Dr. Iksoon Kang

Associate Professor
California Polytechnic State University
San Luis Obispo, CA, USA

Associate Professor (2016 – Present), California Polytechnic State University

Assistant Professor (2009 – 2016), Michigan State University
Associate Principal Scientist (2000 – 2009), Kraft/Oscar Mayer Foods
Research Associate (1996 – 2000), North Carolina State University

PhD. Texas A&M University, College Station, TX, 1996
M.S. California State University, Fresno, CA.1991

B.S. Kon-Kuk University, South Korea, 1988

The overall goal of Dr. Kang's research is to add value to various meat products during processing, with a primary emphasis on product quality and safety improvement. Recently, Dr. Kang's research focuses on sodium and fat reduction in processed meats by combining the techniques of hot-boning, crust-freezing and cold batter mixing. Hot boning technique, although provides superior meat quality and processing yield, has not been fully adapted in industry due to the loss of hot-boned-meat quality during processing. Cold-batter mixing is an emerging technology that can improve protein functionality and gel-forming ability especially when applied to hot-boned and crust-frozen meat. For the improvement of product safety, Dr Kang's research activity has extended to detection and elimination of both loosely-attached and tightly-attached bacteria on animal carcasses. The unique approach of his research is to decontaminate both types of bacteria: Loosely-attached bacteria are contributing to cross-contamination while tightly-attached bacteria survive and cause problems after processing.

Prior to joining Michigan State University, Dr. Kang worked as an associate research scientist at Kraft/Oscar Mayer Foods for 9 years. During the time, Dr. Kang developed low fat sausages using fat-eliminated raw meats, transferred 12 different meat products from batch to continuous production lines, and

implemented hot-boning technology to turkey processing by simultaneous mixing with CO_2 and ice. In addition, Dr. Kang actively involved in various projects including lunchable simplification, deli-style turkey products, and on-line processing of chopped ham.

Having academic and industrial experience, Dr. Kang has been invited to many industrial companies, academic conferences, and various workshops to present his research findings, consultative purposes, expert panel meetings. Dr. Kang has a personal interest in helping companies, research institutes, governments, other countries with the need to add value to their food products, improve overall quality and extend shelf-life, using various and innovative food processing technologies.