

FOOD PROCESS ENGINEERING

REVOLUTIONISING FUTURE FOODS

SIFBI's Food Process Engineering capability group focuses on developing functional plant-, fungal-, and microbial-based food ingredients of local and Asian origin. Alongside SIFBI's other expertise such as clinical nutrition, biotransformation and fermentation, we bring together proprietary cutting-edge technologies and state-of-the-art food processing equipment in our development of tasty, healthy, convenient and sustainable tailor-made foods. Through our process design and engineering enabler, texturised new alternative proteins that deliver a whole new gastronomic experience can be produced.

With deep knowledge in plant protein fractionation and extrusion texturisation, microencapsulation for target delivery of bioactives and scaffold engineering, the group provides innovative solutions to the food industry from lab to pilot scale by delivering market-ready foods and ingredients.

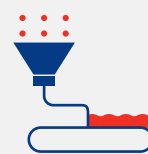
Capabilities



Ingredients
Development
and Formulation



Microencapsulation
for Targeted
Delivery

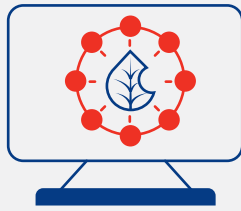


Food
Texturisation

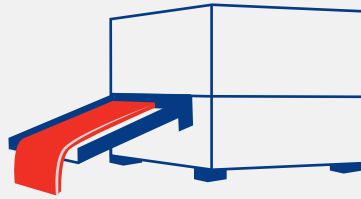


Scaffold
Engineering for
Cultivated Meat

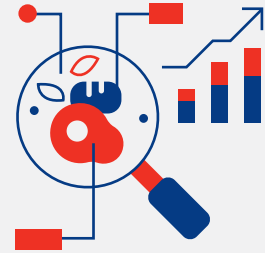
Our Differentiating Factor – Enhanced Future Foods and Ingredients



Tailoring techno-functional properties for food applications



Developing texturisation processes based on structure-functionalities of new food ingredients



Understanding complex multicomponent food systems to increase consumer acceptance

Experiential Journey

Plant-based Asian Foods Galore

Asia's market for plant-based proteins is flourishing, largely due to health and sustainability concerns of animal-based product consumption. For many Asian consumers, sensory characteristics of plant-based food products have challenged its market adoption, necessitating innovations in taste, texture and mouthfeel development. In addition, SIFBI's Food Process Engineering and Nutrition teams work closely together to study and enhance the nutritional profile of the foods developed. In order for plant-based future foods to reach full market potential in this region, new technologies and ingredients to deliver better gastronomic experiences are necessary.



People are more health conscious over the food they eat, and the concern on environmental impacts on consuming real meat are pushing up demand for plant-based meat alternative products in Asia. Our collaboration with the FPE capability group of SIFBI has been an enriching journey in which we are collectively gaining a better understanding of high moisture extrusion and the development of foods that suit Asian palates."

Sien Kiong Lim, General Sales Manager, Leistritz SEA Pte Ltd



Innovation and collaboration are at the core of what KH Roberts does, and this is why we value our partnership with the FPE capability group and Leistritz. This collaboration has been fulfilling and exciting as we share insights on plant-based formulations and extrusion technology, allowing us to offer our expertise in aromas and tastes for Asian consumers."

Derrick Heng, Innovation Manager, KH Roberts Pte Ltd

Contact Us



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