



## ADAPTATION OF A PHOTOVOLTAIC POWERED OZONE GENERATION SYSTEM FOR FOOD STORAGE

L.Nehari<sup>1</sup>, M.Brahmi<sup>1</sup>, IS.Bousmaha<sup>1</sup>, H.Labair<sup>2</sup>, FZ Boudjella<sup>1</sup>, A. Tilmatine<sup>2\*</sup>

<sup>1</sup>ICEPS Laboratory, Djillali Liabes University of Sidi Bel-Abbes, Algeria  
<sup>2</sup>APELEC Laboratory, Djillali Liabes University of Sidi Bel-Abbes, Algeria  
\*atilmatine@gmail.com

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**ABSTRACT**

This paper is aimed to describe a low-cost system, including a power supply, an ozone generator and a photovoltaic panel for the disinfection of a food storage space. The "supply- ozone generator" system is powered by a photovoltaic energy system developed in the laboratory. The experiments were conducted using an ozone treated food storage cabinet and another control cabinet. The obtained results showed that an ozone concentration in the range 2 to 7 ppm make it possible to ensure effective disinfection. The study that was carried out with fresh food products confirmed the effectiveness of such a technique for extending the shelf life of food, which can be used in isolated rural areas that are not provided with electrical energy.

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