

**Antimicrobial Nano-packaging Systems for Enhancement of Seafood Shelf Life (14 pt)** **Times New Roman**

**Oral Presentation**

**Poster Presentation**

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**Abstract (12 pt) Times New Roman**

Seafood including fish is highly susceptible to physical, chemical and microbiological deterioration, as a function of its natural composition, during both production, processing, storage and transfer stages. Food spoilage due to microorganism growth is a worldwide problem that causes an estimated 25% loss of food before it reaches the consumer after harvest. Especially in order to prevent this important loss in fisheries and all other food products, microbial growth during storage of foods should be scientifically well examined and preservation techniques should be developed. Pathogenic bacteria advance a mechanism of resistance to antimicrobial agents. Therefore, new and more effective alternative antimicrobial agents should be developed.

Nano -active packaging referred to as interactive respond to internal and external alteration in environment of the target food has been considered a constituent of the packaging for several decades. The purpose of active packaging, association with food processing, is to enhance preservation of food products. Active packaging system has several types including, oxygen scavengers, ethylene absorbers, ethanol emitters, antimicrobial and antioxidant drug delivery systems, flavor and odor absorbers, chemical stabilizers etc… Active packaging is proposed to control food environment whereas smart packaging refers to monitor it. The development of chemical sensors and biosensors with taking advantage of the innovation in nanotechnology including several fields i.e., electronic, materials, chemistry, engineering resulted novel sensor devices with promise for food technology. The incorporation of bio- or nano- sensors into food packaging material generates the smart or intelligent packaging. Nano-sensors give opportunity to monitor and provide information of shelf life and freshness of the food, pathogen detection time, or the alterations in the food environment throughout the supply chain. **(12 pt) Times New Roman**

**Keywords:** Antimicrobial, Nano-packaging, Active Packaging, food, Seafood

**Acknowledgment: if necessary**

**Abstracts should be written as English language in microsoft word file.**

**Abstract should contain at least 200 words (12 pt).**