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# Effects of Atmospheric Pressure Plasma Jet on the Conformation and Physicochemical Properties of Myofibrillar Proteins from King Prawn (*Litopenaeus vannamei*)

Flora-Glad Chizoba Ekezie<sup>a,b,c</sup>, Jun-Hu Cheng<sup>a,b,c</sup>, Da-Wen Sun<sup>a,b,c,d\*</sup>

<sup>a</sup> School of Food Science and Engineering, South China University of Technology, Guangzhou 510641, China

<sup>b</sup> Academy of Contemporary Food Engineering, South China University of Technology, Guangzhou Higher Education Mega Center, Guangzhou 510006, China

<sup>c</sup> Engineering and Technological Research Centre of Guangdong Province on Intelligent Sensing and Process Control of Cold Chain Foods, Guangzhou Higher Education Mega Centre, Guangzhou 510006, China

<sup>d</sup> Food Refrigeration and Computerized Food Technology, University College Dublin, National University of Ireland, Agriculture and Food Science Centre, Belfield, Dublin 4, Ireland

## Abstract

The aim of this study was to ascertain the impact of atmospheric pressure plasma jet treatment (APPJ) as a function of treatment times (0, 2, 4, 6, 8 and 10 min) on the conformation and physicochemical properties of myofibrillar proteins (MPs) extracted from king prawn (*Litopenaeus vannamei*). The results showed that the pH and protein solubility were decreased after 10 min treatment of APPJ. These results were also confirmed by dynamic light scattering, which indicated an increase in mean particle diameter of MPs from 654 to 2297 nm. Complementary methodologies used to characterize the structural changes confirmed the exposure of hydrophobic groups and promotion of

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\* Corresponding author. Tel: +353-1-7167342, Fax: +353-1-7167493, E-mail: dawen.sun@ucd.ie, Website: [www.ucd.ie/refrig](http://www.ucd.ie/refrig); [www.ucd.ie/sun](http://www.ucd.ie/sun)

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