

Towards the development of bioactive packaging

By Dr. Zvi Hayouka

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Time: 12 - 1pm

Host: Dr. Yuk Hyun-Gyun

Venue: Seminar Room S15-03-15

Abstract

Designing new approaches to inhibit microbial food contamination while maintaining quality, freshness, and safety are required. In my talk I will present our efforts towards the development of bioactive food processing surface technologies where the active agents are immobilized onto the surface materials via covalent linkages to prevent migration to the food. The active agents that we have developed are novel antimicrobial sequence random peptide mixtures that display strong antimicrobial activity towards food borne pathogens. We are currently exploring methods to immobilize these random peptides mixture onto a model surface and characterizing their antimicrobial activity.

About the speaker



Dr. Zvi Hayouka received his PhD from the Hebrew University of Jerusalem, Israel. He has developed a novel strategy for inhibiting proteins activity or binding by shifting their oligomerization equilibrium towards an inactive state by peptides or small molecules. As a Fulbright scholar, he approached Prof. Samuel H. Gellman at the Chemistry Department, University of Wisconsin-Madison, USA to design and synthesize new types of antimicrobial cationic copolymers. Since July 2014, he has become a group leader in the Department of Biochemistry, Food Science and Nutrition, at the Hebrew University of Jerusalem, Israel. His group mainly focuses on the development of chemical approaches to design effective antimicrobial compounds to improve food safety and food shelf life.