

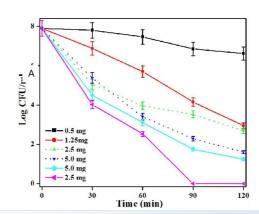




GRANTED

(IN393066)

A bactericidal composition and a method for disinfecting water under visible light irradiation



NEED

Safe drinking water is a global necessity, but waterborne pathogens continue to be a serious health concern. What if we could disinfect water more effectively using a visible light-powered solution?

MARKET ANALYSIS

The global water disinfection market is expected to grow at a CAGR of 8.5% from 2023 to 2033, driven by increasing water contamination and demand for sustainable solutions. [Source: Grand View Research, 2023]

TECHNOLOGY OVERVIEW

This technology uses a Ru (II) polypyridyl complex adsorbed onto activated carbon for bactericidal water disinfection under visible light. The method is energy-efficient and provides a sustainable approach to purifying water with minimal chemical use.

Target Industries

Water Treatment, Environmental Sustainability, Healthcare., Water purification companies, environmental NGOs, government water management programs, pharmaceutical and healthcare facilities, agricultural water systems, research institutions.

TECHNOLOGY KEY FEATURES

Ru (II) polypyridyl complex, activated carbon, bactericidal activity under visible light, energy-efficient, low chemical consumption, eco-friendly, enhanced water disinfection, 90-minute stirring process, scalable, low-cost solution.

AT A GLANCE

 SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 9 (Industry, Innovation, and Infrastructure)

Read more here

Technology is available for licensing/ co-development.

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