

# The Global Market for Nanobubbles 2024-2034

<https://marketpublishers.com/r/G28929A2D606EN.html>

Date: December 2023

Pages: 175

Price: US\$ 1,250.00 (Single User License)

ID: G28929A2D606EN

## Abstracts

Nanobubbles or ultrafine bubbles are sub-micron gas-containing cavities in aqueous solution with unique physical characteristics that differ from other types of bubbles, and have the ability to change the normal characteristics of water. Nanobubbles can exist on surfaces (surface or interfacial NBs) and as dispersed in a liquid phase (bulk NBs). Their use can contribute greatly to sustainability challenges as environmentally friendly alternative and solutions.

The Global Market for Nanobubbles 2024-2034 provides an in-depth global analysis of the emerging nanobubbles technology market - covering properties, generation techniques, key industry applications, market segment growth estimates through 2034, technology readiness assessments and profiling of over 40 leading nanobubbles equipment manufacturers commercializing solutions. Across 170+ pages, 72 figures and charts, the report covers:

Nanobubbles definition, properties comparative analysis, generation techniques.

Technology maturity assessments and limitations by application market.

In-depth examination of addressable market drivers, restraining factors, revenues growth projections across major industry segments including agriculture, aquaculture, biopharma, food production, oil/gas, and water treatment.

Global market size estimates from 2021-2034, geographic and end-use market segment outlooks.

SWOT analysis identifying nanobubbles strengths, weaknesses and external threats segmented by end market.

Featured market segment analyses cover:

Agriculture - Assessing nanobubbles foliar spray usage for boosting crop yields, triggering disease resistance, reducing irrigation needs

Aquaculture - Evaluating nanobubbles for oxygenation, growth acceleration, immune response triggering across hatcheries and fish farms

Biopharma - Studying utility of nanobubbles for advancing targeted drug delivery, ultrasound imaging, bacterial biofilm treatment

Water Purification - Examining integration for municipal wastewater nutrient removal, potable water microflotation, desalination pre-treatments.

The competitive section profiles over 40 international nanobubbles companies across technology innovators focused on generation methods/equipment and solutions providers commercializing applications across the above end markets. Companies profiled include Kairospace Technologies, Kran Nanobubble, NanobOX, Water Design Japan, Anzai Kantetsu Co. Ltd., AquaB Nanobubble Innovations Ltd., Aquamar B.V., En Soluci?n, EnH Co., Ltd., HACK UFB Co., Ltd., Fawoo Nanotech Co., Ltd., Moleaer, Inc., Nangatech Sp. z o.o., Rapid Water Technologies and more. Profiles include stage of commercialization and product developments, products, estimated revenues, technology advantages, markets and customers.

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