Professor NGUYEN Khang Duong

I received the PhD degree in Animal Nutrition and Management at Swedish University of Agricultural Sciences in 2004. Five years later, I got the Associate Professor title. I also got a Full Professor title in 2019. At present, I am a member of the Professional Associations of Vietnamese Biogas, a member of academic training at Nong Lam University. I have published more than 80 national and international articles relating on animal methane emissions and biodigester.

I found nutritional solutions balancing emissions and utilization of carbon dioxide as well as reduction of methane: meat production ratios in cattle production, also to reduce greenhouse gas emissions from agricultural activities for net-zero methane for the Vietnamese government up to 2050. In Vietnam, I established and developed the sustainable livestock farming system, black soldier fly (for animal/bird manure treating, crop/food processing wastes treating…), and fuel production based on fractionation of high biomass crops, forage trees, and water plants with emphasis on ruminant and recycling of wastes which is environmentally friendly by using the black soldier fly. It is based on agroecological principles of organic-based inputs and biological control of pests and diseases. The feeding systems for ruminants in mountain areas using sugar cane, leaves from trees, and water plants have been introduced and developed to poor farmers. Besides that, I also set up the low-cost plastic biodigester and improvements to the technology, with over 500,000 units installed and paid for by farmers. It reduced methane production from animal wastes.