

APPLICATION OF NANOBUBBLE TECHNOLOGY IN AQUACULTURE: PRESENT AND POTENTIAL

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Summary

Nanobubble (NBs) are bubbles in aqueous solution with a diameter of <200nm. NBs have some unique and important properties such as long shelf life, low floating pressure, high oxygen dissolution rate and formation of free radicals. NBs have a wide range of applications such as water purification, plant growth, decomposition of organic matter, restriction of algae growth in ponds, and medical applications such as to enhance the absorption effect of the drug as well as bactericidal. NBs also have many applications for aquaculture such as increasing the content of dissolved oxygen in water, improving water quality, oxidizing organic matter in ponds, increasing the growth rate of farmed species, inhibiting growth or kill harmful bacteria. NBs technology has many potential applications to increase yield, productivity and quality of aquaculture products.

Keywords: *Nanobubble, aquaculture, water quality, dissolved oxygen, bactericidal.*