The mission of Department of Food, Agriculture and Bioresources (FAB) is to produce newer generation for striving the solutions to sustainably feeding a hungry and growing world. The department provides the foundation for broad array of research activities, both basic and applied to tackle those challenges and make the newer generations to handle potentially, amidst other efforts by “Sustainable and Safer Food Production and Supply Systems” in the developing countries through natural and balanced ecological approaches. Different academic programs at the Department of Food, Agriculture and Bioresources focus on critical issues and prepare the students to be leaders in the agriculture, aquaculture, livestock, food, and other bioresources professions worldwide. Communities and employers will seek our graduates because of their creative problem solving abilities and their strategic management skills and for their practical application training in the agriculture, aquaculture, food processing, and bio-based economy.

Vision
The FAB Department at the AIT will be evolving into a focal point for addressing the major challenges related to the people and stakeholders we serve. The Department addresses on the following issues through its academic, research and outreach activities:

- Meeting the food and nutritional needs of growing urban and rural populations, with changing dietary preferences;
- Increasing sustainable production and productivity through balancing the ecosystems;
- Enhancing resilience to climate change;
- Finding sustainable solutions to the increasing competition for bioresources;
- Chemical residues free food and food safety;
- Developing new technologies and processes for bioeconomy
Focuses on sustainable processes to enhance the performances in small, medium and large scale enterprises in the globally competitive agricultural-based industries.

Research area

- Sustainability Assessment of Agro-industries
- Risk in Food Marketing Channels
- Contract Farming Systems and Risk Management Analysis
- Enhancing Productivity and Market Linkages
- Food Waste and Loss
- Value Chain Analysis for Food Supply Chains
- Food safety, Risk analysis and Traceability Systems
- Governance Mechanisms in Food Supply Chains
- Agribusiness Development
AGRICULTURAL SYSTEMS AND ENGINEERING

Focuses on the utilization and management of biological and agricultural systems and natural resources with specialization in Agricultural Systems and Engineering.

Research area

- Farm Machinery and Power Management
- Systems Analysis for Sustainable Agriculture
- Precision Farming and Controlled Environment Agriculture
- Design Development
- Traction Mechanics of Off-road Vehicles
- Integrated Crop Management in relation to Food Security
- Crop Tolerance to Soil and Environmental Stresses
- Ecological Agriculture and Organic Farming
- Climate Adaptability and Crop Water Management
- Integrated Pest and Nutrient Management
AQUACULTURE AND AQUATIC RESOURCES MANAGEMENT

Focuses on practical education, research and development of skillful human resource required for sustainable aquaculture and fisheries management to meet the rapidly increasing demand for aquatic food.

Research areas

- Systems Design for Efficient Tropical Aquaculture
- Aquatic Nutrition and Feed Development
- Utilization of Farm-byproducts for Low-cost Feeding
- Genetics and Selective Breeding
- Biosecurity and Health Management in Aquaculture
- Biofloc Technology in Finfish and Shellfish
- Recirculating Aquaculture Systems (RAS)
- Integrated Multitrophic Aquaculture (IMTA)
- Smart Aquaculture, Aquaponic Systems & Organic aquaculture
- Safety and Quality in Aquaculture
Food Engineering and Bioprocess Technology

Focuses on the understanding of food and biological materials, their processing, conversion and utilizations in sustainable, safer and healthy products, with specialization in Food Process Engineering and Bioprocess Technology.

Research area

- Novel Food Processing Technologies
- Mathematical Modeling of Food and Food Processes
- Chemical Sensors and Biosensors for Food Safety Applications
- Probiotics, Functional Foods and Neutraceuticals
- Safety, Risk Assessment and Value-chain Analysis in Food and Other Natural products
- Waste Valorization, Green Technology and Bioeconomy
- Biopackaging and Edible Packaging
- Nanotechnology in Food and Pharmaceutical Applications
- Antimicrobial Resistance (AMR) and Bio-based Alternate Solutions
- Delivery and Controlled Release of Bioactives and Live Cells in Food, Feed and Neutraceuticals
ELIGIBILITY FOR APPLICATION

- Degree in engineering, aquaculture, biology, life sciences, social sciences, fisheries science, agricultural sciences, veterinary sciences and/or other related disciplines
- Degree from an institution of recognized standing

SCHOLARSHIPS AND FELLOWSHIPS

- HM The Queen’s Scholarships
- ADB-Japan Scholarships
- President Robert B. Banks Scholarship
- Royal Thai Government Fellowships
- Many other scholarships from private and public sectors
- Industrial Scholarships
- Royal Thai Government Fellowships (RTG)
- AIT Fellowships

JOB PLACEMENTS

Our graduates find placements in various public, and private sectors, including industries, government agencies, non-government organizations, academia, research organizations and as independent entrepreneurs.
FACULTY MEMBERS

DR. ANIL K. ANAL
HEAD
Bionanotechnology
Food Ingredients and delivery Systems, Food Safety

DR. AVISHEK DATTA
Agricultural Systems, Ecological Farming Systems

DR. JOHN K.M. KUWORNU
Agribusiness Management and Agricultural Policy

DR. KRISHNA R. SALIN
Applied Genetics in Aquaculture, Innovative Technologies in Aquaculture

DR. LOC THAI NGUYEN
Food Engineering, Chemical Sensors

DR. PEEYUSH SONI
Agricultural & Biosystems Engineering

DR. RAM C. BHUJEL
Aqua-Business, Aquaculture Nutrition and Feeding Management, Biostatistics

DR. A. YAKUPITIYAGE
Aquaculture Development, Aquanutrition and Energetics, Integrated Coastal Management

THE HEAD:
Department of Food, Agriculture and Bioresources
School of Environment, Resources and Development
Asian Institute of Technology
P.O. Box 4, Klong Luang, Pathumthani 12120
Thailand

CONTACT US:
Email: FAB-HoD@ait.ac.th
anilkumar@ait.ac.th
Tel: (66) 2 524-5488, 5489, 5450
Fax (66) 2 524-6200, 6071
Website: http://www.serd.ait.ac.th