS FROM AN EXPERIENCED RESEARCHER

By Hadi Akbar Bin Dahlan, PhD

Many aspire to enhance their research skills, and one effective way to do so is by learning from experienced mentors or accomplished researchers. Prof. Dr. Ir. Abu Bakar is one example of a senior researcher that had achieved various breakthroughs in his research field. He, together with his team members from different backgrounds, showcased their medical technology in the Tech Planter Malaysia 2024's Demo day back in July last year. Prof. Ir. Dr. Abu Bakar Sulong is a distinguished figure in academia and research, celebrated for his pioneering contributions to advanced materials and composites.



Prof. Dr. Ir. Abu Bakar presenting about UKM MedikSkrus at Tech Planter Malaysia 2024 Demo day.

As a Professor in the Department of Mechanical and Manufacturing Engineering at Universiti Kebangsaan Malaysia (UKM), his work bridges academic excellence and real-world impact. Gaining his perspective provides us with a deeper understanding of his views, insights, and experiences. By learning from his journey, we can extract valuable lessons, reflect on different approaches, and use that knowledge to shape our own unique path forward.

His Perspective On Becoming A Good Researcher

In Malaysia, the majority of the researchers are also lecturers in the universities. As such, he describes that to become a good researcher, one must be able to fulfill academic duties (teaching, sharing results via paper publication), as well as strive to make societal contributions. Based on his perspective, prior experiences in industry or professional experience can contribute significantly to one's research skill.

He shares that prior experience is important since it will be during those formative years that one develops skill in communicating ideas, writing proposals, and developing teamwork ability and leadership skills. These skills are imperative to be developed early since after one becomes a researcher, they will need to rely on their critical thinking and leadership skills and focus on preparing to transfer their knowledge and experiences to the next generation.

The Ripple Effect: How Research Shapes Lives

Believing that he had accomplished various things, the team were eager to learn more about his latest breakthrough. They arrived prepared to ask about the latest advancements related to his previous entry in TECH PLANTER, expecting an update on his progress. However, his response was unexpected. However, Prof. Dr. Ir Abu Bakar replies provides a unique and important value which I believe is needed in all countries:

“The greatest achievement for me is training the next generation of researchers and seeing their developing new field of research.”

Prof. Dr. Ir. Abu Bakar's research area is in the field of advanced material; a research focusing on investigating materials and developing new properties into the existing materials properties (making the multiproperty component). From his humble research group that dwelt in powder metallurgy and polymer composite, his former students had graduated and began developing new researchers in their field and country.

One of his former students is now working with Malaysian Palm Oil Board (MPOB) and worked in developing Kenaf composites. Kenaf is a fibrous plant that is used to make paper and biopolymers. Research on Kenaf will ensure sustainable material development and contribute toward the local Kenaf industry.

All in all, he takes pride in the fact that 50–60% of his former international students continue to conduct impactful research in their home countries while leveraging local resources and maintaining international collaborations. This demonstrates how knowledge-sharing and collaboration can lead to sustainable societal benefits.

Fostering Interdisciplinary Collaborations

Based on his experience, he had led various interdisciplinary research team toward new breakthroughs. They wanted to understand how he was able to gather and form interdisciplinary connections; an important factor that he cites to be critical in his research, including the development of MedikSkru. He shared that fostering an interdisciplinary collaboration comes from networking effort and genuine curiosity to understand the connection's passion.



Prof. Dr. Ir. Abu Bakar at his office at Center for Research and Instrumentation Management (CRIM).

In one instance, while collaborating with orthopedic surgeons, he immersed himself in their work by visiting their workplace multiple times and observing surgeries. This hands-on approach not only provided fresh perspectives but also fostered impactful partnerships. Effective interdisciplinary collaboration, he notes, demands mutual understanding and the willingness to learn from others' expertise.

He emphasized that interdisciplinary collaboration will play a crucial role in the near future. As societal issues grow increasingly complex, only through interdisciplinary research collaboration can we achieve a comprehensive approach and effective solutions to these challenges.

The Role of Research Commercialization

When one talk's about research, the topic on what do you do about the research will usually follow. Usually, universities would like to commercialise research for use in society. However, the majority of researchers only focus on researching. Prof. Abu Bakar believes that this needs to change because it is the researcher's duty to be involved in the commercialization efforts.

However, he also understands that current academic practices often discourage such effort and instead focuses on traditional evaluation metric such as quantity of paper publication. For this, he suggested several radical ideas such as (1) inclusion of commercialization skills in training new researchers, and (2) giving time for new researchers to pursue commercialization without traditional academic evaluation constraints. Despite these challenges, Prof. Abu Bakar is optimistic. He believes that with the right mindset and institutional support, researchers can play a pivotal role in driving innovation and societal progress.

Advices for Aspiring Researchers

As the interview concluded, his insights revealed a recurring theme linking his experiences and aspirations. To clarify, the team asked Prof. Dr. Ir. Abu Bakar for advice on becoming a researcher, to which he shared his major advice:

*“Start with your immediate surroundings.
Address local problems first and scale up when feasible.”*

Flexibility and openness to new possibilities are crucial, as building strong networks and adapting to diverse environments pave the way for growth. He shares that research is a continuous journey—unexpected directions may emerge, but these detours often lead to the most valuable and fulfilling discoveries. As we navigate an era of rapid technological evolution, his advice serves as a powerful reminder: research is not merely about discovery but about leaving a legacy that benefits society for generations to come.

DISCIPLINE DRIVES RESILIENCE:

STRENGTHENING COMMUNITIES WITH SUSTAINABLE SOLUTIONS FOR FLOOD-SAFE FUTURES THROUGH INNOVATION, EDUCATION, AND UNITY

By Vincent Carl C. Ramos, BSc

Flooding continues to challenge many coastal urban areas in the Philippines, worsened by rapid urbanization and environmental factors. Assistant Professor Jayson L. De Vera, PhD, an expert in science education at the Faculty of Science, Technology, and Mathematics from Philippine Normal University, is committed to researching sustainable flood mitigation strategies. His work highlights the crucial role of community discipline in ensuring the long-term success of flood management systems.

Community Discipline and the Impact of Flooding

Dr. De Vera emphasizes that while technological solutions like automatic trash rakes are essential for flood management, their success relies heavily on disciplined community action. In his view, *“Technology alone cannot solve the problem; it is the discipline of the community that ensures these systems work effectively.”* Flooding has far-reaching impacts, including public health threats such as waterborne diseases like cholera and dysentery, as well as significant mental health challenges. Economically, floods devastate homes, businesses, and infrastructure, leaving both families and local governments grappling with costly recovery efforts.

Building a Foundation for Change Through Education

Dr. De Vera also underscores the importance of education in building lasting change. He advocates for environmental education starting in early childhood to instill habits of responsibility and self-discipline. *“Educational programs should teach children about flood prevention and environmental stewardship from a young age,”* he explains. This foundation of knowledge and responsible behavior can continue into adulthood, ensuring that communities engage in flood mitigation efforts effectively.

By fostering early environmental awareness, Dr. De Vera believes communities will not only better understand the importance of flood prevention but will also be equipped to take action when needed.



Jayson L. De Vera, PhD
Assistant Professor
Faculty of Science, Technology, and Mathematics
Philippine Normal University

Collaboration for Long-Term Solutions

Beyond personal initiatives, Dr. De Vera advocates for a comprehensive, nationwide strategy for flood resilience. Effective water disaster mitigation demands synchronized actions from local communities and government institutions. When residents actively maintain control systems, these structures become vital community resources. For example, large-scale initiatives like the Mega Dike system, if properly supervised, can enhance both safety measures and local economic growth. Dr. De Vera's study highlights the essential connection between discipline, education, and sustainability. Through well-designed educational programs, community participation, and government collaboration, the Philippines can strengthen its defenses and promote safer, more sustainable urban landscapes.

ELEVATING RESEARCH TO SERVE COMMUNITIES

By Sharifah Nabihah Binti Syed Othman, PhD

Research work is a vital cornerstone for societal progress, as it holds the key to addressing the pressing needs of communities. Through diligent study and innovation, researchers can develop technologies and solutions that improve the quality of life for people. However, a concerning trend has emerged where the gap between the researchers' hard work and the effective application of their findings has widened. As a result, many communities are undervaluing the significance of research, failing to recognize that it is essential for their growth and development. Insights from Associate Professor Afizan Azman, the Director for Impact Lab Digital Innovation & Smart Society at Taylor's University, reveal this disconnect between research initiatives and their community impact, emphasizing the need for closer examination of strategies to effectively bridge this gap.

A Missed Opportunity for Change

As an application software developer, Dr. Afizan has created a variety of impactful apps aimed at improving the quality of life within communities. Notably, he developed TALKBIM, an innovative app designed to bridge communication barriers for individuals in the special needs community by translating sign language into spoken language. His portfolio also includes a Flood Detection app that proactively alerts communities about potential flooding and a Blockchain app enhancing secure transactions. He pointed out that inequity in the research landscape has allowed a select group to monopolize the benefits, leaving many potential contributions unheard. He continued by saying *"As researchers, we achieve impactful results by understanding community needs through direct outreach and collaboration, not by working in isolation."*

Creating Impact through Collaboration and Creativity

At Taylor's University, Dr. Afizan is privileged to lead projects within an impact lab that systematically integrates targeted beneficiaries and stakeholders into the research process. Each initiative is aligned with Malaysia's Sustainable Development Goals (SDGs),



Associate Professor Afizan Azman, the Director for Impact Lab Digital Innovation & Smart Society at Taylor's University.

particularly in promoting equality and education through innovations like the TALKBIM app, ensuring that the goals and outcomes are not only significant but also beneficial to society. He advocates for a collaborative approach, emphasizing that effective research should work hand in hand with industries and communities to promote sustainability and inclusivity. Therefore, he is open to support and collaborate with the Leave a Nest, who are providing equal opportunities for individuals from diverse backgrounds to showcase their innovations and meaningfully contribute to society through various events.

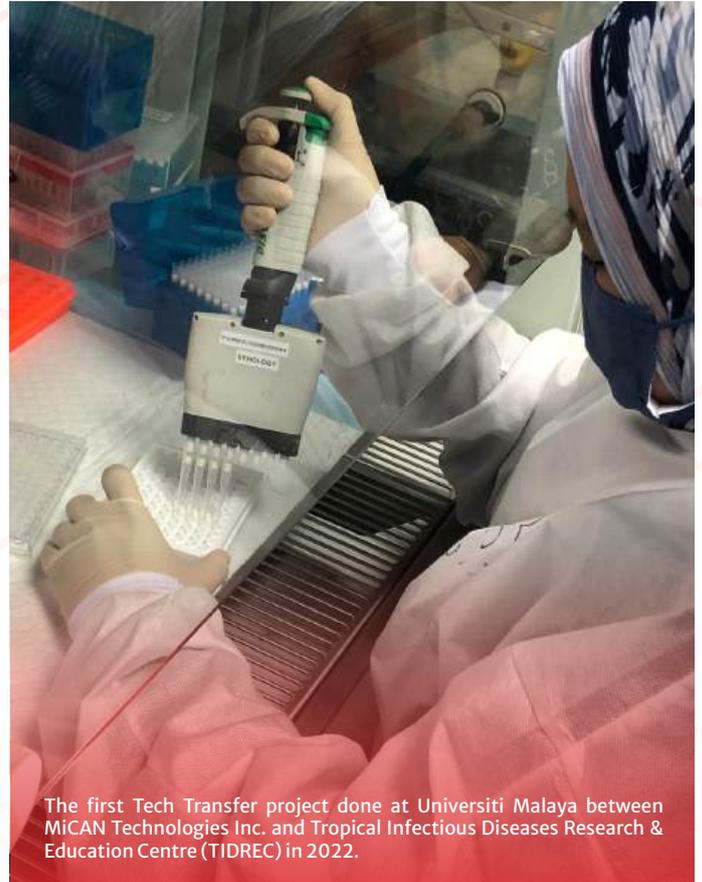
As he encourages the younger generation to harness their creativity and think outside the box, he reminds them that great ideas can transform lives. By actively seeking to address barriers and gaps and crafting solutions that uplift others, the new generation can truly make a difference in their communities and beyond. He concluded the session with the quote, *"If your invention does not harm others and has the potential to bring even the smallest benefit, just go for it!"*

NEST VENTURE LAB

YOUR GATEWAY TO SOUTHEAST ASIA'S RESEARCH DEVELOPMENT ECOSYSTEM

Leave a Nest Malaysia is excited to announce the soon-to-be launched NEST Venture Lab (NVL), an innovative hub designed to bridge the gap between researchers and industry players. Leveraging Leave a Nest's extensive presence in Malaysia's research ecosystem and its robust network across Southeast Asia and Japan, NVL aims to foster meaningful collaborations and maximize the potential of R&D in universities. It will serve as a platform to connect cutting-edge academic research with industry needs, driving impactful innovations and sustainable solutions.

The NEST Venture Lab offers comprehensive research services through five (5) key pillars: R-Connect, Research Grants, Research Marketplace, Research Support Initiatives, and the Facility Prototyping and Matching Platform. The R-Connect service fosters collaborations between universities and industries, emphasizing tech transfer to accelerate innovation. Research Grants include industrial grant opportunities through L-Grant initiative and external grant management support to secure necessary resources for impactful projects. These pillars ensure robust linkages and financial support to drive research activities, especially for young researchers.



The first Tech Transfer project done at Universiti Malaya between MiCAN Technologies Inc. and Tropical Infectious Diseases Research & Education Centre (TIDREC) in 2022.



University researchers showcasing their innovations and technology on Leave a Nest's research platform.

The NVL also features a Research Marketplace, hosting libraries for intellectual property (IP) and project-based resources to streamline research access across industries. Research Support initiatives provide expertise in research management, industrial statistical consulting, IP validation, and external grant application assistance. Lastly, the Facility Prototyping and Matching platform connects researchers with prototyping services and university R&D labs, ensuring access to the right infrastructure for product development and innovation.

NEST Venture Lab aspires to be a catalyst for groundbreaking R&D partnerships, empowering researchers, startups, and businesses to co-create advancements that address pressing challenges and contribute to global progress. Therefore, Leave a Nest invites industry players and researchers to leverage NVL's diverse platforms and initiatives, as well as unique ecosystem to drive innovation and impactful solutions. By connecting expertise, resources, and infrastructure, NVL fosters seamless collaborations and accelerates research outcomes. Join us in transforming ideas into breakthroughs that shape the future of technology and industry.

ENTREPRENEUR EDUCATION PROGRAM 2025 WITH THE FOCUS ON “FULFILLING LIFE FOR HUMAN” IN SINGAPORE & IN JAPAN

We are calling for entrepreneurial early founders, researchers and/or students who have burning ideas but are still not quite sure about how to go about realizing them. We want to build a venture with you in business for which the market has not yet been identified. Selected participants will receive financial incentives, access to an entrepreneurship education program, and potential opportunities to be considered for investment during the startup phase. We are launching the program for 2025 from March.

The initiative aims to foster unique perspectives, visions, and actions to realize each participant's idea of a fulfilling life. What “happiness” or “fulfillment” means depends on the individual. This program will be a rare opportunity where you are able to explore ideas which no one has answers for. Over six months, participants will interact with leading expert lecturers and Leave a Nest members to expand and refine their ideas. This program can focus on ideas which may not seem possible at this point in time, but could have a big impact on society if it succeeds by combining ideas and approaches. Euglena Co., Ltd., a company established to address nutritional issues in Bangladesh, initially focused on the concept of a health food business leveraging the rich nutrients of Euglena, a type of microalgae. However, the company has since evolved its business to include the production of algae-derived jet fuel. This expansion connects the realization of sustainable energy with the original goal of contributing to people's well-being. In this manner, the program also supports participants in their endeavors to refine their ideas to achieve their vision.

We are calling for passionate individuals who are ready to take up the challenge to realize “Fulfilling Life for Human”. Let's start this journey together.

Application Guidelines

Theme:

Research & development or business ideas that create new value, enriching/fulfilling human lives.

Program Overview:

This program starts from submitting an application, attending a kickoff event, participating in a 3-day educational program, and brushing up on your own ideas. The program runs for 7 months from May to November 2025.

Eligibility:

Individuals from Japan or Singapore
Entrepreneurs/Researchers/Students who have ideas, started a business or are considering starting one.

Program Schedule:

March 1st: Application starts

May 9th: Application deadline

May 10th: Kickoff event

June 28th, July 12th, and 26th: Entrepreneurship Education Program

November 14th: Demo Day

Note: For all dates of the kickoff event, educational program, and Demo Day, in-person participation is preferred, either in Japan (Tokyo) or at a venue in Singapore city.

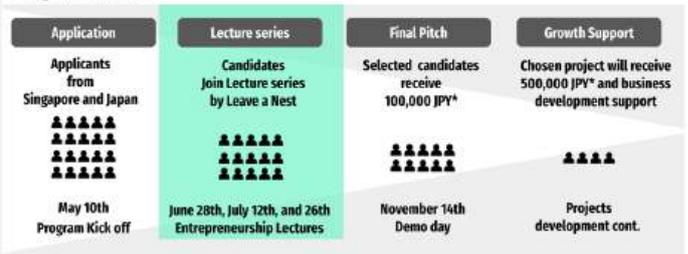
Information Sessions:

TBC at respective Universities & Polytechnics
March & April 2025

Incentive Grants and Business Support:

1. Upon completion of the educational program
After a screening process based on the application and presentation, up to 16 selected participants will be awarded 100,000 JPY* each
2. Upon completion of the Demo Day
Following the final presentation, business support ranging from 100,000 JPY* to 500,000 JPY* will be granted

Program Outline



* Incentive funds will be given in equivalent SGD according to respective exchange rate at the time of transfer for Singaporean participants in Singapore.



Scan the QR Code to register your interest.

Contact us if you are interested to find out more.
Leave a Nest Singapore Program leader:
Leeyon Lim

BRIDGING DISCIPLINES AND BORDERS: HIGHLIGHTS FROM HIC SESSIONS IN SOUTHEAST ASIA

By Alecks Megxel S. Abordo, BSc

The Hyper Interdisciplinary Conferences (HIC) highlight the power of cross-sector collaboration in solving global challenges. These events bring together diverse teams of professionals, researchers, and students to refine ideas and explore real-world applications. Past HIC sessions examined how technology, education, health, and environmental strategies can be optimized to address national and local challenges, fostering interdisciplinary collaboration and innovation.



Ignition pitch during HIC PH 2024.



First HIC PH Leave a Nest Ignition Awardee.

HIC in the Philippines 2024's Ignition Session promoted knowledge-sharing and partnership-driven innovation. Participants tackled two themes: "Solutions for Issues in the Philippines and the SEA Region" (through partnership with Focus Systems Corporation) and "Empowering Remote Communities Through Water Education with Science and Technology" (under Leave a Nest). Grassroots innovation thrived, including the development of a method for removing heavy metals from contaminated waters using chitosan beads derived from Black Soldier Fly larvae. This approach not only provided a cost-effective solution for water purification but also showcased how sustainable biotechnological applications can address environmental challenges while promoting resource efficiency.

The Mindstorm Session during HIC in Malaysia 2024 centered on enhancing disaster planning frameworks across mitigation, preparation, response, and recovery phases. Serving as a platform to navigate expertise toward the right direction during disasters, the session enabled participants to propose strategies for optimizing and utilizing technology at the right time and place. It emphasized the integration of diverse disciplines that fosters collaboration for delivery of appropriate and best technologies. These objectives were achieved through focus group discussions and presentations, where participants tackled the challenges posed by recurring disasters. Solutions were presented to expert panels, whose feedback inspired further refinements and diverse perspectives. The session demonstrated Malaysia's commitment to proactive disaster management and its industries' determination to enhance national resilience.



Mindstorm Session during HIC MY 2024.

Across HIC sessions in Southeast Asia, a unifying vision emerged—bridging disciplines and borders to foster a symbiotic society through collaboration and innovation. Key takeaways highlighted that sustainable solutions arise when diverse expertise converges to address local challenges. By integrating technology with community-driven approaches, participants showcased how interdisciplinary efforts can create scalable and impactful solutions. These sessions reinforced the importance of cross-border collaboration in tackling global issues, demonstrating that innovation flourishes when knowledge transcends disciplines and geographical boundaries. As HIC continues to expand, it remains a vital platform for uniting minds and driving transformative solutions worldwide.

SOARING IN 2025:

ANNOUNCING LEAVE A NEST'S ANNUAL LAUNCH OF RESEARCH DEVELOPMENT INITIATIVES

As part of our continued commitment to advancing innovation and fostering collaboration, Leave a Nest is proud to announce a series of high-impact events for 2025: the Summit for Mental Innovation and Life Enhancement (SMILE) in Singapore, the Global Algae Summit (GAS) 2025 in Malaysia, and the Hyper Interdisciplinary Conference in Iloilo, Philippines. These events are designed to gather the professionals and experts in research, technology, and sustainability to explore transformative ideas that can influence the future.

Summit for Mental Innovation and Life Enhancement (SMILE)

Leave a Nest Singapore is launching the Summit for Mental Innovation and Life Enhancement (SMILE) from 2025. To be held on 19th August 2025, SMILE is an innovative and interactive summit focused on the intersections of mental health, personal growth, and innovation. The event serves as a catalyst for inspiring the development of new ideas and strategies by bringing together experts, thought leaders, and passionate individuals dedicated to advancing the fields of mental health, self-improvement, and holistic living. Participants will have the opportunity to engage with advanced research, learn about the latest mental health technologies, and gain insights from top professionals in psychology, wellness, and personal development. Through a mix of inspirational talks and collaborative discussions, SMILE empowers individuals to live more fulfilling, balanced, and resilient lives.

Global Algae Summit (GAS)

The Global Algae Summit (GAS), taking place on August 27th in partnership with Euglena Co., Ltd., is designed to promote collaboration and networking among leading experts in algae research. It provides its participants with a platform that showcases groundbreaking innovations while addressing the challenges and opportunities within the algae industry. Its primary goal is to develop cohesive strategies that tackle these challenges and drive the progress of algae-based solutions. It mainly highlights emerging trends, research opportunities, and new business models that empower its stakeholders to drive the future of the algae industry.



Photo from Global Algae Summit 2024 in Malaysia

Hyper Interdisciplinary Conference in Iloilo, Philippines

The Hyper Interdisciplinary Conference is an inaugural initiative of the Leave a Nest Group implemented in Japan and its subsidiary countries. The conference seeks to unite diverse fields of expertise, encouraging collaborative exploration and exchange across a broad spectrum of disciplines. By merging innovative research and approaches from multiple sectors, fostering dynamic dialogue and cross-pollination of ideas. For the first time, the conference will be held in Iloilo City, Philippines. Through the theme "Synergy in Research: Building Bridges for Progressive Solutions," it aims to expand its reach and impact with the objective of enhancing the research ecosystem in provincial areas and promoting research development in rural communities, bridging the gap between urban and rural innovation.



Photo from Hyperinterdisciplinary Conference in the Philippines 2024 Keynote Panel Discussion

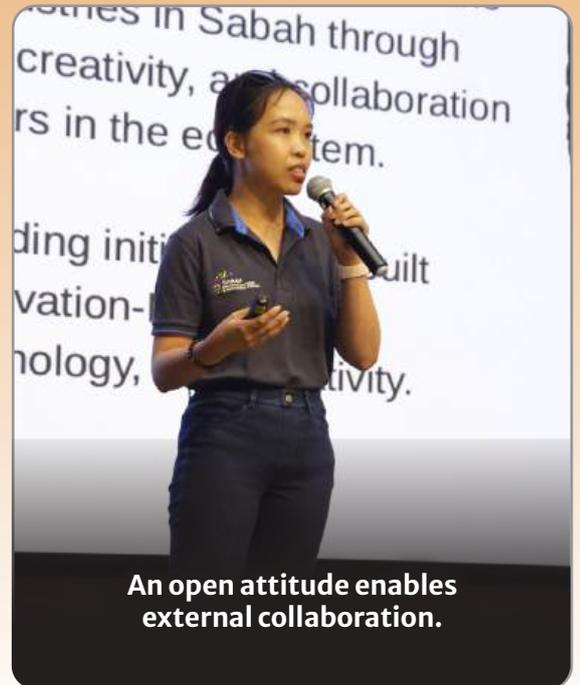
For more information on any of these events, connect with us via the Leave a Nest Facebook Page, <https://www.facebook.com/LNEST.Global>.



Intrapreneurship begins with knowledge sharing and ensuring a shared mindset throughout the company.



Opportunities exist to discover new business seeds.



An open attitude enables external collaboration.

Driving Change from the Inside Out: An Intrapreneur's Edge in Modern Society

Disruptive innovation is not exclusive to startups; established companies, with the right strategy, can likewise achieve transformative growth by nurturing intrapreneurs – employees empowered to experiment and solve problems creatively. Intrapreneurship involves cultivating startup-like innovation within an organization, blending the agility of entrepreneurs with the strength of corporate resources. To accomplish this, companies must foster a culture that encourages cross-functional collaboration, tolerates calculated risks, and supports failure as a learning process. By embedding these practices into their DNA, organisations can unlock untapped potential, creating impactful ventures while sustaining long-term growth. In this section, we highlight the complexity of a company's intrapreneurship journey, and actionable steps to accomplish innovation.

THE EMPLOYEE-TO-STARTUP LEAP

By Aisyah Abdul Hamid, MBioSc

Despite a stable career at PETRONAS, Mr. Yusof Faizal Amin's passion for solving waste management issues led him to embark on an entrepreneurial journey. This is the story of his transition from a corporate role to becoming the founder and CEO of Tigasfera Greentech Sdn. Bhd., turning innovative ideas into sustainable solutions. His journey highlights how one can pursue entrepreneurial dreams while leveraging the skills and experience gained from a corporate background, showcasing the power of intrapreneurship.



Mr. Yusof Faizal Amin
Founder and CEO
Tigasfera Greentech Sdn. Bhd.

The Beginning of Entrepreneurship

"There's never been a right time, the founders have to gauge themselves based on their unique situation," he reflects. The idea for Tigasfera emerged during the COVID-19 pandemic, driven by Mr. Yusof's desire to turn waste into electricity for his home. He pitched the idea at the Social Impact Challenge and won in 2021. Benefiting from PETRONAS's commitment to innovation, he joined their pilot intrapreneurial program, PETRONAS Innovation Garage (PING), in 2022. This program provided the perfect platform for his transition from employee to entrepreneur, further advancing Tigasfera's innovative solutions and enabling him to pursue his entrepreneurial ambitions.

Navigating the Intrapreneurial Minefield

The corporate world, with its established structures and resources, contrasts greatly with the startup environment, especially in terms of finances. Entering this industry required building trust from scratch and balancing an imbalanced lifestyle. Mr. Yusof shared, *"They called me crazy for leaving a promising career at PETRONAS."* Entrepreneurship has redefined his success—not just climbing the corporate ladder, but empowering others and creating lasting impact. To overcome bureaucracy, Tigasfera focuses on strong data-backed business cases, early stakeholder buy-in, transparency, and prototypes, transforming skeptics into believers and even attracting investment interest.



Mr. Yusof explains Tigasfera's solution to YB Tuan Nik Nazmi Nik Ahmad, Minister of Natural Resources and Environmental Sustainability.

Leveraging Corporate Experience for Startup Success

Mr. Yusof's expertise in project management, strategic planning, and stakeholder engagement at PETRONAS has been crucial in scaling Tigasfera and forming valuable partnerships. As a founder, he advocates for more paid-pilot opportunities and genuine corporate support for startups. Collaborations between Tigasfera and PETRONAS, such as oil sludge conversion and carbon credits, highlight the powerful synergy between corporate support and intrapreneurial innovation. To achieve startup success, Mr. Yusof advises aspiring entrepreneurs to seek mentorship early and build a strong international network that extends beyond local startup ecosystems.

Mr. Yusof's intrapreneurship journey shows that a thriving ecosystem of employees, companies, and startups fosters innovation and growth. It is rewarding to see Tigasfera's solutions create real environmental and economic value, inspiring others to explore waste-to-value technologies. Mr. Yusof encourages those aspiring to innovate within their organizations or start their own ventures to take calculated risks, remain persistent, and align with their values, making entrepreneurship both fulfilling and impactful. His final message: *"At the end of the day, have courage and faith."*

EXPLORING PETRONAS INNOVATION GARAGE (PING): A CATALYST FOR INTRAPRENEURSHIP

By Mahirah Basri, MBA

In today's fast-paced corporate environment, organizations must constantly innovate to stay competitive. Recognizing this, PETRONAS established the PETRONAS Innovation Garage (PING), a subsidiary of the PETRONAS Leadership Centre (PLC), in 2023. PING was created to empower employees to transform their innovative ideas into impactful solutions and investible ventures. By fostering a culture of entrepreneurship within the organization, PING equips employees with the tools, resources, and opportunities to address challenges, create value, and drive impactful change beyond traditional corporate confines.



Zafirah Zulkifli, CEO of PING (sitting rightmost), sharing her thoughts as panelist on unleashing entrepreneurship in corporations during PING Open Day.

Enhancing Entrepreneurial Capabilities: PING's Contribution to PETRONAS's Vision

At its core, PING is a platform designed to achieve several objectives. It aims to build investible ventures that not only provide solutions to PETRONAS' operational challenges but also generate broader value for industries and communities. Additionally, PING seeks to cultivate an employee-driven innovation culture, where creativity and entrepreneurial spirit thrive. By enhancing employees' entrepreneurial capabilities, PING aligns with PETRONAS' overarching vision of embracing sustainability, innovation, and leadership in the global energy sector. These goals underscore PING's role as both a driver of business solutions and a hub for talent development.

Cultivating Intrapreneurship at PETRONAS: The PING Model

PING integrates essential components to foster intrapreneurship within PETRONAS. The journey begins with a supportive environment where aspiring entrepreneurs can refine their concepts under the guidance of experienced mentors. PING provides structured training programs, access to funding, and ecosystem support to ensure participants have the resources they need to succeed.

One of PING's unique features is its entrepreneurship pathway within conventional employment. Employees progress through various stages, starting with the Accelerate phase, where they validate their ideas. This phase culminates in Demo Day, where participants pitch their solutions to a panel of judges. Successful ventures are then offered a one-year employment contract with PING to further develop their startups. This model not only empowers employees to fully commit to their projects but also grants them entrepreneurial autonomy while receiving support from the company.

Synergy and Success: How PING Supports Intrapreneurial Innovation at PETRONAS

In its inaugural year, PING has made significant strides in nurturing entrepreneurial talents and delivering impactful solutions. The program has developed the capabilities of 46 employees, incubated 20 projects, and successfully launched five startups. One of their startups, JAZRO, a robotics education company, has even secured a significant investment from a reputable venture capitalist, Gobi Partners. Aside from that, another two standout ventures with notable successes, Tigasfera and V-Cred have also made waves in the tech and green innovation sectors.



Entrepreneurship class conducted by PING

Tigasfera, a green tech startup, focuses on waste-to-energy conversion. Through the development and deployment of their Ecosfera 1.0, a machine that converts wastes and materials into valuable by-products and carbon credits, the company has demonstrated its commitment to sustainability and innovation. This machine, which is containerized, can be placed on-site, providing ease of logistics for their clients. Apart from providing coaching to the founder, Yusof Faizal Amin, PING supported Tigasfera, by facilitating and connecting them with various businesses within and outside of PETRONAS for proof-of-concept and deployment opportunities. Tigasfera's participation in the Tech Venture Meetup 2024, where they pitched their solutions to corporates and investors, showcased their potential to drive meaningful change in the green tech sector. Additionally, Tigasfera won the prestigious Sarawak Digital Economy Corporation Berhad Award at Tech Planter Malaysia 2024, cementing their reputation as an emerging leader in green technology and innovation.

Similarly, V-Cred, a generative AI startup founded by Law May and Tan Nian Wei, 2 young data scientists, has achieved remarkable milestones. Their venture provides knowledge discovery and AI solutions that can elevate expert judgment in legal and engineering fields. A promising player in the AI innovation space, their solution has won them over RM500,000 in grants, including from MYHacktahn 2024 as one of the seven winners out of over 500 submissions nationwide. With PING support, V-Cred was able to complete multiple proof-of-concept projects with PETRONAS businesses in a safe environment, ensuring robust and reliable solutions. Their presence at the Tech Venture Meetup 2024, where they showcased their solutions through an open booth, exemplifies their commitment to expanding their network and driving technological advancements. Both Tigasfera and V-Cred are prime examples of PING's ability to foster ventures that address critical challenges and create meaningful impact.

Fostering a Culture of Innovation and Risk-Taking: Lessons Learned from PING

The journey of building PING provides valuable lessons for organizations seeking to develop intrapreneurship programs. First and foremost, having a clear purpose and intent is essential. Programs like PING thrive on strong support from top management, which ensures sustainability and alignment with broader organizational goals. Creating an environment that encourages innovation and calculated risk-taking is equally critical. Employees must feel empowered to experiment and learn from failures without fear of repercussions.

Providing comprehensive resources—such as mentorship, funding, and skill development opportunities—is another cornerstone of success. Establishing clear metrics to evaluate outcomes, whether it be the number of startups launched, solutions developed, or employees trained, helps maintain focus and demonstrates the program's impact.

PING exemplifies how organizations can unlock the untapped potential within their workforce to drive innovation and create meaningful solutions. By fostering an entrepreneurial culture, PETRONAS has shown that intrapreneurship can lead to groundbreaking achievements that resonate far beyond the company's walls. As PING continues to grow, it serves as a testament to the power of empowering employees with the tools, support, and freedom to innovate. Other organizations can draw inspiration from PING's success, recognizing that investing in their people's potential is not just a strategy for growth but a pathway to shaping industries and improving lives. Together, these efforts contribute to a future where innovation thrives, sustainability prevails, and possibilities are limitless.



Yusof Faizal Amin, founder & CEO of Tigasfera presenting at PING Open Day



May Law, Co-founder of V-cred presenting at PING Open Day

FROM IDEA TO IMPACT: EMPOWERING INNOVATION IN BUDDING STARTUPS

By Joanna Marie Cua, BA

Innovation is more than just having a great idea—it's about cultivating a culture where creativity, learning, and experimentation are prioritized. For early-stage startups, success isn't just about groundbreaking concepts; it's about embracing continuous improvement, empowering employees to innovate, and building an environment where ideas evolve into meaningful solutions.



Mr. Jose Emmanuel "Jimbo" Reverente
Adviser for Innovation of the University of the
Philippines System (Office of the President)

In today's fast-paced world, adaptability is crucial. Startups that encourage intrapreneurship—where employees are empowered to take ownership, experiment, and drive change—are the ones that thrive. But how can entrepreneurs build this type of culture?

To explore this, we spoke with Mr. Jose Emmanuel "Jimbo" Reverente, an innovation advisor at the University of the Philippines and a faculty member at the College of Engineering. With years of experience in both academia and the startup ecosystem, he shared key insights on how startups can transition from ideation to real-world impact.

Unleashing Individual Potential: The Foundation of Innovation

A startup's ability to innovate starts with its people. When individuals feel a sense of purpose and ownership over their work, they are far more likely to contribute meaningfully to the company's growth. Successful entrepreneurs go beyond financial motivations; they are driven by a desire to solve real-world problems and create impact.

Innovation also requires resilience. The startup journey is filled with uncertainty, and failure is inevitable. However, those who adopt a growth mindset—viewing setbacks as learning opportunities—are the ones who adapt, pivot, and ultimately succeed.

For startup founders, this means fostering an environment where failure is not feared but seen as a stepping stone to improvement. Encouraging teams to experiment and learn from mistakes allows them to actively participate in the innovation process. This process isn't about avoiding failure—it's about building resilience through continuous learning and iteration.

Building the Innovation Engine: Fostering a Collaborative and Empowered Environment

Creating a culture of intrapreneurship requires systems that support collaboration, trust, and ownership. Mr. Reverente emphasizes the importance of integrity, transparency, and a data-driven approach to ensure teams are solving real problems, not chasing the latest trends.

Technology plays a crucial role in this process. Startups should leverage tools that enhance communication, streamline workflows, and promote transparency. Messaging apps, project management software, and collaborative platforms can reduce friction in team collaboration, allowing for faster decision-making and more effective execution of ideas.



Mr. Jimbo giving a talk for Rizal Academy for Innovation and Leadership

Mr. Reverente shared one powerful model for startups to consider is the “Exponential Organization” framework by Salim Ismail. Companies that adopt this model achieve rapid scalability by leveraging technology, decentralizing decision-making, and tapping into external resources. Here’s how startups can apply these principles:

- Define a Massive Transformative Purpose (MTP): A clear, mission-driven goal that guides all innovation efforts.
- Scale through external resources: Use “staff on demand” models, automation, and crowdsourcing to expand capabilities.
- Encourage decentralized decision-making: Give teams autonomy to experiment and iterate on new ideas.

The key takeaway? As a startup leader, your role is to create an environment where employees feel empowered to innovate, take initiative, and drive meaningful change. This is how intrapreneurship takes root.

Turning Ideas into Reality: Fostering a Culture of Feedback and Action

Innovation thrives in an environment where feedback is embraced and acted upon. Successful startups maintain a strong feedback loop between employees, customers, and leadership. This ensures that new ideas are tested, refined, and implemented effectively. Mr. Reverente emphasizes three key aspects of effective listening:

- Listening with an Open Mind: Approaching new ideas with curiosity and suspending judgment.
- Listening with an Open Heart: Understanding the speaker’s perspective with empathy and compassion.
- Listening with an Open Will: Demonstrating a willingness to embrace new ideas and adapt to change.

Mentorship is also crucial in nurturing innovation. Experienced mentors, who have faced both success and failure, can provide valuable guidance. The mentor-mentee relationship is reciprocal—mentors also learn from fresh ideas and experiences.

Taking the Leap: Are You Willing to Shift?

At the core of all this is one essential question: Are you willing to shift? Mr. Reverente challenges startup founders to embrace change—not just in ideas but in mindset, processes, and leadership styles. So, what’s next for you?

- Assess your organizational culture: Identify areas where innovation can be better supported.
- Develop a concrete action plan: Implement mentorship programs, experimentation initiatives, and better collaboration tools.
- Adopt a growth mindset: Encourage continuous learning and iteration within your team.
- Leverage external resources: Connect with other innovators, attend industry events, and engage with mentorship networks.

As Mr. Reverente reminds us, success isn’t just about having the smartest ideas—it’s about action. Knowledge alone isn’t enough; it’s how you apply that knowledge that drives impact. A thriving startup isn’t built on luck or a single moment of inspiration—it’s built on a culture of continuous innovation, collaboration, and experimentation.

Ultimately, building an innovation-driven startup is about more than luck or inspiration. It’s about fostering a mindset of continuous learning, empowering your team, and creating an environment where creativity and experimentation can flourish. When these principles become the foundation of your company, you’re setting yourself up for sustainable growth and lasting impact.

The challenge is clear:

**ARE YOU
WILLING TO
SHIFT?**

INTRAPRENEURSHIP IN THE PHILIPPINES: A GROWING TREND

By Jondi Doplayna, BSc

Intrapreneurship has struggled to gain traction in the Philippines due to risk aversion and a focus on established business models. However, the rise of the startup ecosystem has begun to reshape this landscape. The dynamic and innovative nature of startups has demonstrated the value of entrepreneurial thinking and risk-taking, making corporations more receptive to intrapreneurial initiatives. As a result, a growing number of Philippine companies are now actively encouraging their employees to develop and implement new business ideas [917Ventures 2024].

Corporate-Startup Collaboration: A Catalyst for Change

One of the biggest examples of this is the PLDT Start-Up Innovation Challenge. This is an initiative by PLDT Enterprise, PLDT Innolab, and the NTT Startup Challenge that fuels both external startups and internal corporate innovation. This challenge emerged from PLDT's intrapreneurship strategy, encouraging employees to think like entrepreneurs and integrate AI, IoT, Smart Cities, and Sustainability into PLDT's business [PLDT Enterprise 2024].



PLDT Enterprise Calls for Entries for the Start-Up Innovation Challenge 2024 (Courtesy: PLDT Enterprise, 2024)

By supporting these technologies, PLDT strengthens its digital infrastructure and end-to-end digital solutions and ICT services. This synergy is also seen in other corporations present in the Philippines from incubators, to partnerships and especially in acquisitions. This all is a circular ecosystem where it promotes innovation and intrapreneurship through acquiring talent that already has this entrepreneurial mindset and in turn pushing the employees within to adopt that same perspective.

Other Corporate Intrapreneurship Initiatives

- **917Ventures** – Incubator fostering new business ventures [917Ventures 2024].
- **IdeaSpace Foundation** – MVP Group's accelerator promoting entrepreneurial innovation [IdeaSpace Foundation 2024].
- **Ayala Innovation Hub** – Developing intrapreneurial initiatives in fintech and real estate [Ayala Corporation 2024].

Strategic Partnerships and Acquisitions

- **Globe x Kumu** – Scaling digital content platforms [Kumu 2024].
- **Jollibee x Cloud Kitchens** – Expanding digital food delivery [The Philippine Star 2020].
- **Move It x Grab** – Strengthening transport solutions [Move It 2024].

The interaction between startups and corporations has played a crucial role in driving intrapreneurship in the Philippines. By embracing the startup ecosystem, corporations are fostering a culture of innovation and creating new opportunities for growth. As this trend continues, we can expect to see even more innovative products and services emerging from the Philippine corporate landscape [Philippine Startup Ecosystem Report 2024].

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Regional TECH PLANTER



TECH PLANTER
the PHILIPPINES

DEADLINE: March 2, 2025
DEMO DAY: May 17, 2025



TECH PLANTER
SINGAPORE

DEADLINE: March 23, 2025
DEMO DAY: May 24, 2025

TP ASIA FINAL



TECH PLANTER
MALAYSIA

DEADLINE: March 30, 2025
DEMO DAY: May 31, 2025



TECH PLANTER
VIETNAM

DEADLINE: May 11, 2025
DEMO DAY: July 12, 2025



TECH PLANTER

DEMO DAY: AUGUST 23, 2025



TECH PLANTER
THAILAND

DEADLINE: May 18, 2025
DEMO DAY: July 19, 2025



TECH PLANTER
INDONESIA

DEADLINE: May 25, 2025
DEMO DAY: July 26, 2025

Local TECH PLANTER



MINDANAO
TECH PLANTER

DEADLINE: May 4, 2025
DEMO DAY: July 19, 2025



VISAYAS
TECH PLANTER

DEADLINE: May 25, 2025
DEMO DAY: August 2, 2025



TECH PLANTER
UK

DEADLINE: September 5, 2025
DEMO DAY: November 1, 2025

World TECH PLANTER

About TECH PLANTER

TECH PLANTER is an early-stage startup ecosystem program led by Leave a Nest. It supports aspiring technopreneurs, researchers, and innovators focused on science- and technology-based projects, bridging the gap between research and commercialization to drive global innovation.



For more information about Deep Tech and TECH PLANTER, you can visit <https://techplanter.com/> or scan the QR code.

PERKS OF JOINING TECH PLANTER

- Funding Opportunities:** Cash prizes, seed funding, and connections to potential investors.
- Networking:** Build global connections with corporations, academic institutions, and innovators.
- Exposure and Validation:** Present to expert panels, gain credibility, and validate your ideas in real-world contexts.
- Global Reach:** Leverage TP's presence in Japan, Southeast Asia, and beyond for regional and international opportunities.

***Applicants will be required to create LnestID before proceeding to register for TECH PLANTER**

- Step 1: Register for LnestID
- Step 2: Register for the TECH PLANTER in your respective country

SEA DEEP TECH VENTURE OF THE YEAR 2025: REVOLUTIONIZING INDUSTRIES ACROSS SOUTHEAST ASIA

By Khalid Khalil, MSc

The Deep Tech Venture of the Year award, introduced by Leave a Nest, celebrates groundbreaking innovations that address critical global challenges through advanced technologies. This prestigious recognition aims to highlight startups that push the boundaries of science and engineering while driving meaningful impact across industries such as agriculture, energy, water treatment, and beyond. By acknowledging ventures with transformative solutions and a commitment to sustainability, the award seeks to inspire and support the growth of deep-tech ecosystems in Southeast Asia and beyond. Leave a Nest introduced this award to empower startups that not only advance technology but also contribute to societal progress, showcasing the potential of innovation to create a better and more sustainable future.



Mr. Chor Chee Hoe, CEO of Qarbotech received the award from Mr. Zaim, Director of Leave a Nest Malaysia

Qarbotech: Pioneering Sustainable Agriculture with Nanotechnology

Qarbotech is revolutionizing agriculture with its innovative nanotechnology solutions. Its flagship product, QarboGrow, enhances photosynthesis using nanocarbon materials, boosting crop yields by improving sunlight, water, and carbon dioxide absorption. By reducing reliance on chemical fertilizers, it promotes sustainable farming and addresses global food security challenges. Derived from agricultural waste, QarboGrow reflects Qarbotech's commitment to sustainability. The company, based in Malaysia, understands the unique challenges of Southeast Asian agriculture, enabling it to develop practical solutions for tropical farming. Looking ahead, Qarbotech aims to expand research, reach more farmers, and strengthen food security, shaping a more sustainable agricultural future.



Mr. Hai Ho, CEO of Alternō received the award from Mr. Hakim, Managing Director of Leave a Nest Malaysia

Alternō: Leading the Clean Energy Revolution with Sand Battery Innovation

Alternō, a Vietnam-based tech pioneer, is transforming the clean energy landscape with its groundbreaking sand battery technology. By addressing climate change through innovative thermal energy storage solutions, Alternō provides eco-efficient systems for industrial, agricultural, and residential heating needs. In its early stages, Alternō faced challenges including low awareness of sand battery technology, high production costs, and securing funding. However, the company swiftly tackled these issues by implementing a strategy focused on rapid prototyping, customer collaboration, and leveraging accelerator programs. Within just a few months, Alternō went from concept to piloting its first industrial sand battery with global clients like PepsiCo, demonstrating its viability in real-world applications. Today, Alternō's sand battery technology reduces carbon emissions and energy costs for industrial clients, making a tangible impact on sustainability. By 2030, Alternō aims to cut global CO₂ emissions by 100 million tons annually, with plans to expand into high-emission regions such as Asia, Africa, and South America. Alternō is more than just a tech company; it's a driving force in the clean energy sector. Through ongoing innovation, the company is set to lead the way toward a sustainable, decarbonized world.



DEEP TECH VENTURE
OF THE YEAR



Ms. Gillian Santos, CEO of AniTech received the award from Dr. Yukihiro Maru, CEO of Leave a Nest Group



Mr. Ang Boon Tong, Head of Business Development of Hydroleap received the award from Mr. Daiki Kumamoto, Director of UntroD Capital Asia

AniTech: Pioneering Tech-Enabled Agriculture in the Philippines

AniTech is transforming Philippine agriculture with its sensor and platform solutions, empowering agribusinesses to monitor, track, and optimize farm operations. Driven by a mission to organize the flow of information across the agri-value chain, AniTech envisions a future where technology uplifts Filipino farmers and agribusinesses. The journey began with challenges: no reputation, limited resources, and the uphill battle of entering an industry steeped in tradition. AniTech’s founders leaned into every opportunity—startup competitions, summits, and networking events—to build connections and refine their solutions. Hardware development, inherently capital-intensive, added complexity, but the team’s resilience and resourcefulness guided them through. AniTech’s innovations extend beyond tools—they champion long-term change in agriculture. With a commitment to collaboration and perseverance, AniTech calls on stakeholders to join in transforming Philippine agriculture into a sustainable, tech-driven industry that uplifts communities and secures the future. Every step forward counts, and together, they can make a lasting impact.

Hydroleap: Revolutionizing Water Treatment with Sustainable Innovation

Hydroleap Pte Ltd, a Singapore-based environmental technology company, is pioneering advanced water treatment solutions using chemical-free electrical treatment technologies. Designed to efficiently remove contaminants from industrial wastewater, their green and efficient innovations serve sectors such as data centres, manufacturing, food processing, oil and gas and palm oil. By helping customers to achieve better water and energy efficiencies and rely less on chemicals, Hydroleap stands out by addressing challenges of water security and sustainability. Their journey has been one of perseverance and innovation. Scaling the technology for large-scale industrial use and securing funding required relentless focus. Working with industries to actualize value in sustainable solutions was demanding and required extensive outreach and navigating complex regulatory landscapes. But, all obstructions became stepping stones in their journey. Aligned with Singapore’s Smart Nation vision, Hydroleap enhances water management systems and supports sustainability goals, contributing to a greener, resource-efficient future for industries locally and globally.



The SEA Deep Tech Venture of the Year 2025 winners showcase Southeast Asia’s innovation leadership. Supported by Leave a Nest’s mentorship and resources, these startups are advancing sustainability in agriculture, energy, water, and technology, proving the region’s ability to tackle global challenges and drive meaningful change for a better future.

LIST OF EVENTS FROM LEAVE A NEST IN SEA 2025

ED

January 18
Science Castle PH

April 12
Science Castle SG

July
Science Castle MY

October 11 - 12
Science Castle Asia



HD

February 8
Add Venture Forum PH

February 28
Add Venture Forum SG

April 2
Add Venture Forum MY

October 29
Add Venture Forum SG



RD

February 8
HIC IDN

February 15
HIC TH

February 22
HIC VN

September 12
HIC ILO

November 8
HIC PH

November 15
HIC SG

November 22
HIC MY



FD

May 17
TechPlanter PH

May 24
TechPlanter SG

May 31
TechPlanter MY

July 12
TechPlanter VN

July 19
Mindanao TechPlanter

July 19
TechPlanter TH

July 26
TechPlanter IDN

August 9
Visayas TechPlanter

August 23
TechPlanter Asia Final

November 1
TP World UK



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