

AQUACULTURE

ROUND**TABLE**SERIES® 2022

6 - 7 October 2022 • Ho Chi Minh City • Vietnam

PROGRAM & PRESENTATIONS A New Equilibrium



THE AQUACULTURE ROUNDTABLESERIES® 2022

- 7 October 2022 · Ho Chi Minh City · Vietnam



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Welcome



Dear Stakeholders,

Our last in-person TARS gathering was in 2019. At that time, the focus was on how well the aquafeed industry in Asia was managing its supporting role and catalysing the growth of aquaculture in Asia. Fast forward to the years 2020 and 2021, during these pandemic years, we saw rises in the costs of feed raw materials reaching peak prices in 2021, namely soybean meal and corn. Then, there is a new dimension, the war in Ukraine raising wheat prices, a key ingredient in shrimp feed as well as energy price increases and the onset of inflationary pressures.

As we come out of lockdown, we meet here in Ho Chi Minh City. Vietnam was chosen as the venue for this 11th TARS because of its dynamic aquaculture industry and its supportive aquafeed industry. Aside from well-established local aquafeed businesses, Vietnam is also a centre of feed production for large multinationals.

Along the value chain, feed companies are a major force, which causes a push effect to drive the industry. But this year, the rise in the costs of feed ingredients, high freight costs, supply chain disruptions and demand for more sustainable feed ingredients are major challenges facing the global aquafeed industry. For the feed industry in Asia, it is a question of raising prices, reformulating or compromising on quality.

TARS 2022 seeks to help the aquafeed industry and other stakeholders navigate these challenges by looking into a new equilibrium with precision nutrition and feed efficiency. We set the stage with the state of the aquafeed industry in Asia and review current threats and future directions through different vantage points; sustainability, technology and feed optimisation with genetics, production and financial impacts of rising costs to the feedmiller. There are also evergreen issues such as the unknowns in nutrient requirements as we work towards feed optimisation for each major farmed species. A constant challenge is risk mitigation and attracting investments. TARS will address this in an industry talk with a panel of investors.

TARS 2022 is made possible with the support of key industry players and dedicated stakeholders. On behalf of the organising committee, I thank the Ministry of Agriculture and Rural Development - Directorate of Fisheries - Vietnam; and our industry sponsors: INVE Aquaculture & Benchmark Genetics, DSM, BASF, Diamond V, BioMar, Phibro Aqua, Adisseo, Grobest, Symrise Aqua Feed, Cargill and JEFO Nutrition; for their support.

There is a need to future proof the industry for the next decade by addressing the demand from consumers for sustainable products and feeds have a leading role in the production process. One of Asia's biggest weaknesses is the fragmented nature of our value chain. Despite the lack of integration, we have to build alliances to act in a de facto integrated manner. The 1.5-hour interactive breakout roundtable session will involve group participation of all attendees to discuss "Working along the value chain to improve efficiency, traceability and sustainability."

To all stakeholders, we wish you a successful meeting and a pleasant stay in Vietnam.

Zuridah Merican Chair. TARS 2022



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To all stakeholders, we wish you a successful meeting and a pleasant stay in Vietnam.

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Organizers & Sponsors



SUPPORTING AGENCY/ORGANIZERS



Ministry of Agriculture and Rural Development, Directorate of Fisheries

MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT - DIRECTORATE OF FISHERIES

The Ministry of Agriculture and Rural Development (MARD) is a government ministry responsible for rural development and the governance, promotion and nurturing of agriculture and the agriculture industry, in Vietnam. The purview of the Ministry includes forestry, aquaculture, irrigation and the salt industry; it is also involved in water management and flood control. Located in Hanoi, the Ministry maintains 64 provincial department offices throughout Vietnam. MARD has been developed since 1987 with the combination of different government ministries: Ministry of Agriculture, Ministry of Food, combined with the Ministry of Agriculture and Food Industry in 1987; and the subsequent addition of the Ministry of Forestry and the Ministry of Irrigation, as well as the addition of the Ministry of Fisheries in 2007. MARD was officially formed in 1995.

https://www.mard.gov.vn



AQUA CULTURE ASIA PACIFIC

Aqua Culture Asia Pacific (AAP) is a regional trade magazine for the fast-developing aquaculture industry. Published by Aqua Research PL six times a year, the magazine was launched in 2004 by Zuridah Merican, PhD., a consultant with more than 30 years' experience in aquaculture. Striving to be the beacon for Asia-Pacific's aquaculture industry, AAP features a wide range of industry topics along the value chain, from hatchery to seafood marketing. www.aquaasiapac.com



CORPORATE MEDIA SERVICES

An award-winning communications agency established in 1992 by Irene M Gomez, Corporate Media Services (CorpMedia) has 30 years of experience in marketing, public relations, publishing and event management. CorpMedia works with a diverse group of clients representing corporate, government and nongovernment organizations, investment, hospitality, food, agriculture, health, science and technology sectors. CorpMedia strives to bring global perspectives to an ever-changing world of communication dynamics. www.corpmediapl.com

Sponsors



ADISSEO

Adisseo, one of the world's leading experts in feed additives, offers species specific solutions and services for aquaculture. Through its dedicated Business Unit Aquaculture, Adisseo helps producers across the world grow fish and shrimp in a more sustainable and profitable way. Key specialty programs are health (prevention of diseases and parasites); digestion (digestive/metabolic enhancers) and palatability (attractants), besides a wide range of nutritional and technological feed additives for optimizing aqua feed production (specialty nutrition and feed quality programs). A specific farm care portfolio has been developed for optimizing health and environmental conditions in shrimp farming. At Adisseo, field-experienced aquaculture professionals provide advice and services to our customers through the Global Service Platforms for Aquaculture Nutrition and Aquaculture Health. Adisseo relies on its 10 research centers and its production sites based in Europe, USA and China to design, produce and market nutritional solutions for sustainable animal feed. With more than 2,345 employees, it serves around 3,900 customers in over 110 different countries through its global distribution network. In 2020, Adisseo achieved a turnover of over 1.51 billion Euros. Adisseo is one of the main subsidiaries of China National BlueStar, leader in the Chinese chemical industry with nearly 21,000 employees and a turnover of 6.8 billion USD. Adisseo is listed on the Shanghai Stock Exchange. www.adisseo.com



BASF ANIMAL NUTRITION

The science of sustainable feed that succeeds. The demand for animal protein grows continuously, and the need for more sustainable animal husbandry becomes increasingly urgent. At BASF, we create chemistry for a sustainable future, and BASF Animal Nutrition has been a pioneer from the beginning, for example in vitamins (Lutavit®) and enzymes (Natuphos®E, Natugrain®TS). Now we are leading the way with more sustainable, successful, science-based solutions. Our products have proven to be efficient, effective and reliable in the lab, in the mill and in the field, promoting animal growth, vitality and wellbeing. Together with other feed additives such as monoglycerides (BalanGut®), carotenoids (Lucantin®, Lucarotin®), trace elements (Glycinates), and organic acids (Amasil®, Luprosil®), combined with greater use of digital tools and technologies, we share our expertise and experience and work together to be more considerate of animals, people and the planet. That is what we stand for at BASF Animal Nutrition: From feed to farm to fork to the future.

https://nutrition.basf.com/global/en/animal-nutrition/species/aquaculture.html



BIOMAR GROUP

BioMar are innovators in high performance aquaculture feed, dedicated to doing our part in creating a healthy and sustainable global aquaculture industry. BioMar operates 17 feed factories across the globe in Norway, Chile, Denmark, Scotland, Spain, France, Greece, Turkey, China, Vietnam, Costa Rica, Ecuador, and Australia. Worldwide, we supply feed to around 90 countries and for more than 45 different species. www.biomar.com



CARGILL BRANDED FEED

Cargill's Starches, Sweeteners and Texturizers business unit has a Feed Division that consists of commodity feed ingredients and branded feed ingredients. The Branded Feed business started in 1995 and has continued to introduce new and unique, functional macro feed ingredients for specific species and markets including dairies, feed yards, and aquaculture. Cargill Branded Feed uses our knowledge of these industries and our expertise and resources from the corn wet milling process to use nutrition to simplify diets with macro ingredients while improving performance with functional benefits of digestive health and improved nutrient utilization. These unique brands also come with a promise of reliable delivery and consistent quality. For aquaculture, Cargill Branded Feed offers the following: Empyreal 75® a corn protein concentrate for salmon and other carnivorous species with many of the functional benefits of fishmeal but as an acceptable, high-value alternative. Motiv™ is a fermented corn protein source that offers many functional benefits that improve digestive health, performance and an improved stress response. www.BrandedFeed.com



DIAMOND V

Diamond V^{\otimes} leads in the research, development, and delivery of unique microbial fermentation postbiotic feed additives for animal nutrition and health, helping to achieve optimal performance and preharvest food safety. Diamond V postbiotics are designed to address real-world challenges in the dairy, beef, poultry, swine, aquaculture, and companion animal industries. Defined by AAFCO as a natural health ingredient for use animal diets, our postbiotic dual-action effect supports the body's immune and digestive systems, helping promote performance. Our unique combination of postbiotics and bioactive compounds work naturally with the animal's biology to maintain immune strength and promote a healthy microbial balance. Diamond V postbiotics support immune health, energy, activity, and vitality for more productive animals. Backed by nearly 80 years of fermentation expertise, animal nutritionists and veterinarians worldwide have recognized Diamond V's leadership in research and development of postbiotics that benefit animal health and wellness. Learn more at www.DiamondV.com.



GROBEST GROUP HOLDINGS LIMITED

At Grobest, we are committed to feeding the world through the development of innovative products to support safe and sustainable aquaculture. Grobest's aquaculture and environmental protection solutions enforce the industry's sustainability through our 360° Nutrition Solution dedicated to functional performance feed for aquatic animals. At the same time, through our mobile, on-site laboratories and exclusive service APP, we support farmers by providing shrimp health and water quality assessment. Confronted by soaring global demand for food due to rapid growth of world population and scarcity of natural resources, we persist with the ideal of "respecting nature for healthy aquaculture" and continue to improve the health and growth of aquatic species by feeding them with advanced nutrition. www.grobest.com



INVE AQUACULTURE AND BENCHMARK GENETICS

As a pioneer in the aquaculture industry, INVE Aquaculture (part of Benchmark) has always been about enabling growth. The healthy growth of fish and shrimp, the growth of our clients' local businesses, and the growth of global aquaculture as a whole. Our advanced nutrition, health, and environment solutions are a solid reference in the market and have a proven added value in hundreds of farms and hatcheries worldwide. Benchmark Genetics is a world leader in breeding and genetics on Atlantic salmon, tilapia, shrimp, and lumpfish, produced in Norway, Iceland, Chile, the USA, Brazil, and Colombia. Next to that BMK Genetics is also a world leader in technical genetic services for the global aquaculture industry. We bring together biology and technology, developing innovative products which improve yield, quality, animal health, and welfare for you, as a customer. We do this by improving the genetics, health, and nutrition of the stocks – from broodstock and hatchery through to nursery and grow out. Together the Benchmark group offers the most complete genetics, nutrition, health, and environmental solutions in the market.

www.inveaquaculture.com or www.bmkgenetics.com



JEFO NUTRITION

Jefo is a global leader in high-performance non-medicated nutritional solutions for animals. Founded in 1982 in Canada, Jefo markets its species-specific products worldwide and massively invests in innovation and development to be the supplier of preference for those striving to reduce or eliminate the use of antibiotics. With its Life, made easier commitment in mind, Jefo uses a practical approach to share its results based on complex scientific research. To improve animal health and increase human longevity by feeding growing populations with better protein sources, Jefo proposes different solutions in their programs. Jefo Care – Health & Prevention, Jefo Peak – Performance & Production and Jefo Cycle – Reproduction. www.jefo.ca/en



PHIBRO AQUA

Phibro Aqua is a division of Phibro Animal Health Corporation, a diversified global developer and manufacturer of a broad range of animal health and nutrition products for the poultry, swine, cattle, dairy and aquaculture markets. Growing worldwide demand for high quality protein, combined with expanding human populations and decreasing wild stocks of fish, assures an increased future dependence on aquaculture products and technologies. The challenge is to develop profitable and sustainable aquaculture practices which will implement advanced technologies. These technologies will allow aquaculture to make a significant contribution to future supplies of aquatic products. Phibro Aqua has developed a strong team of fish health specialists and scientists with a focus on providing the global aquaculture industry with cost effective health management solutions to maximize the productivity of our customer's farms. The Phibro Aqua team brings to customers a full range of expertise in production and operation, fish health management, disease diagnosis and vaccination. Phibro Aqua operates comprehensive research and development facilities. These facilities include a large-scale wet lab for clinical evaluation of fish vaccines, medication and feed additives. Phibro Aqua's lab includes a full diagnostic service addressing parasitology, bacteriology, histopathology and molecular biology. www.phibro-aqua.com



ROYAL DSM N.V.

Royal DSM is a global, purpose-led company in Health, Nutrition & Bioscience, applying science to improve the health of people, animals and the planet. DSM's purpose is to create brighter lives for all. DSM's products and solutions address some of the world's biggest challenges while simultaneously creating economic, environmental and societal value for all its stakeholders – customers, employees, shareholders, and society at large. The company was founded in 1902 and is listed on Euronext Amsterdam. More information can be found at www.dsm.com/animal-nutrition-health



SYMRISE AQUA FEED

In 2022, Diana Aqua became Symrise Aqua Feed. Symrise Aqua Feed produces and offers palatability enhancers, marine ingredients and services that help aquafeed manufacturers to develop high-performance feeds with reliable and proven solutions, ensuring consistent feed intake and performance. Symrise Aqua Feed relies on a unique global network of sales, scientific and technologies experts, a team of 150 passionate employees and three industrial sites all over the world. Within the Symrise Group, Symrise Taste, Nutrition & Health leverages the Group's capabilities to provide advanced natural health & well-being nutrition solutions for the human food, pet food and aquafeed industries. https://aquafeed.symrise.com

Speakers & Moderators



Speakers



Karla Canavan

Vice President, Commodity Trade and Finance, Markets World Wildlife Fund USA

Karla Canavan brings 25 years of experience in agribusiness supply chains, trading, investment, wealth management, and finance. Passionate about sustainability, Karla developed her deep understanding of the food and energy value chains through her 20-year career in agribusiness giants Cargill and Bunge. She worked directly with producers and end users to determine logistics, pricing, and marketing, granting her the first-hand field experience that underpins her knowledge of product traceability, social and environmental impact, and profitability factors that are necessary to optimize the food supply chain from farm to table.

She has been active in sustainability markets since 2007 developing the origination strategy for Bunge and directly managing projects which included REDD+, emission reductions, impact investing, clean energy, structured finance, sustainable agriculture, sustainable farming, renewables, waste management, conservation finance, and supply chain optimization, among others. Karla has traded derivatives, stocks, currencies, agricultural commodities, biofuels, and carbon among others. Karla's global markets expertise has led her to be an apt trend identifier.

She has a deep understanding of the value chains of grains (corn, wheat), oilseeds (soybeans, canola, sunflower), tree crops (oil palm, cocoa, coffee), biofuels and feed markets. She has managed projects and teams globally with emphasis on emerging and development markets across geographies including Latin America, Africa, South East Asia, India, and China.



Piet Verstraete

Managing Director, 4SEA Consulting Ltd Thailand

Piet Verstraete is the Managing Director of 4SEA Consulting Ltd since 2006. He has been active in the aquaculture industry for more than 25 years and has serviced customers all over the world. Piet and his team at 4SEA provide nutrition related services to the aquaculture and pet food industry in Asia Pacific and the Mediterranean; mainly for feed mills, additive companies and producers of (novel) ingredients. 4Sea's goal is to "improve the profitability and sustainability of companies active in the aqua- and pet food industry."

4SEA has developed numerous new feeds and premixes for a variety of species and all culture stages based on a strong know-how on ingredients, nutrition and formulation. Apart from the formulation and feed development services, 4SEA has managed projects as diverse as building new feed plants, execute sourcing missions and plant audits, organizing research and field trials, setting up quality assurance systems and supporting the market introduction of additives and novel ingredients.

As part of the consultancy services, Piet held different management positions for customers, mainly in general management, product management, sourcing and purchase and technical management. Prior to 4SEA, Piet was at Aqualma and Unima Group to develop their specific feed program for domesticated fast growing monodon shrimp. He designed, built and managed their state-of-theart feed plant, producing aquafeeds for the production of Label Rouge- and Organic certified shrimp.

After completing academic work in Mexico, Piet started his career in 1995 at the R&D department of INVE Aquaculture. He held several global positions at the INVE Group, including technical manager, product manager and business unit manager for farms and feedmills. At INVE, he gained expertise in formulation and feed design for all live stages of the main aquaculture species and developed several successful specialty premixes, hatchery broodstock and grow-out feeds for marine fish and shrimp.

Piet an international MBA and a degree in Bioengineering, with specialization in aquaculture, and was trained in feed processing and nutrition.



Matthew Clark
Director, FeedGuys Resources Pte Ltd
Singapore

Matthew Clark is a graduate in Agriculture from London University. After three years of experience of livestock farm management in the UK, Matthew moved into an international consulting role and has focused mainly on the feed and farming business in Southeast Asia. During that time, Matthew has supported feed formulation systems starting with the Brill Corporation in Atlanta as Vice President of Product Development in 1990 and then in feed businesses in Southeast Asia. Projects in the feed business have included implementation of operational planning and business solutions for feed ingredient purchasing, farm planning and control, poultry processing and product mix optimization

Matthew is a founding member of Genesis Feed Technologies in Fargo, North Dakota, USA bringing practical knowledge of feed formulation processes to the team to develop new software solutions. Genesis new generation of webbased formulation tools complements existing feed formulation programs enabling more detailed economic decision making in purchasing.



Olivier Decamp

Group Technical, Marketing and Product Director, Grobest Thailand

Olivier Decamp is now Group Technical, Marketing and Product Director at Grobest since March 2022. He joined Grobest as Group Technical Director in 2021. Prior to this, he spent 13 years in various roles at INVE Aquaculture (part of Benchmark Group), covering R&D and product management. The earlier part of his career was spent in the UK (The Natural History Museum, London), Japan (research laboratories in Hiroshima), and USA (The Oceanic Institute in Hawaii). He has vast experience in aquaculture, having worked for over 20 years in shrimp farming in Asia and the Americas, specialising in marine microbial ecology in intensive shrimp farming. In his new function at Grobest, he leads efforts in developing and enhancing the comprehensiveness and reliability of performance data, customer technical service, and the introduction of new, innovative service solutions, as well as technical training programs for our farming partners. Olivier has a PhD in Zoology from The Natural History Museum, London and the University of Leicester (UK) in 1996, with a focus on wastewater microbiology. He is currently based in Thailand.



Nguyen Van Khanh

Head of Technical Service and Sales, Grobest Vietnam

Nguyen Van Khanh joined Grobest Vietnam as Head of Technical Service and Sales in 2020. Khanh has more than 18 years of experience in aquaculture in Vietnam. Prior to joining Grobest, he held various roles at Hendrix Genetics (West Asia) and De Heus Vietnam as Technical & Sales Manager. He was a research assistant at the Research Institute for Aquaculture No.1 (RIA1). Khanh has a Master of Science degree in Aquaculture from Ghent University, Belgium and has published nine publications and reports in the aquaculture.



Thomas Wilson

Aquaculture Consultant, DSM Nutritional Products Asia Pacific Thailand

Thomas Wilson is currently a aquaculture consultant for DSM Nutritional Products Asia Pacific, based in Thailand. He completed his PhD studies at the University of Washington, USA. In 1992 he moved to Thailand to work as a nutritionist-feed formulator for Unicord Feed Co, then Aquastar, followed by ThaiLuxe Enterprises, where he became executive vice president, until his retirement at the end of 2014.

Since 2015, he has been an independent aquaculture nutrition consultant for several multinational companies, specialising in sustainable feed development.



Frederic Jozwiak

Product Manager - Health Solutions, INVE Aquaculture Belgium

Frederic Jozwiak is from an aquaculture background, with a global hands-on experience in shrimp and fish production sites. His interests are in production SOP, nutrition, biosecurity, health & environmental management and diagnostic methods for aquatic pathogens. During the last decade, he worked in animal nutrition within the feed additive industry. Since the past five years, Frederic has been with INVE Aquaculture in product management, leading the health portfolio, which offers risk prevention solutions along with market segments such as biocides, water conditioners, and probiotics. The applications are from hatchery to farm and into shrimp and fish production.

Frederic has a master's degree in the field of Biochemistry, Microbiology & Food Processing from the ENSCP engineering school in Bordeaux, France. He has 15 years' experience in shrimp farming (Ecuador, Madagascar, Indonesia and New-Caledonia) and fish farming (Madagascar, Mozambique and Corsica in France). At TARS 2022, Frederic is part of the INVE Aquaculture and Benchmark Genetics team (with Bruno Decock - Operations Manager, Shrimp Breeding Asia) presenting on a holistic approach combining nutrition and genetics for efficiency in farming.



Bundit Yuangsoi

Lecturer, Department of Fisheries, Faculty of Agriculture Khon Kaen University Thailand

Bundit Yuangsoi is a lecturer at Department of Fisheries, Faculty of Agriculture, Khon Kaen University, Khon Kaen, Thailand since 2009. He completed his PhD in Aquaculture from the Faculty of Fisheries, Kasetsart University, Thailand, with a focus on aquatic animal nutrition. Bundit is currently focusing on improving the nutritive value of feed ingredients for aquafeed, functional feed additives to improve the growth performance and health status, and fish meal replacement in aquafeeds for the sustainability of aquaculture.



Ruth Garcia Gomez

Business Development Manager, Aquaculture Farm Care & Health ISC/APAC, Adisseo Spain

Ruth G Gomez recently joined Adisseo's Aqua Team as Business Development Manager Aquaculture Farm Care & Health for the ISC/APAC regions, and is based in Thailand. Since 2001, Ruth has worked in fish health management with a wide range of tropical and temperate species (e.g. shrimp, catfish, tilapia, marine finfish, among others), in various countries in Africa (Uganda, Democratic Republic of Congo), Asia (Vietnam and Cambodia), the Maghreb (Morocco and Egypt), Latin America (Ecuador and Colombia) and Europe (Spain and France), in the fields of aquaculture, aquatic animal health, and aquatic biosecurity. She worked as FAO Aquaculture Specialist, ASC Standards Coordinator for fish health and fish welfare, and as aquatic health specialist in various companies, institutions and research organizations. During 2010-2020, Ruth was in the Pacific Region where for the Secretariat of Pacific Community (SPC) as Aquaculture and Aquatic Biosecurity Specialist; and during 2020-2022 for the Cawthron Aquaculture Institute and Aquaculture New Zealand - New Zealand Fish Farmers Association.

Ruth graduated in Veterinary Science-Animal Husbandry from the Complutense University of Madrid, Spain, with a specialisation in Aquaculture and Aquatic Health Science. She completed her PhD in Veterinary Science Branch-Aquatic Animal Health Department at the same university and has a degree in international development strategies, agents, and policies from the Basque Country University in 2006.



Wee Kok Leong

Regional Technical Director Aquaculture for APAC, Diamond V Thailand

As Regional Technical Director, Aquaculture for APAC, Wee Kok Leong provides technical assistance and support to aquaculture producers and feed industry professionals, including veterinarians, and nutritionists, throughout the region served by our Asia Office.

Prior to joining Diamond V, Kok Leong worked extensively in the aquaculture feed mill sector, responsible for the selection of raw materials and formulation and providing technical support to customers. He also served as a university lecturer and academic supervisor at various reputable universities, and as technical consultant to organizations. His collective competencies lie in research and development of innovative feed additive products and new applications, feed and nutrition formulation, technical review, and training. He is well-known and highly recognized in the aquaculture industry for both feed milling and feed additives. Kok Leong holds an M.Sc. in Aquaculture and Fishery Management and a PhD in Fish Nutrition, both from the University of Stirling, UK.



Loc Tran
Senior Advisor for Minh Phu AquaMekong
Founder and Director of ShrimpVet Laboratory
Vietnam

Loc Tran is Senior Advisor for Minh Phu AquaMekong and founder and director of ShrimpVet Laboratory in Vietnam where he leads a team of more than 80 researchers and technicians. Tran's research while at the University of Arizona identified early mortality syndrome (EMS), a disease that caused USD1 billion in farmed shrimp losses in Vietnam alone. EMS is caused by a bacterial agent colonising the shrimp gastrointestinal tract and producing a toxin responsible for tissue destruction and dysfunction of the shrimp digestive organ. ShrimpVet which has a state-of-the-art shrimp and fish disease diagnostics laboratory, is also a vertically integrated operation with a commercial hatchery/nursery and algae laboratory, grow-out farm and provides extension services. Research at ShrimpVet includes genetics, disease diagnostics and disease management, hatchery and farming technologies, nutrition, therapeutics development and new aquaculture technologies.



Romi Novriadi
Lecturer
Jakarta Technical University of Fisheries
Indonesia

Romi Novriadi is a lecturer at the Jakarta Technical University of Fisheries (Politeknik Ahli Usaha Perikanan) since October 2021, and Head of Fish Nutrition Study since January 2022. Prior to this, he was a senior researcher at the Directorate General of Aquaculture, Ministry of Marine Affairs and Fisheries, Republic of Indonesia and Vice Chairman of the Indonesia Aquaculture Society. His research expertise is in aquaculture nutrition, immunology, aquaculture technology and disease management.

Romi has a Master's degree M.Sc in aquaculture from Ghent University, Belgium and under the Fulbright program, a PhD from Auburn University, Alabama, USA. Romi is currently focusing on the development of shrimp farming systems, evaluation of nutritional requirements for shrimp and marine fish, and evaluation of novel ingredients and feed supplemental properties to enhance the growth and health status of aquatic organisms. He is the founder of (super) intensive farming system for vannamei shrimp culture in the concrete tank.



Benny ShapiraGlobal R&D Manager - Phibro Animal Health Corporation Israel

Benny Shapira is Global R&D Manager at Phibro Animal Health Corporation in Israel. In his current role, he leads a team of aquaculture specialists in all projects related to product improvement, development and innovation. He is a qualified researcher, skilled in contemporary analyzing technologies, marine biology and aquaculture, and combines his managerial experience in multiple disciplines to bring innovative ideas to the R&D processes he leads.

Prior to Phibro Animal Health Corporation, Benny was CEO of a microalgae company growing haematococcus pluvialis for pharmaceuticals and cosmetics.

Benny graduated from the Faculty of Agriculture, Fish Reproduction and Endocrinology at Hebrew University with a Masters (M.Sc) degree in animal science after completing his Bachelor's (B.Sc) degree in marine science.



Nguyen Duy HoaGlobal Technical Director
Empyreal Products, Cargill Inc.
Vietnam

Nguyen Duy Hoa is Global Technical Director, Empyreal Products, Cargill Inc. since December 2016. Hoa has spent more than 27 years in aquaculture research and business where he spent more than 17 years working for the National Research Institute for Aquaculture; a year working for INVE Thailand as key accounts manager for shrimp health products; and 3.5 years for Cargill Vietnam as leader of aquaculture nutrition.

Hoa is well-known and recognised in the shrimp industry and among aquafeed mills in Vietnam and the Southeast Asia Region. He provides technical advice and training to shrimp farms, leads technical and sales teams for large shrimp feed and aquafeed mills in the region both in person and online; and gives presentations at various international workshops and conferences. In 2009 and 2009, he received award certificates from the Ministry of Agriculture and Rural Development for his aquaculture research achievements.

Hoa has Bachelor's degree in Aquaculture from Nong Lam University, Vietnam, and holds a Master's degree and Ph.D in aquaculture, both from Ghent University, Belgium.



Masahiko Yamada Co-founder / Managing Director, UMITRON Pte. Ltd.

Singapore

Masahiko Yamada is Co-founder, Managing Director of UMITRON which is a deep-tech company whose aim is to solve worldwide food and environmental problems by empowering aquaculture through technology such as IoT, satellite remote sensing, and Al.

Masa was involved in the development of microsatellites at Kyushu University. Next at Mitsui & Co, he worked for the electricity retail business, building power futures trading models using weather data. He also worked at Metaps, an AI company until its listing, where he was engaged in analysing consumer data. Masa founded UMITRON to apply technologies developed in other fields, such as AI and aerospace technology, to aquaculture.



Ravikumar Bangarusamy

Assistant Vice President - Sales & Technical, Growel Feeds Pvt Ltd India

Ravikumar Bangarusamy is an aquaculture expert working in the field of aquaculture for more than 25 years in India, Philippines, Iran, Madagascar, Mozambique, Malaysia, Thailand, Indonesia, Sri Lanka and Bangladesh. He obtained his Bachelor of Fisheries Science (B.F.Sc.,) and Master of Fisheries Science (M.F.Sc.,) from the Fisheries College and Research Institute, Tamilnadu Veterinary and Animal Sciences University, Tuticorin, India. He has worked in network of aquaculture centres in Asia-pacific (NACA), IFC- World Bank group, Asian Development Bank (ADB) and Worldfish projects as an aquaculture specialist and project manager, and as BMP expert in FAO projects related to improving the livelihoods of small-scale farmers in Indonesia and Bangladesh. Ravikumar has also worked as a Farm Manager at integrated shrimp farming projects in Africa promoted by European companies. He is currently Assistant Vice President – Sales & Technical at Growel Feeds Pvt. Ltd., India.



Brett D. Glencross

Technical Director
IFFO The Marine Ingredients Organisation
United Kingdom

Brett Glencross is Technical Director of IFFO (The Marine Ingredients Organisation) since June 2021. Prior to this role, he was the Professor of Nutrition at the Institute of Aquaculture at the University of Stirling in Scotland, where he maintains a position as a honorary professor.

Over the past 25 years he has worked in various academic, industrial, and institutional roles across Asia, Europe, the Middle East, and Oceania. His career has been characterised by a close working relationship with many aquaculture production (farming) and feed companies throughout each of these regions. His research achievements have delivered many industrial outcomes resulting in the development of new processes, products, and applications.

For his achievements in this regard, Brett received multiple awards and commendations from both Government and Industrial organisations. At an academic level, he was one of the former editors of the journal Aquaculture Nutrition from 2008 to 2016. He is the current Chair of the International Scientific Committee of the International Symposium for Fish Nutrition and Feeding (ISFNF) and was the convening chair of the Feeds and Feeding thematic review at the recent FAO Global Conference on Aquaculture held in Shanghai. He has been a Director of the Asia-Pacific Chapter of the World Aquaculture Society (2013 – 2016), and has undertaken leadership roles at the CSIRO in Australia and the Institute of Aquaculture.

Brett has honours and masters degrees in Biochemistry from the University of Western Australia and a PhD in Animal Nutrition from the University of Queensland, Australia.



Danny Miller

Sustainability and ESG Lead Specialist, Aquaculture World Wildlife Fund USA

Danny Miller is Lead Specialist, Aquaculture on the WWF-US Aquaculture team. He develops and implements strategies that will improve the sustainability of the global aquaculture sector; including the enhancement of transparency in global supply chains through more rigorous financial reporting, the generation of business case valuation models for natural resources used in animal protein commodities, and the development of sustainability risk-based assessments for companies that procure or produce aquaculture. Before joining WWF, Danny provided sustainability and ESG leadership and expertise to non-profits, startups, and investment firms focusing on agriculture and aquaculture. Danny received his Master's degree in Sustainability Management from Columbia University where he focused on the intersection of sustainable food systems and finance. He also has nearly a decade of experience in finance, sales, and non-profit management.

Moderators



Ronnie Tan
Regional Aquaculture Consultant
US Grains Council
Malaysia

Ronnie Tan currently serves on the advisory board of Calysta, USA and is the regional aquaculture consultant with the US Grains Council, and advisor to BASF, Germany. He also acts as a mentor at Hatch - an aquaculture startup accelerator. Ronnie stepped down as Vice-President at Blue Archipelago - the largest integrated shrimp enterprise in Malaysia, responsible for downstream operations and corporate strategy. He was Executive Director and board member at Regal Springs Group - the largest tilapia integrator in the world, responsible for global feed supply and held a supervisory role of the Indonesia legal entity. He co-led the sale of the company. Ronnie started his career building the aquaculture feed division in the Gold Coin Group. An aquaculturist by training, he has over 38 years' experience in international marketing, supply chain and general management in multinational chemical and feed companies such as Rhone Poulenc and Imperial Chemical Industries. He was a board member of the Malaysian Palm Oil Board and ICI's representative to RSPO (Roundtable on Sustainable Palm Oil). Ronnie, who is Malaysian, read Environmental Biology at King's College, University of London and obtained his MSc. in Aquaculture from University of Stirling, Scotland, UK.



Daranee SeguinTechnical Director Aqua, SEA
Phibro Animal Health Corporation

Thailand

Daranee Seguin recently joined Phibro's Aqua Team as Technical Director Aquaculture for the Southeast Asia region, based in Thailand. Prior to this appointment, she worked as Technical Expert, Aquaculture with DSM Nutritional Products for 6 years. She has 15 years of research experience in developing nutritionally complete, functionally health benefit, environmentally sound, and cost-effective diets for commercial of fish and shrimp.

For 11 years, she was involved in the health management of commercial shrimp feed formulation and feed mill operations. Her main focus areas include research and development of functional additives and feeds, and the use of alternative protein and lipid sources to improve nutrition and health in a wide range of warmwater species (e.g. shrimp, pangasius, tilapia, and marine finfish).

Daranee holds a MSc in Appropriate Technology in Resources and Environment Development from Mahidol University, Thailand and a PhD in Aquaculture Nutrition from Auburn University, USA.



Regis F. BadorSenior Aquaculture Expert
New Caledonia

Since Jan 2018 to May 2022, Regis was Senior Advisor of Cargill Animal Nutrition Technologies, USA, for iQuatic digital platform development, worldwide and as Lead of the iQuatic Academy & the iQuatic Insights Explorer Team. Previously, from 2016-2017, he was General Manager of AQ1 Systems Panamá, subsidiary of AQ1 Systems Australia. His job was to create and organise marketing & servicing activities of the unique advanced technology to manage shrimp feeding based on instant acoustic monitoring in whole Latin America and the US. From May 2012 to 2016, he was founder & Managing Director of Innov'Aquaculture Sarl, based in New Caledonia.

Regis started his career in aquaculture in 1983 as a researcher at IFREMER, Tahiti, French Polynesia, & Paris, France. He worked 11 years New Caledonia, as Manager, SODACAL S.A., the largest farm in New Caledonia, producing stylirostris and as General Manager, Ecloserie de Mara, SAS, both in Moindou, New Caledonia. He was also involved in the implementation of up-to-date RAS technology for this 23-year-old hatchery. Regis also worked in CENIACUA in Cartagena, Bogotá & Tumaco and Madagascar.



Rizky DarmawanDirector
PT Delta Marine Indonesia
Indonesia

Rizky Darmawan is Director at PT Delta Marine Indonesia, 70-ha farm with 30-ha developed in Sumbawa, West Nusa Tenggara, Indonesia. After graduation, Rizky took over the operations of the farm in Sumbawa from his father who now manages the harvesting and distribution activities of the company, using raw materials supplied by the farm as well as from other farms.

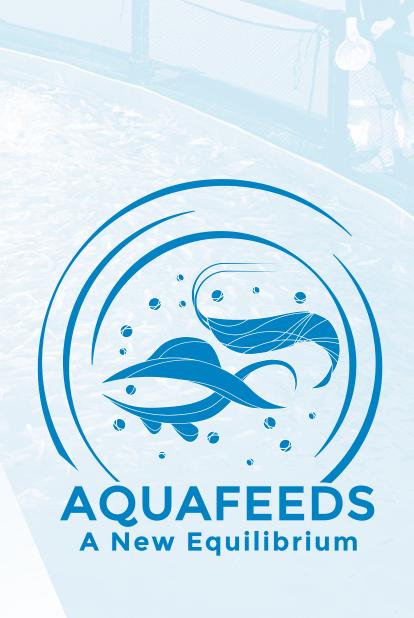
Rizky graduated from the University of Washington, Seattle, USA with a Bachelor of Science in Aquatic and Fisheries Science with a Minor in Marine Biology in 2013. He attended the Shanghai International Studies University for Chinese Language Courses in 2013-2014. Rizky is very active in the community of second-generation farmers and is the Founder of the Young Shrimp Farmers Association (Petambak Muda Indonesia). He is Head of the Shrimp Club Indonesia (SCI), Sumbawa Chapter. Rizky is also involved with PT Indo Nautilus Pharma, a startup that focuses on converting shrimp wastes such as chitin into chitosan for the health foods, cosmetics and other markets and NUSEA, an initiative to transform shrimp farming to be more traceable and sustainable.



Jarin Sawanboonchun
Aquaculture Technical Specialist
Cargill Siam, Ltd
Thailand.

Jarin's background is in aquaculture nutrition. Her expertise encompasses various aspects of production, including farm management, development of feed and nutrient technologies, and providing technical assistance to support fish and shrimp farmers in Thailand. She previously worked as Technical Sales Manager at Ridley Corporation (Thailand), and as nutritionist at Gold Coin Specialties (Thailand), responsible for developing shrimp feed formulations (including functional feeds and zero fishmeal formulations) for feedmills in Thailand and Indonesia. Prior to this, Jarin was at Cargill Animal Nutrition as Technology Deployment Manager. Currently at Cargill Siam Ltd, her role is global. Jarin holds a Master's degree and PhD in aquaculture from the University of Stirling, Scotland.

Program



DAY 1: THURSDAY, OCTOBER 6, 2022

7:15am - 7:55am Registration

8:00am - 8:10am Welcome Address

SESSION 1: STATE OF THE AQUAFEED INDUSTRY IN ASIA AND GROWTH IN VIETNAM

8:10am - 8:30am Current Events and Volatility in Aqua Feed Ingredients: The Journey to Sustainable

Commodities

Karla Canavan, Vice President, Commodity Trade and Finance, World Wildlife Fund

(WWF), USA

8:30am - 8:50am Status of Asia's Aquafeed Industry: Dealing With The Challenges and Striving Towards

Greater Sustainability

Piet Verstraete, Managing Director 4SEA Consulting Ltd, Thailand

8:50am - 9:10am Formulation Techniques for Capturing Genetic Potential of Aqua Species and Optimising

Digestible Amino Acid Content

Matthew Clark, Director FeedGuys Resources Pte Ltd, Singapore

Olivier Decamp, Group Technical Marketing Product Director &

9:10am - 9:30am Challenges in Shrimp Production in Vietnam: Role of Aquafeed Players

Nguyen Van Khanh, Head of Technical Service and Sales, Grobest, Vietnam

9:30am - 10:00am Q&A Panel with Speakers and Industry players, Moderator: Ronnie Tan

SESSION 2: IMPROVING FEED EFFICIENCY AND FUNCTIONAL FEEDS - MORE WITH LESS

10:30am - 10:50am Precision Farming and Precision Nutrition: Improving Aquaculture's Efficiency

Thomas Wilson, Aquaculture Consultant, DSM Nutritional Products Asia Pacific, Thailand

10:50am - 11:10am Improving Efficiency through a Holistic Genetic X Nutritional Approach at Hatchery and

Farm Level

Frederic Jozwiak*, Product Manager - Health Solutions, INVE Aquaculture &

Bruno Decock, Operations Manager, Shrimp Breeding Asia, Belgium

* Presenter

11:10am - 11:30am Palatability Enhancers: Essential Nutrient for Aquafeeds

Bundit Yuangsoi, Lecturer Department of Fisheries, Faculty of Agriculture of Khon Kaen

University, Thailand

11:30am - 11:50am What are the Cost Implications of Using Functional Additives for Farmers and What will

the Incentives be for Feedmillers to Change?

Ruth Garcia Gomez, Business Development Manager Aquaculture Farm Care & Health

ISC/APAC, Adisseo, Spain

11:50am - 12:10pm Postbiotic from Yeast Fermentation Mitigates Stress in Tilapia

Wee Kok Leong, Regional Technical Director Aquaculture for APAC, Diamond V, Thailand

12:10pm - 12:40pm Q&A Panel with Speakers and Industry players, Moderator: Jarin Sawanboonchun

12:40pm - 2:00pm Lunch

SESSION 3: ADOPTION OF NOVEL FEED INGREDIENTS/ADDITIVES

2:00pm - 2:20pm Cost and Performance Challenges in Evaluating Fish-Free Feeds, Novel Ingredients and

Additives

Loc Tran, Senior Advisor for Minh Phu, AquaMekong/Founder and Director of ShrimpVet

Laboratory, Vietnam

2:20pm - 2:40pm Production and Economic Sustainability in Indonesia's Aquafeed Industry

Romi Novriadi, Lecturer, Jakarta Technical University of Fisheries, Indonesia

2:40pm - 3:00pm The Solution for Stress Mitigation - A Technical and Innovation Perspective

Benny Shapira, Global R&D Manager - Phibro Animal Health Corporation, Israel

3:00pm - 3:20pm Fishmeal Alternatives and Formulation Approaches

Nguyen Duy Hoa, Global Technical Director, Empyreal Products, Cargill Inc., Vietnam

3:20pm - 3:50pm Q&A Panel with Speakers and Industry players, Moderator: Rizky Darmawan

SESSION 4: SMART FEED MANAGEMENT

4:20pm - 4:30pm Introduction

Regis F Bador, Senior Aquaculture Expert, New Caledonia

4:30pm - 4:50pm Al and Satellite Technology in Feed Management for Sustainable Aquaculture

Masahiko Yamada, Co-founder & Managing Director of UMITRON, Singapore

4:50pm - 5:10pm Smart Feed Management and use of IoT in Aquaculture

Ravikumar Bangarusamy, Assistant Vice President - Sales & Technical of Growel Feeds

Pvt Ltd. India

5:10pm - 5:40pm Q&A Panel with Speakers and Industry players, Moderator: Regis Bador

6:30pm - 8:30pm Cocktail Reception

DAY 2: FRIDAY, OCTOBER 7, 2022

SESSION 5: FUTURE PROOFING AND SUSTAINABILITY ISSUES WITH AQUAFEEDS

8:00am - 8:20am Future Directions for Marine Ingredients

Brett D. Glencross, Technical Director, IFFO The Marine Ingredients Organisation, UK

8:20am - 8:40am Perspectives on ESG and its Role in Aquafeed Production

Danny Miller, Sustainability and ESG Lead Specialist, Aquaculture, World Wildlife Fund

(WWF), USA

8:40am - 9:10am Q&A Panel with Speakers and Industry players, Moderator: Daranee Seguin

SESSION 6: INDUSTRY DIALOGUE ON RISK MITIGATION AND INVESTMENTS

9:10am - 10:10am

- Carlos Diaz, Chief Executive Officer of BioMar Group, Denmark
- · Aaron McNevin, Global Network Lead, Aquaculture, World Wildlife Fund, USA
- Benedict Tan, Programme Manager, Hatch Blue, Singapore
- Piers Lakin, Senior Associate of Investments, Ocean 14 Capital, United Kingdom
- · Michael Sweeney, Partner, Bluegrass Partners, Hong Kong SAR
- Ronnie Tan (moderator)

10:10am - 10:30am Open forum with questions from the floor

10:30am - 11:00am Tea Break

SESSION 7: INTERACTIVE BREAKOUT ROUNDTABLES

11:00am - 12:30am Group 1: Feedmillers & Farmers (FF)

Group 2: Feedmillers & Processors (FP)

Group 3: Feedmillers & Feed Ingredient Suppliers (FIS)

12:30pm - 2:30pm Lunch

SESSION 8: HARD TALK WITH BUSINESS LEADERS

2:30pm - 3:30pm • Henrik Aarestrup, Vice President LATAM, Shrimp & Hatchery, BioMar Group, Denmark

• Tony Dang Quoc Tuan, Owner, Tony Tuan Farm, Vietnam

• Josh Goldman, Founder/CEO at Australis Aquaculture, US

• Christopher Tan, Director, Mida Trade Ventures Pte Ltd, Singapore

Ronnie Tan (moderator)

3:30pm - 4:00pm Tea Break

SESSION 9: PRESENTATIONS ON SUMMARY FROM 3 BREAKOUT GROUPS AND Q&A

4:00pm - 6:00pm Group 1: Feedmillers & Farmers (FF)

Group 2: Feedmillers & Processors (FP)

Group 3: Feedmillers & Feed Ingredient Suppliers (FIS)

6.00pm Closing of TARS 2022

Organizers & Sponsors



SUPPORTING AGENCY/ORGANIZERS



Ministry of Agriculture and Rural Development, Directorate of Fisheries

MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT - DIRECTORATE OF FISHERIES

The Ministry of Agriculture and Rural Development (MARD) is a government ministry responsible for rural development and the governance, promotion and nurturing of agriculture and the agriculture industry, in Vietnam. The purview of the Ministry includes forestry, aquaculture, irrigation and the salt industry; it is also involved in water management and flood control. Located in Hanoi, the Ministry maintains 64 provincial department offices throughout Vietnam. MARD has been developed since 1987 with the combination of different government ministries: Ministry of Agriculture, Ministry of Food, combined with the Ministry of Agriculture and Food Industry in 1987; and the subsequent addition of the Ministry of Forestry and the Ministry of Irrigation, as well as the addition of the Ministry of Fisheries in 2007. MARD was officially formed in 1995.

https://www.mard.gov.vn



AQUA CULTURE ASIA PACIFIC

Aqua Culture Asia Pacific (AAP) is a regional trade magazine for the fast-developing aquaculture industry. Published by Aqua Research PL six times a year, the magazine was launched in 2004 by Zuridah Merican, PhD., a consultant with more than 30 years' experience in aquaculture. Striving to be the beacon for Asia-Pacific's aquaculture industry, AAP features a wide range of industry topics along the value chain, from hatchery to seafood marketing. www.aquaasiapac.com



CORPORATE MEDIA SERVICES

An award-winning communications agency established in 1992 by Irene M Gomez, Corporate Media Services (CorpMedia) has 30 years of experience in marketing, public relations, publishing and event management. CorpMedia works with a diverse group of clients representing corporate, government and nongovernment organizations, investment, hospitality, food, agriculture, health, science and technology sectors. CorpMedia strives to bring global perspectives to an ever-changing world of communication dynamics. www.corpmediapl.com

Sponsors



ADISSEO

Adisseo, one of the world's leading experts in feed additives, offers species specific solutions and services for aquaculture. Through its dedicated Business Unit Aquaculture, Adisseo helps producers across the world grow fish and shrimp in a more sustainable and profitable way. Key specialty programs are health (prevention of diseases and parasites); digestion (digestive/metabolic enhancers) and palatability (attractants), besides a wide range of nutritional and technological feed additives for optimizing aqua feed production (specialty nutrition and feed quality programs). A specific farm care portfolio has been developed for optimizing health and environmental conditions in shrimp farming. At Adisseo, field-experienced aquaculture professionals provide advice and services to our customers through the Global Service Platforms for Aquaculture Nutrition and Aquaculture Health. Adisseo relies on its 10 research centers and its production sites based in Europe, USA and China to design, produce and market nutritional solutions for sustainable animal feed. With more than 2,345 employees, it serves around 3,900 customers in over 110 different countries through its global distribution network. In 2020, Adisseo achieved a turnover of over 1.51 billion Euros. Adisseo is one of the main subsidiaries of China National BlueStar, leader in the Chinese chemical industry with nearly 21,000 employees and a turnover of 6.8 billion USD. Adisseo is listed on the Shanghai Stock Exchange. www.adisseo.com



BASF ANIMAL NUTRITION

The science of sustainable feed that succeeds. The demand for animal protein grows continuously, and the need for more sustainable animal husbandry becomes increasingly urgent. At BASF, we create chemistry for a sustainable future, and BASF Animal Nutrition has been a pioneer from the beginning, for example in vitamins (Lutavit®) and enzymes (Natuphos®E, Natugrain®TS). Now we are leading the way with more sustainable, successful, science-based solutions. Our products have proven to be efficient, effective and reliable in the lab, in the mill and in the field, promoting animal growth, vitality and wellbeing. Together with other feed additives such as monoglycerides (BalanGut®), carotenoids (Lucantin®, Lucarotin®), trace elements (Glycinates), and organic acids (Amasil®, Luprosil®), combined with greater use of digital tools and technologies, we share our expertise and experience and work together to be more considerate of animals, people and the planet. That is what we stand for at BASF Animal Nutrition: From feed to farm to fork to the future.

https://nutrition.basf.com/global/en/animal-nutrition/species/aquaculture.html



BIOMAR GROUP

BioMar are innovators in high performance aquaculture feed, dedicated to doing our part in creating a healthy and sustainable global aquaculture industry. BioMar operates 17 feed factories across the globe in Norway, Chile, Denmark, Scotland, Spain, France, Greece, Turkey, China, Vietnam, Costa Rica, Ecuador, and Australia. Worldwide, we supply feed to around 90 countries and for more than 45 different species. www.biomar.com



CARGILL BRANDED FEED

Cargill's Starches, Sweeteners and Texturizers business unit has a Feed Division that consists of commodity feed ingredients and branded feed ingredients. The Branded Feed business started in 1995 and has continued to introduce new and unique, functional macro feed ingredients for specific species and markets including dairies, feed yards, and aquaculture. Cargill Branded Feed uses our knowledge of these industries and our expertise and resources from the corn wet milling process to use nutrition to simplify diets with macro ingredients while improving performance with functional benefits of digestive health and improved nutrient utilization. These unique brands also come with a promise of reliable delivery and consistent quality. For aquaculture, Cargill Branded Feed offers the following: Empyreal 75® a corn protein concentrate for salmon and other carnivorous species with many of the functional benefits of fishmeal but as an acceptable, high-value alternative. Motiv™ is a fermented corn protein source that offers many functional benefits that improve digestive health, performance and an improved stress response. www.BrandedFeed.com



DIAMOND V

Diamond V^{\otimes} leads in the research, development, and delivery of unique microbial fermentation postbiotic feed additives for animal nutrition and health, helping to achieve optimal performance and preharvest food safety. Diamond V postbiotics are designed to address real-world challenges in the dairy, beef, poultry, swine, aquaculture, and companion animal industries. Defined by AAFCO as a natural health ingredient for use animal diets, our postbiotic dual-action effect supports the body's immune and digestive systems, helping promote performance. Our unique combination of postbiotics and bioactive compounds work naturally with the animal's biology to maintain immune strength and promote a healthy microbial balance. Diamond V postbiotics support immune health, energy, activity, and vitality for more productive animals. Backed by nearly 80 years of fermentation expertise, animal nutritionists and veterinarians worldwide have recognized Diamond V's leadership in research and development of postbiotics that benefit animal health and wellness. Learn more at www.DiamondV.com.



GROBEST GROUP HOLDINGS LIMITED

At Grobest, we are committed to feeding the world through the development of innovative products to support safe and sustainable aquaculture. Grobest's aquaculture and environmental protection solutions enforce the industry's sustainability through our 360° Nutrition Solution dedicated to functional performance feed for aquatic animals. At the same time, through our mobile, on-site laboratories and exclusive service APP, we support farmers by providing shrimp health and water quality assessment. Confronted by soaring global demand for food due to rapid growth of world population and scarcity of natural resources, we persist with the ideal of "respecting nature for healthy aquaculture" and continue to improve the health and growth of aquatic species by feeding them with advanced nutrition. www.grobest.com



INVE AQUACULTURE AND BENCHMARK GENETICS

As a pioneer in the aquaculture industry, INVE Aquaculture (part of Benchmark) has always been about enabling growth. The healthy growth of fish and shrimp, the growth of our clients' local businesses, and the growth of global aquaculture as a whole. Our advanced nutrition, health, and environment solutions are a solid reference in the market and have a proven added value in hundreds of farms and hatcheries worldwide. Benchmark Genetics is a world leader in breeding and genetics on Atlantic salmon, tilapia, shrimp, and lumpfish, produced in Norway, Iceland, Chile, the USA, Brazil, and Colombia. Next to that BMK Genetics is also a world leader in technical genetic services for the global aquaculture industry. We bring together biology and technology, developing innovative products which improve yield, quality, animal health, and welfare for you, as a customer. We do this by improving the genetics, health, and nutrition of the stocks – from broodstock and hatchery through to nursery and grow out. Together the Benchmark group offers the most complete genetics, nutrition, health, and environmental solutions in the market.

www.inveaquaculture.com or www.bmkgenetics.com



JEFO NUTRITION

Jefo is a global leader in high-performance non-medicated nutritional solutions for animals. Founded in 1982 in Canada, Jefo markets its species-specific products worldwide and massively invests in innovation and development to be the supplier of preference for those striving to reduce or eliminate the use of antibiotics. With its Life, made easier commitment in mind, Jefo uses a practical approach to share its results based on complex scientific research. To improve animal health and increase human longevity by feeding growing populations with better protein sources, Jefo proposes different solutions in their programs. Jefo Care – Health & Prevention, Jefo Peak – Performance & Production and Jefo Cycle – Reproduction. www.jefo.ca/en



PHIBRO AQUA

Phibro Aqua is a division of Phibro Animal Health Corporation, a diversified global developer and manufacturer of a broad range of animal health and nutrition products for the poultry, swine, cattle, dairy and aquaculture markets. Growing worldwide demand for high quality protein, combined with expanding human populations and decreasing wild stocks of fish, assures an increased future dependence on aquaculture products and technologies. The challenge is to develop profitable and sustainable aquaculture practices which will implement advanced technologies. These technologies will allow aquaculture to make a significant contribution to future supplies of aquatic products. Phibro Aqua has developed a strong team of fish health specialists and scientists with a focus on providing the global aquaculture industry with cost effective health management solutions to maximize the productivity of our customer's farms. The Phibro Aqua team brings to customers a full range of expertise in production and operation, fish health management, disease diagnosis and vaccination. Phibro Aqua operates comprehensive research and development facilities. These facilities include a large-scale wet lab for clinical evaluation of fish vaccines, medication and feed additives. Phibro Aqua's lab includes a full diagnostic service addressing parasitology, bacteriology, histopathology and molecular biology. www.phibro-aqua.com



ROYAL DSM N.V.

Royal DSM is a global, purpose-led company in Health, Nutrition & Bioscience, applying science to improve the health of people, animals and the planet. DSM's purpose is to create brighter lives for all. DSM's products and solutions address some of the world's biggest challenges while simultaneously creating economic, environmental and societal value for all its stakeholders – customers, employees, shareholders, and society at large. The company was founded in 1902 and is listed on Euronext Amsterdam. More information can be found at www.dsm.com/animal-nutrition-health



SYMRISE AQUA FEED

In 2022, Diana Aqua became Symrise Aqua Feed. Symrise Aqua Feed produces and offers palatability enhancers, marine ingredients and services that help aquafeed manufacturers to develop high-performance feeds with reliable and proven solutions, ensuring consistent feed intake and performance. Symrise Aqua Feed relies on a unique global network of sales, scientific and technologies experts, a team of 150 passionate employees and three industrial sites all over the world. Within the Symrise Group, Symrise Taste, Nutrition & Health leverages the Group's capabilities to provide advanced natural health & well-being nutrition solutions for the human food, pet food and aquafeed industries. https://aquafeed.symrise.com

Speakers & Moderators



Speakers



Karla Canavan

Vice President, Commodity Trade and Finance, Markets World Wildlife Fund USA

Karla Canavan brings 25 years of experience in agribusiness supply chains, trading, investment, wealth management, and finance. Passionate about sustainability, Karla developed her deep understanding of the food and energy value chains through her 20-year career in agribusiness giants Cargill and Bunge. She worked directly with producers and end users to determine logistics, pricing, and marketing, granting her the first-hand field experience that underpins her knowledge of product traceability, social and environmental impact, and profitability factors that are necessary to optimize the food supply chain from farm to table.

She has been active in sustainability markets since 2007 developing the origination strategy for Bunge and directly managing projects which included REDD+, emission reductions, impact investing, clean energy, structured finance, sustainable agriculture, sustainable farming, renewables, waste management, conservation finance, and supply chain optimization, among others. Karla has traded derivatives, stocks, currencies, agricultural commodities, biofuels, and carbon among others. Karla's global markets expertise has led her to be an apt trend identifier.

She has a deep understanding of the value chains of grains (corn, wheat), oilseeds (soybeans, canola, sunflower), tree crops (oil palm, cocoa, coffee), biofuels and feed markets. She has managed projects and teams globally with emphasis on emerging and development markets across geographies including Latin America, Africa, South East Asia, India, and China.



Piet Verstraete

Managing Director, 4SEA Consulting Ltd Thailand

Piet Verstraete is the Managing Director of 4SEA Consulting Ltd since 2006. He has been active in the aquaculture industry for more than 25 years and has serviced customers all over the world. Piet and his team at 4SEA provide nutrition related services to the aquaculture and pet food industry in Asia Pacific and the Mediterranean; mainly for feed mills, additive companies and producers of (novel) ingredients. 4Sea's goal is to "improve the profitability and sustainability of companies active in the aqua- and pet food industry."

4SEA has developed numerous new feeds and premixes for a variety of species and all culture stages based on a strong know-how on ingredients, nutrition and formulation. Apart from the formulation and feed development services, 4SEA has managed projects as diverse as building new feed plants, execute sourcing missions and plant audits, organizing research and field trials, setting up quality assurance systems and supporting the market introduction of additives and novel ingredients.

As part of the consultancy services, Piet held different management positions for customers, mainly in general management, product management, sourcing and purchase and technical management. Prior to 4SEA, Piet was at Aqualma and Unima Group to develop their specific feed program for domesticated fast growing monodon shrimp. He designed, built and managed their state-of-theart feed plant, producing aquafeeds for the production of Label Rouge- and Organic certified shrimp.

After completing academic work in Mexico, Piet started his career in 1995 at the R&D department of INVE Aquaculture. He held several global positions at the INVE Group, including technical manager, product manager and business unit manager for farms and feedmills. At INVE, he gained expertise in formulation and feed design for all live stages of the main aquaculture species and developed several successful specialty premixes, hatchery broodstock and grow-out feeds for marine fish and shrimp.

Piet an international MBA and a degree in Bioengineering, with specialization in aquaculture, and was trained in feed processing and nutrition.



Matthew Clark
Director, FeedGuys Resources Pte Ltd
Singapore

Matthew Clark is a graduate in Agriculture from London University. After three years of experience of livestock farm management in the UK, Matthew moved into an international consulting role and has focused mainly on the feed and farming business in Southeast Asia. During that time, Matthew has supported feed formulation systems starting with the Brill Corporation in Atlanta as Vice President of Product Development in 1990 and then in feed businesses in Southeast Asia. Projects in the feed business have included implementation of operational planning and business solutions for feed ingredient purchasing, farm planning and control, poultry processing and product mix optimization

Matthew is a founding member of Genesis Feed Technologies in Fargo, North Dakota, USA bringing practical knowledge of feed formulation processes to the team to develop new software solutions. Genesis new generation of webbased formulation tools complements existing feed formulation programs enabling more detailed economic decision making in purchasing.



Olivier Decamp

Group Technical, Marketing and Product Director, Grobest Thailand

Olivier Decamp is now Group Technical, Marketing and Product Director at Grobest since March 2022. He joined Grobest as Group Technical Director in 2021. Prior to this, he spent 13 years in various roles at INVE Aquaculture (part of Benchmark Group), covering R&D and product management. The earlier part of his career was spent in the UK (The Natural History Museum, London), Japan (research laboratories in Hiroshima), and USA (The Oceanic Institute in Hawaii). He has vast experience in aquaculture, having worked for over 20 years in shrimp farming in Asia and the Americas, specialising in marine microbial ecology in intensive shrimp farming. In his new function at Grobest, he leads efforts in developing and enhancing the comprehensiveness and reliability of performance data, customer technical service, and the introduction of new, innovative service solutions, as well as technical training programs for our farming partners. Olivier has a PhD in Zoology from The Natural History Museum, London and the University of Leicester (UK) in 1996, with a focus on wastewater microbiology. He is currently based in Thailand.



Nguyen Van Khanh

Head of Technical Service and Sales, Grobest Vietnam

Nguyen Van Khanh joined Grobest Vietnam as Head of Technical Service and Sales in 2020. Khanh has more than 18 years of experience in aquaculture in Vietnam. Prior to joining Grobest, he held various roles at Hendrix Genetics (West Asia) and De Heus Vietnam as Technical & Sales Manager. He was a research assistant at the Research Institute for Aquaculture No.1 (RIA1). Khanh has a Master of Science degree in Aquaculture from Ghent University, Belgium and has published nine publications and reports in the aquaculture.



Thomas Wilson

Aquaculture Consultant, DSM Nutritional Products Asia Pacific Thailand

Thomas Wilson is currently a aquaculture consultant for DSM Nutritional Products Asia Pacific, based in Thailand. He completed his PhD studies at the University of Washington, USA. In 1992 he moved to Thailand to work as a nutritionist-feed formulator for Unicord Feed Co, then Aquastar, followed by ThaiLuxe Enterprises, where he became executive vice president, until his retirement at the end of 2014.

Since 2015, he has been an independent aquaculture nutrition consultant for several multinational companies, specialising in sustainable feed development.



Frederic Jozwiak

Product Manager - Health Solutions, INVE Aquaculture Belgium

Frederic Jozwiak is from an aquaculture background, with a global hands-on experience in shrimp and fish production sites. His interests are in production SOP, nutrition, biosecurity, health & environmental management and diagnostic methods for aquatic pathogens. During the last decade, he worked in animal nutrition within the feed additive industry. Since the past five years, Frederic has been with INVE Aquaculture in product management, leading the health portfolio, which offers risk prevention solutions along with market segments such as biocides, water conditioners, and probiotics. The applications are from hatchery to farm and into shrimp and fish production.

Frederic has a master's degree in the field of Biochemistry, Microbiology & Food Processing from the ENSCP engineering school in Bordeaux, France. He has 15 years' experience in shrimp farming (Ecuador, Madagascar, Indonesia and New-Caledonia) and fish farming (Madagascar, Mozambique and Corsica in France). At TARS 2022, Frederic is part of the INVE Aquaculture and Benchmark Genetics team (with Bruno Decock - Operations Manager, Shrimp Breeding Asia) presenting on a holistic approach combining nutrition and genetics for efficiency in farming.



Bundit Yuangsoi

Lecturer, Department of Fisheries, Faculty of Agriculture Khon Kaen University Thailand

Bundit Yuangsoi is a lecturer at Department of Fisheries, Faculty of Agriculture, Khon Kaen University, Khon Kaen, Thailand since 2009. He completed his PhD in Aquaculture from the Faculty of Fisheries, Kasetsart University, Thailand, with a focus on aquatic animal nutrition. Bundit is currently focusing on improving the nutritive value of feed ingredients for aquafeed, functional feed additives to improve the growth performance and health status, and fish meal replacement in aquafeeds for the sustainability of aquaculture.



Ruth Garcia Gomez

Business Development Manager, Aquaculture Farm Care & Health ISC/APAC, Adisseo Spain

Ruth G Gomez recently joined Adisseo's Aqua Team as Business Development Manager Aquaculture Farm Care & Health for the ISC/APAC regions, and is based in Thailand. Since 2001, Ruth has worked in fish health management with a wide range of tropical and temperate species (e.g. shrimp, catfish, tilapia, marine finfish, among others), in various countries in Africa (Uganda, Democratic Republic of Congo), Asia (Vietnam and Cambodia), the Maghreb (Morocco and Egypt), Latin America (Ecuador and Colombia) and Europe (Spain and France), in the fields of aquaculture, aquatic animal health, and aquatic biosecurity. She worked as FAO Aquaculture Specialist, ASC Standards Coordinator for fish health and fish welfare, and as aquatic health specialist in various companies, institutions and research organizations. During 2010-2020, Ruth was in the Pacific Region where for the Secretariat of Pacific Community (SPC) as Aquaculture and Aquatic Biosecurity Specialist; and during 2020-2022 for the Cawthron Aquaculture Institute and Aquaculture New Zealand - New Zealand Fish Farmers Association.

Ruth graduated in Veterinary Science-Animal Husbandry from the Complutense University of Madrid, Spain, with a specialisation in Aquaculture and Aquatic Health Science. She completed her PhD in Veterinary Science Branch-Aquatic Animal Health Department at the same university and has a degree in international development strategies, agents, and policies from the Basque Country University in 2006.



Wee Kok Leong

Regional Technical Director Aquaculture for APAC, Diamond V Thailand

As Regional Technical Director, Aquaculture for APAC, Wee Kok Leong provides technical assistance and support to aquaculture producers and feed industry professionals, including veterinarians, and nutritionists, throughout the region served by our Asia Office.

Prior to joining Diamond V, Kok Leong worked extensively in the aquaculture feed mill sector, responsible for the selection of raw materials and formulation and providing technical support to customers. He also served as a university lecturer and academic supervisor at various reputable universities, and as technical consultant to organizations. His collective competencies lie in research and development of innovative feed additive products and new applications, feed and nutrition formulation, technical review, and training. He is well-known and highly recognized in the aquaculture industry for both feed milling and feed additives. Kok Leong holds an M.Sc. in Aquaculture and Fishery Management and a PhD in Fish Nutrition, both from the University of Stirling, UK.



Loc Tran
Senior Advisor for Minh Phu AquaMekong
Founder and Director of ShrimpVet Laboratory
Vietnam

Loc Tran is Senior Advisor for Minh Phu AquaMekong and founder and director of ShrimpVet Laboratory in Vietnam where he leads a team of more than 80 researchers and technicians. Tran's research while at the University of Arizona identified early mortality syndrome (EMS), a disease that caused USD1 billion in farmed shrimp losses in Vietnam alone. EMS is caused by a bacterial agent colonising the shrimp gastrointestinal tract and producing a toxin responsible for tissue destruction and dysfunction of the shrimp digestive organ. ShrimpVet which has a state-of-the-art shrimp and fish disease diagnostics laboratory, is also a vertically integrated operation with a commercial hatchery/nursery and algae laboratory, grow-out farm and provides extension services. Research at ShrimpVet includes genetics, disease diagnostics and disease management, hatchery and farming technologies, nutrition, therapeutics development and new aquaculture technologies.



Romi Novriadi
Lecturer
Jakarta Technical University of Fisheries
Indonesia

Romi Novriadi is a lecturer at the Jakarta Technical University of Fisheries (Politeknik Ahli Usaha Perikanan) since October 2021, and Head of Fish Nutrition Study since January 2022. Prior to this, he was a senior researcher at the Directorate General of Aquaculture, Ministry of Marine Affairs and Fisheries, Republic of Indonesia and Vice Chairman of the Indonesia Aquaculture Society. His research expertise is in aquaculture nutrition, immunology, aquaculture technology and disease management.

Romi has a Master's degree M.Sc in aquaculture from Ghent University, Belgium and under the Fulbright program, a PhD from Auburn University, Alabama, USA. Romi is currently focusing on the development of shrimp farming systems, evaluation of nutritional requirements for shrimp and marine fish, and evaluation of novel ingredients and feed supplemental properties to enhance the growth and health status of aquatic organisms. He is the founder of (super) intensive farming system for vannamei shrimp culture in the concrete tank.



Benny ShapiraGlobal R&D Manager - Phibro Animal Health Corporation Israel

Benny Shapira is Global R&D Manager at Phibro Animal Health Corporation in Israel. In his current role, he leads a team of aquaculture specialists in all projects related to product improvement, development and innovation. He is a qualified researcher, skilled in contemporary analyzing technologies, marine biology and aquaculture, and combines his managerial experience in multiple disciplines to bring innovative ideas to the R&D processes he leads.

Prior to Phibro Animal Health Corporation, Benny was CEO of a microalgae company growing haematococcus pluvialis for pharmaceuticals and cosmetics.

Benny graduated from the Faculty of Agriculture, Fish Reproduction and Endocrinology at Hebrew University with a Masters (M.Sc) degree in animal science after completing his Bachelor's (B.Sc) degree in marine science.



Nguyen Duy HoaGlobal Technical Director
Empyreal Products, Cargill Inc.
Vietnam

Nguyen Duy Hoa is Global Technical Director, Empyreal Products, Cargill Inc. since December 2016. Hoa has spent more than 27 years in aquaculture research and business where he spent more than 17 years working for the National Research Institute for Aquaculture; a year working for INVE Thailand as key accounts manager for shrimp health products; and 3.5 years for Cargill Vietnam as leader of aquaculture nutrition.

Hoa is well-known and recognised in the shrimp industry and among aquafeed mills in Vietnam and the Southeast Asia Region. He provides technical advice and training to shrimp farms, leads technical and sales teams for large shrimp feed and aquafeed mills in the region both in person and online; and gives presentations at various international workshops and conferences. In 2009 and 2009, he received award certificates from the Ministry of Agriculture and Rural Development for his aquaculture research achievements.

Hoa has Bachelor's degree in Aquaculture from Nong Lam University, Vietnam, and holds a Master's degree and Ph.D in aquaculture, both from Ghent University, Belgium.



Masahiko Yamada Co-founder / Managing Director, UMITRON Pte. Ltd.

Singapore

Masahiko Yamada is Co-founder, Managing Director of UMITRON which is a deep-tech company whose aim is to solve worldwide food and environmental problems by empowering aquaculture through technology such as IoT, satellite remote sensing, and Al.

Masa was involved in the development of microsatellites at Kyushu University. Next at Mitsui & Co, he worked for the electricity retail business, building power futures trading models using weather data. He also worked at Metaps, an AI company until its listing, where he was engaged in analysing consumer data. Masa founded UMITRON to apply technologies developed in other fields, such as AI and aerospace technology, to aquaculture.



Ravikumar Bangarusamy

Assistant Vice President - Sales & Technical, Growel Feeds Pvt Ltd India

Ravikumar Bangarusamy is an aquaculture expert working in the field of aquaculture for more than 25 years in India, Philippines, Iran, Madagascar, Mozambique, Malaysia, Thailand, Indonesia, Sri Lanka and Bangladesh. He obtained his Bachelor of Fisheries Science (B.F.Sc.,) and Master of Fisheries Science (M.F.Sc.,) from the Fisheries College and Research Institute, Tamilnadu Veterinary and Animal Sciences University, Tuticorin, India. He has worked in network of aquaculture centres in Asia-pacific (NACA), IFC- World Bank group, Asian Development Bank (ADB) and Worldfish projects as an aquaculture specialist and project manager, and as BMP expert in FAO projects related to improving the livelihoods of small-scale farmers in Indonesia and Bangladesh. Ravikumar has also worked as a Farm Manager at integrated shrimp farming projects in Africa promoted by European companies. He is currently Assistant Vice President – Sales & Technical at Growel Feeds Pvt. Ltd., India.



Brett D. Glencross

Technical Director IFFO The Marine Ingredients Organisation United Kingdom

Brett Glencross is Technical Director of IFFO (The Marine Ingredients Organisation) since June 2021. Prior to this role, he was the Professor of Nutrition at the Institute of Aquaculture at the University of Stirling in Scotland, where he maintains a position as a honorary professor.

Over the past 25 years he has worked in various academic, industrial, and institutional roles across Asia, Europe, the Middle East, and Oceania. His career has been characterised by a close working relationship with many aquaculture production (farming) and feed companies throughout each of these regions. His research achievements have delivered many industrial outcomes resulting in the development of new processes, products, and applications.

For his achievements in this regard, Brett received multiple awards and commendations from both Government and Industrial organisations. At an academic level, he was one of the former editors of the journal Aquaculture Nutrition from 2008 to 2016. He is the current Chair of the International Scientific Committee of the International Symposium for Fish Nutrition and Feeding (ISFNF) and was the convening chair of the Feeds and Feeding thematic review at the recent FAO Global Conference on Aquaculture held in Shanghai. He has been a Director of the Asia-Pacific Chapter of the World Aquaculture Society (2013 – 2016), and has undertaken leadership roles at the CSIRO in Australia and the Institute of Aquaculture.

Brett has honours and masters degrees in Biochemistry from the University of Western Australia and a PhD in Animal Nutrition from the University of Queensland, Australia.



Danny Miller

Sustainability and ESG Lead Specialist, Aquaculture World Wildlife Fund USA

Danny Miller is Lead Specialist, Aquaculture on the WWF-US Aquaculture team. He develops and implements strategies that will improve the sustainability of the global aquaculture sector; including the enhancement of transparency in global supply chains through more rigorous financial reporting, the generation of business case valuation models for natural resources used in animal protein commodities, and the development of sustainability risk-based assessments for companies that procure or produce aquaculture. Before joining WWF, Danny provided sustainability and ESG leadership and expertise to non-profits, startups, and investment firms focusing on agriculture and aquaculture. Danny received his Master's degree in Sustainability Management from Columbia University where he focused on the intersection of sustainable food systems and finance. He also has nearly a decade of experience in finance, sales, and non-profit management.

Moderators



Ronnie Tan
Regional Aquaculture Consultant
US Grains Council
Malaysia

Ronnie Tan currently serves on the advisory board of Calysta, USA and is the regional aquaculture consultant with the US Grains Council, and advisor to BASF, Germany. He also acts as a mentor at Hatch - an aquaculture startup accelerator. Ronnie stepped down as Vice-President at Blue Archipelago - the largest integrated shrimp enterprise in Malaysia, responsible for downstream operations and corporate strategy. He was Executive Director and board member at Regal Springs Group - the largest tilapia integrator in the world, responsible for global feed supply and held a supervisory role of the Indonesia legal entity. He co-led the sale of the company. Ronnie started his career building the aquaculture feed division in the Gold Coin Group. An aquaculturist by training, he has over 38 years' experience in international marketing, supply chain and general management in multinational chemical and feed companies such as Rhone Poulenc and Imperial Chemical Industries. He was a board member of the Malaysian Palm Oil Board and ICI's representative to RSPO (Roundtable on Sustainable Palm Oil). Ronnie, who is Malaysian, read Environmental Biology at King's College, University of London and obtained his MSc. in Aquaculture from University of Stirling, Scotland, UK.



Daranee Seguin
Technical Director Aqua, SEA

Phibro Animal Health Corporation Thailand

Daranee Seguin recently joined Phibro's Aqua Team as Technical Director Aquaculture for the Southeast Asia region, based in Thailand. Prior to this appointment, she worked as Technical Expert, Aquaculture with DSM Nutritional Products for 6 years. She has 15 years of research experience in developing nutritionally complete, functionally health benefit, environmentally sound, and cost-effective diets for commercial of fish and shrimp.

For 11 years, she was involved in the health management of commercial shrimp feed formulation and feed mill operations. Her main focus areas include research and development of functional additives and feeds, and the use of alternative protein and lipid sources to improve nutrition and health in a wide range of warmwater species (e.g. shrimp, pangasius, tilapia, and marine finfish).

Daranee holds a MSc in Appropriate Technology in Resources and Environment Development from Mahidol University, Thailand and a PhD in Aquaculture Nutrition from Auburn University, USA.



Regis F. BadorSenior Aquaculture Expert
New Caledonia

Since Jan 2018 to May 2022, Regis was Senior Advisor of Cargill Animal Nutrition Technologies, USA, for iQuatic digital platform development, worldwide and as Lead of the iQuatic Academy & the iQuatic Insights Explorer Team. Previously, from 2016-2017, he was General Manager of AQ1 Systems Panamá, subsidiary of AQ1 Systems Australia. His job was to create and organise marketing & servicing activities of the unique advanced technology to manage shrimp feeding based on instant acoustic monitoring in whole Latin America and the US. From May 2012 to 2016, he was founder & Managing Director of Innov'Aquaculture Sarl, based in New Caledonia.

Regis started his career in aquaculture in 1983 as a researcher at IFREMER, Tahiti, French Polynesia, & Paris, France. He worked 11 years New Caledonia, as Manager, SODACAL S.A., the largest farm in New Caledonia, producing stylirostris and as General Manager, Ecloserie de Mara, SAS, both in Moindou, New Caledonia. He was also involved in the implementation of up-to-date RAS technology for this 23-year-old hatchery. Regis also worked in CENIACUA in Cartagena, Bogotá & Tumaco and Madagascar.



Rizky DarmawanDirector
PT Delta Marine Indonesia
Indonesia

Rizky Darmawan is Director at PT Delta Marine Indonesia, 70-ha farm with 30-ha developed in Sumbawa, West Nusa Tenggara, Indonesia. After graduation, Rizky took over the operations of the farm in Sumbawa from his father who now manages the harvesting and distribution activities of the company, using raw materials supplied by the farm as well as from other farms.

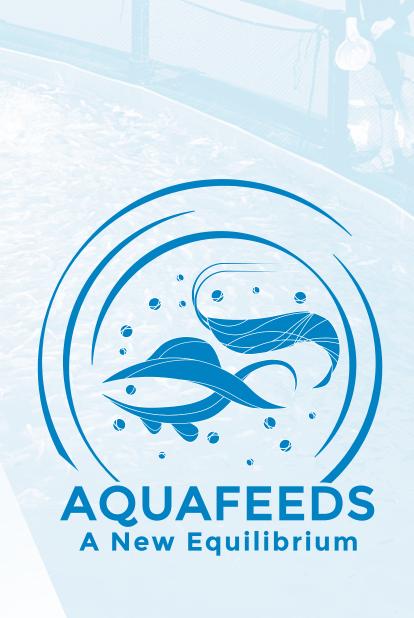
Rizky graduated from the University of Washington, Seattle, USA with a Bachelor of Science in Aquatic and Fisheries Science with a Minor in Marine Biology in 2013. He attended the Shanghai International Studies University for Chinese Language Courses in 2013-2014. Rizky is very active in the community of second-generation farmers and is the Founder of the Young Shrimp Farmers Association (Petambak Muda Indonesia). He is Head of the Shrimp Club Indonesia (SCI), Sumbawa Chapter. Rizky is also involved with PT Indo Nautilus Pharma, a startup that focuses on converting shrimp wastes such as chitin into chitosan for the health foods, cosmetics and other markets and NUSEA, an initiative to transform shrimp farming to be more traceable and sustainable.



Jarin Sawanboonchun
Aquaculture Technical Specialist
Cargill Siam, Ltd
Thailand.

Jarin's background is in aquaculture nutrition. Her expertise encompasses various aspects of production, including farm management, development of feed and nutrient technologies, and providing technical assistance to support fish and shrimp farmers in Thailand. She previously worked as Technical Sales Manager at Ridley Corporation (Thailand), and as nutritionist at Gold Coin Specialties (Thailand), responsible for developing shrimp feed formulations (including functional feeds and zero fishmeal formulations) for feedmills in Thailand and Indonesia. Prior to this, Jarin was at Cargill Animal Nutrition as Technology Deployment Manager. Currently at Cargill Siam Ltd, her role is global. Jarin holds a Master's degree and PhD in aquaculture from the University of Stirling, Scotland.

Program



DAY 1: THURSDAY, OCTOBER 6, 2022

7:15am - 7:55am Registration

8:00am - 8:10am Welcome Address

SESSION 1: STATE OF THE AQUAFEED INDUSTRY IN ASIA AND GROWTH IN VIETNAM

8:10am - 8:30am Current Events and Volatility in Aqua Feed Ingredients: The Journey to Sustainable

Commodities

Karla Canavan, Vice President, Commodity Trade and Finance, World Wildlife Fund

(WWF), USA

8:30am - 8:50am Status of Asia's Aquafeed Industry: Dealing With The Challenges and Striving Towards

Greater Sustainability

Piet Verstraete, Managing Director 4SEA Consulting Ltd, Thailand

8:50am - 9:10am Formulation Techniques for Capturing Genetic Potential of Aqua Species and Optimising

Digestible Amino Acid Content

Matthew Clark, Director FeedGuys Resources Pte Ltd, Singapore

Olivier Decamp, Group Technical Marketing Product Director &

9:10am - 9:30am Challenges in Shrimp Production in Vietnam: Role of Aquafeed Players

Nguyen Van Khanh, Head of Technical Service and Sales, Grobest, Vietnam

9:30am - 10:00am Q&A Panel with Speakers and Industry players, Moderator: Ronnie Tan

SESSION 2: IMPROVING FEED EFFICIENCY AND FUNCTIONAL FEEDS - MORE WITH LESS

10:30am - 10:50am Precision Farming and Precision Nutrition: Improving Aquaculture's Efficiency

Thomas Wilson, Aquaculture Consultant, DSM Nutritional Products Asia Pacific, Thailand

10:50am - 11:10am Improving Efficiency through a Holistic Genetic X Nutritional Approach at Hatchery and

Farm Level

Frederic Jozwiak*, Product Manager - Health Solutions, INVE Aquaculture &

Bruno Decock, Operations Manager, Shrimp Breeding Asia, Belgium

* Presenter

11:10am - 11:30am Palatability Enhancers: Essential Nutrient for Aquafeeds

Bundit Yuangsoi, Lecturer Department of Fisheries, Faculty of Agriculture of Khon Kaen

University, Thailand

11:30am - 11:50am What are the Cost Implications of Using Functional Additives for Farmers and What will

the Incentives be for Feedmillers to Change?

Ruth Garcia Gomez, Business Development Manager Aquaculture Farm Care & Health

ISC/APAC, Adisseo, Spain

11:50am - 12:10pm Postbiotic from Yeast Fermentation Mitigates Stress in Tilapia

Wee Kok Leong, Regional Technical Director Aquaculture for APAC, Diamond V, Thailand

12:10pm - 12:40pm Q&A Panel with Speakers and Industry players, Moderator: Jarin Sawanboonchun

12:40pm - 2:00pm Lunch

SESSION 3: ADOPTION OF NOVEL FEED INGREDIENTS/ADDITIVES

2:00pm - 2:20pm Cost and Performance Challenges in Evaluating Fish-Free Feeds, Novel Ingredients and

Additives

Loc Tran, Senior Advisor for Minh Phu, AquaMekong/Founder and Director of ShrimpVet

Laboratory, Vietnam

2:20pm - 2:40pm Production and Economic Sustainability in Indonesia's Aquafeed Industry

Romi Novriadi, Lecturer, Jakarta Technical University of Fisheries, Indonesia

2:40pm - 3:00pm The Solution for Stress Mitigation - A Technical and Innovation Perspective

Benny Shapira, Global R&D Manager - Phibro Animal Health Corporation, Israel

3:00pm - 3:20pm Fishmeal Alternatives and Formulation Approaches

Nguyen Duy Hoa, Global Technical Director, Empyreal Products, Cargill Inc., Vietnam

3:20pm - 3:50pm Q&A Panel with Speakers and Industry players, Moderator: Rizky Darmawan

SESSION 4: SMART FEED MANAGEMENT

4:20pm - 4:30pm Introduction

Regis F Bador, Senior Aquaculture Expert, New Caledonia

4:30pm - 4:50pm Al and Satellite Technology in Feed Management for Sustainable Aquaculture

Masahiko Yamada, Co-founder & Managing Director of UMITRON, Singapore

4:50pm - 5:10pm Smart Feed Management and use of IoT in Aquaculture

Ravikumar Bangarusamy, Assistant Vice President - Sales & Technical of Growel Feeds

Pvt Ltd. India

5:10pm - 5:40pm Q&A Panel with Speakers and Industry players, Moderator: Regis Bador

6:30pm - 8:30pm Cocktail Reception

DAY 2: FRIDAY, OCTOBER 7, 2022

SESSION 5: FUTURE PROOFING AND SUSTAINABILITY ISSUES WITH AQUAFEEDS

8:00am - 8:20am Future Directions for Marine Ingredients

Brett D. Glencross, Technical Director, IFFO The Marine Ingredients Organisation, UK

8:20am - 8:40am Perspectives on ESG and its Role in Aquafeed Production

Danny Miller, Sustainability and ESG Lead Specialist, Aquaculture, World Wildlife Fund

(WWF), USA

8:40am - 9:10am Q&A Panel with Speakers and Industry players, Moderator: Daranee Seguin

SESSION 6: INDUSTRY DIALOGUE ON RISK MITIGATION AND INVESTMENTS

9:10am - 10:10am

- Carlos Diaz, Chief Executive Officer of BioMar Group, Denmark
- · Aaron McNevin, Global Network Lead, Aquaculture, World Wildlife Fund, USA
- Benedict Tan, Programme Manager, Hatch Blue, Singapore
- Piers Lakin, Senior Associate of Investments, Ocean 14 Capital, United Kingdom
- · Michael Sweeney, Partner, Bluegrass Partners, Hong Kong SAR
- Ronnie Tan (moderator)

10:10am - 10:30am Open forum with questions from the floor

10:30am - 11:00am Tea Break

SESSION 7: INTERACTIVE BREAKOUT ROUNDTABLES

11:00am - 12:30am Group 1: Feedmillers & Farmers (FF)

Group 2: Feedmillers & Processors (FP)

Group 3: Feedmillers & Feed Ingredient Suppliers (FIS)

12:30pm - 2:30pm Lunch

SESSION 8: HARD TALK WITH BUSINESS LEADERS

2:30pm - 3:30pm • Henrik Aarestrup, Vice President LATAM, Shrimp & Hatchery, BioMar Group, Denmark

• Tony Dang Quoc Tuan, Owner, Tony Tuan Farm, Vietnam

• Josh Goldman, Founder/CEO at Australis Aquaculture, US

• Christopher Tan, Director, Mida Trade Ventures Pte Ltd, Singapore

Ronnie Tan (moderator)

3:30pm - 4:00pm Tea Break

SESSION 9: PRESENTATIONS ON SUMMARY FROM 3 BREAKOUT GROUPS AND Q&A

4:00pm - 6:00pm Group 1: Feedmillers & Farmers (FF)

Group 2: Feedmillers & Processors (FP)

Group 3: Feedmillers & Feed Ingredient Suppliers (FIS)

6.00pm Closing of TARS 2022

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