



# ABOUT US

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**IOTA Group Co.** is a pioneering company dedicated to cutting-edge innovation across multiple sectors, including nanotechnology-based machines and systems, medical technology, green sustainability solutions, biotechnology, and beverage manufacturing. Established in 2022, IOTA Group Co. is driven by a commitment to creating breakthrough technologies that shape a sustainable future.

With a focus on research and development, manufacturing, and supply, the company aims to revolutionize industries through nanotechnology and other advanced technologies, positioning itself as a leader in innovation and sustainability.



## **VISION:**

Building and leading a bold ecosystem of nanobubbles for a bluer planet.

## **MISSION:**

To revolutionize water management, empower agriculture, advance health and wellness, and drive the global adoption of nanobubble technology through strategic industry collaborations.

## **VALUES:**

Innovation, Environmental Responsibility, Collaboration, Excellence, Empowerment, Diversity, Equity, and Inclusion (DEI).



**NICO Nanobubble India Co.** was established with the vision of revolutionizing industries through advanced nanobubble technology solutions. With a strong emphasis on innovation, research, and development, we embarked on a mission to tackle critical challenges in water treatment, agriculture, environmental sustainability, oil & gas, health & wellness, wastewater treatment, and various other industrial sectors.

Our commitment to excellence has driven us to develop state-of-the-art NICO nanobubble generators, mixers, and ozone & oxygen generators. We are dedicated to creating ground-breaking technologies that address the evolving needs of such critical industries while ensuring energy efficiency for end users.



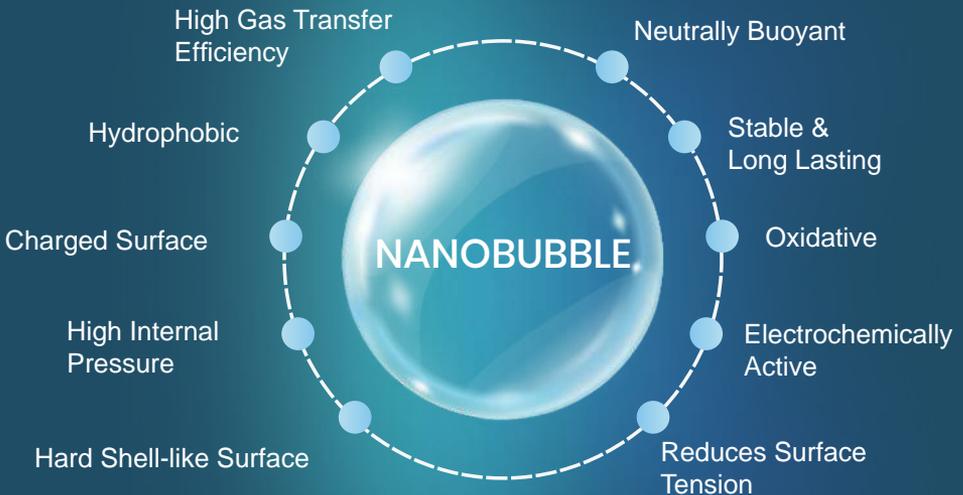
# ABOUT NANOBUBBLES

Nanobubbles are ultra-fine gas bubbles, typically less than 200 nanometers in diameter, with unique properties such as high internal pressure, neutral buoyancy, and prolonged stability in liquids. Their small size allows them to remain suspended in water, promoting superior gas dissolution, improved mass transfer, and effective surface interaction.

These characteristics make nanobubbles valuable across diverse applications including agriculture, aquaculture, water and wastewater treatment, industrial cleaning, and biofilm removal.

## INVISIBLE INTELLIGENCE UNLEASHED

### NANOBUBBLE Properties & Behaviors





## NICO NANOBUDDLE GENERATOR SYSTEMS

NICO Nanobubble India Co. offers advanced nanobubble generator systems designed to efficiently integrate air or gas into water/other liquids, maximizing nanobubble production and significantly improving dissolved gas levels. Engineered with patented technologies, our systems deliver optimal performance across diverse applications. Built with corrosion-resistant materials, our generators are durable, low-maintenance, and environmentally friendly — ensuring long-term, cost-effective operation with minimal disruption to existing systems.

### Product Configurations & Accessories

We offer our nanobubble generator systems in three configurations:

**Configuration 1:** Bare Nanobubble Mixer with allied instrumentation.

**Configuration 2:** Nanobubble Mixer with pump (SS/CI), starter and allied instrumentation.

**Configuration 3:** Fully automated Nanobubble Generator System including pump (SS/CI), fittings, enclosure, instrumentation, and complete electrical and automation setup (HMI, PLC, IoT-ready).

**Additional Accessories:** Oxygen generators, ozone generators, pipes & pipe fittings, instrumentation, & electrical fittings.

Our systems support flow rates ranging from **1 m<sup>3</sup>/hr - 1000 m<sup>3</sup>/hr**, offering scalable solutions tailored to a wide range of operational needs.

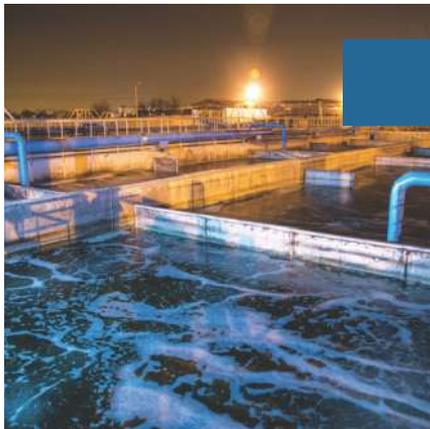
# APPLICATIONS

NICO Nanobubbles possess the capability to enhance processes, improve efficiency, and reduce environmental impact.



## ► Agriculture

Transform your farm with NICO Nanobubble Technology. Our systems infuse oxygen into irrigation water, improving soil health, boosting crop yields, and reducing pathogens — all without chemicals. Easy to install, they integrate with your existing setup for both open-field and greenhouse farming. NICO nanobubbles improve root growth, nutrient uptake, and water efficiency naturally.



## ► STP & WWTP

NICO Nanobubbles revolutionize wastewater and sewage treatment by enhancing oxidation, improving contaminant removal, and reducing chemical and energy use. Their stable, ultrafine bubbles boost gas transfer, control odours, and streamline operations. Easily integrated into existing systems, NICO offers a cost-effective, sustainable solution for efficient STP and WWTP performance.



## ▶ Lake Rejuvenation

NICO Nanobubble generators restore lake health by boosting dissolved oxygen, reducing pathogens, and accelerating organic waste breakdown—naturally and without chemicals. They improve water quality, support aquatic life, and control odour. Easy to install and energy-efficient, NICO offers a sustainable, long-term solution for lake rejuvenation.



## ▶ Aquaculture

NICO Nanobubbles revolutionize aquaculture by boosting dissolved oxygen, improving water quality, and reducing disease — all without chemicals. Their tiny size allows longer suspension in water, enhancing circulation, waste breakdown, and nutrient delivery. Perfect for fish, salmon, and shrimp farming, NICO systems promote faster growth, better health, and sustainable operations.



## ▶ Health & Wellness

NICO Nanobubbles transform skincare and wellness with deep skin penetration for enhanced cleansing, hydration, acne control, and scar healing. In hydrotherapy, they relieve irritation, remove bacteria, and boost skin metabolism—naturally and without chemicals. Ideal for spas and wellness centers, they offer a gentle, effective solution for healthier, radiant skin.



## ▶ Vegetable Wash

NICO Nanobubbles offer a chemical-free, cost-effective solution for sanitizing fruits and vegetables. Ozone-infused nanobubble water removes pathogens like E. coli, Salmonella, and Listeria, eliminates biofilms, and leaves no harmful residues. It's safe for the environment and doesn't require special disposal. Ideal for processors, it ensures cleaner produce and surfaces while preventing future biofilm formation—naturally and sustainably.



## ▶ Swimming Pool

NICO Nanobubbles revolutionize pool care by reducing chemical usage up to 80%, improving water clarity, and breaking down biofilm and contaminants naturally. Gentle on skin and eyes, they lower maintenance, water waste, and operating costs. Easy to install, NICO offers a cleaner, safer, and eco-friendly swimming experience for any pool.



## ▶ Oil & Gas

NICO Nanobubbles revolutionize the oil & gas industry by enhancing oil recovery, treating wastewater, cleaning pipelines, and controlling corrosion—without harsh chemicals. Their tiny size improves efficiency, boosts biodegradation, and reduces maintenance needs. Ideal for EOR and gas separation, they lower operational costs while supporting sustainability.



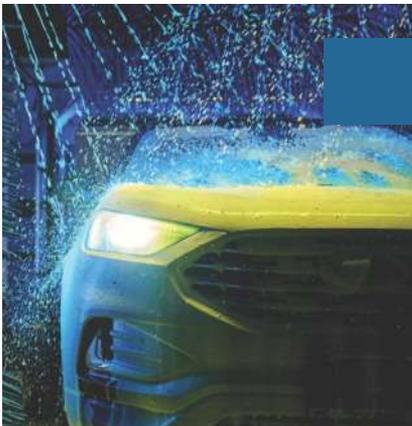
## ▶ Poultry Farming

Boost poultry performance with NICO Nanobubble oxygenated water. Improve feed efficiency by up to 32%, reduce mortality, enhance weight gain, and cut feed and vet costs. Higher dissolved oxygen supports bird health, immunity, and metabolism—leading to better growth, hatchability, and overall productivity in broiler and layer chicken farms.



## ▶ Horticulture

NICO Nanobubbles provide a chemical-free horticulture solution by increasing dissolved oxygen, suppressing pathogens like Pythium by up to 80%, and disrupting biofilms. They enhance root health, boost nutrient absorption, and improve yields. Ideal for sustainable, controlled-environment farming, NICO supports healthier plants and reduced reliance on chemicals.



## ▶ Car Wash

NICO Nanobubbles transform car wash operations by enhancing cleaning power, reducing chemical use, and conserving water. They penetrate deep into surfaces, prevent scale buildup, and lower maintenance costs. Eco-friendly and efficient, NICO systems offer a sustainable, cost-effective solution for superior vehicle cleaning and long-term equipment protection.

# DEMONSTRATION PILOTS

At NICO Nanobubble India Co., we are committed to validating the real-world impact of nanobubble technology through extensive pilot studies across diverse sectors. Our demonstration projects are designed to showcase measurable improvements in growth, health, and overall system performance — whether in agriculture, aquaculture, wastewater treatment, or industrial applications.

Each pilot is carefully monitored and analyzed to assess the efficacy of nanobubbles in improving water quality, enhancing oxygen transfer, reducing chemical usage, and promoting sustainable practices.

## Want to see the results?

Scan the QR code to explore detailed case studies, data insights, and outcomes from our on-going and completed demonstration pilots.



**NATIONAL ZOOLOGICAL PARK - NEW DELHI**  
(Ministry of Environment, India)



**RAGI SEED GERMINATION IN WET TISSUE**



**NATIONAL ZOOLOGICAL PARK - NEW DELHI**  
(Ministry of Environment, India)



**STRAWBERRY FARM**  
(Manouli Village, Sonipat)



**MUNGESHPUR DRAIN**  
(Haryana State Pollution Control Board)



**KRISHNA MATHA  
PUSHKARANI**  
(Udupi, Karnataka)



**NILE TILAPIA**  
(Kerala University of Fisheries  
and Ocean Studies (KUFOS))



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(Kerala University of Fisheries  
and Ocean Studies (KUFOS))



**RED ONION SEED  
GERMINATION**



**WHEAT FARMING**  
(Abbaspur, Haryana)



**MANCHIKERE LAKE  
REJUVENATION**



**ROSE FLOWER LIFE  
ENHANCEMENT**



**GREEN GRAM  
GERMINATION**



**JOWAR SEED  
GERMINATION IN  
WET TISSUE**

# AWARDS & ACCOLADES



**Top 3**  
DTU-IF Startup Ecosystem Showcase  
April 2024



**Most Promising Startup**  
Indo-Israel Co-Incubation Program  
June 2024



**Speaker Recognition**  
3D Printing Summit of India's Future  
June 2024



**Ground-breaking Novel Innovators**  
Bengaluru India Nano 2024  
August 2024



**Top 4**  
IIM Calcutta TATA Social Enterprise  
September 2024



**Showcased Nanotech Innovation**  
University of Oxford  
September 2024



**Finalist**  
Bühler Germany Start-up Challenge  
October 2024



**Startup Manufacturing Excellence**  
Industry Samurai Awards  
November 2024



**Innovation in Manufacturing Excellence**  
Industry Samurai Awards  
November 2024



**First Prize – Silk Innovation**  
Bharat Tex 2025 Startup Challenge  
February 2025



**Top Finalist**  
NXP India Tech Startup Challenge  
June 2025



**Family Business Award 2025**  
ET Now Times Group  
June 2025



**Green Chemistry IGCW 2025 Award**  
October 2025



**Emerging Finance Leader 2025-26**  
October 2025



**Innovation in Manufacturing Excellence**  
Industry Samurai Awards  
November 2025



# AFFILIATIONS & PARTNERSHIPS



**MANIPAL COLLEGE OF HEALTH PROFESSIONS**  
MANIPAL  
*(A constituent unit of MAHE, Manipal)*



**TATA SOCIAL ENTERPRISE CHALLENGE**  
A Joint Initiative With **IIM Calcutta**



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
*Institution of Eminence Deemed to be University*



**IIML-INCUBATOR IIM LUCKNOW**  
*Innovating the future*

**IIM KOZHIKODE LIVE**  
LABORATORY FOR INNOVATION VENTURING AND ENTREPRENEURSHIP



**MANIPAL UNIVERSAL TECHNOLOGY BUSINESS INCUBATOR**  
*Supported by NISTED, Dept. of Science & Technology, Govt. of India and MAHE, Manipal*



**UNIVERSITY OF OXFORD**

**CU CHANDIGARH UNIVERSITY**  
*Discover. Learn. Empower.*

**TEL AVIV UNIVERSITY**  
תל אביב אוניברסיטת



**Center for Technology Innovation and Entrepreneurship**



**Foundation For Innovation And Technology Transfer**



**MANIPAL-GOK BIOINCUBATOR**  
*(Supported by IISX, Government of Karnataka, IIT - BANG and MAHE, Manipal)*

startupsingla  
**SEED FUND SCHEME**

**SPJ GLOBAL**



**Technology Innovation Hub of IIT Delhi**



**Association for Bio-inspired Leaders & Entrepreneurs at SASTRA-TBI**

# ABOUT US

**IOTA WATER** was born from a passion for health, wellness, and innovation. Our founders recognized the potential of nanobubble technology to revolutionize hydration. After years of research and development, they created IOTA WATER, committed to offering the highest-quality water for those who value both performance and purity.



PURITY



HEALTH



INNOVATION

## BENEFITS

### Deep Cellular Oxygenation:

Nanobubbles penetrate cell membranes and tissue linings more efficiently, enabling faster, deeper, and more effective oxygen exchange at the cellular level.

### Increased Oxygen Delivery:

Oxygen nanobubbles in your water can help boost energy, improve endurance, and support overall well-being.

### Detoxification:

Nanobubbles help flush out toxins, supporting natural detox processes and promoting overall well-being.

### Pure and Clean:

IOTA WATER undergoes advanced filtration to deliver the purest, healthiest hydration, free from impurities, packed with goodness.

# PRODUCT RANGE (SKUs)



## #FEELTHEDIFFERENCE

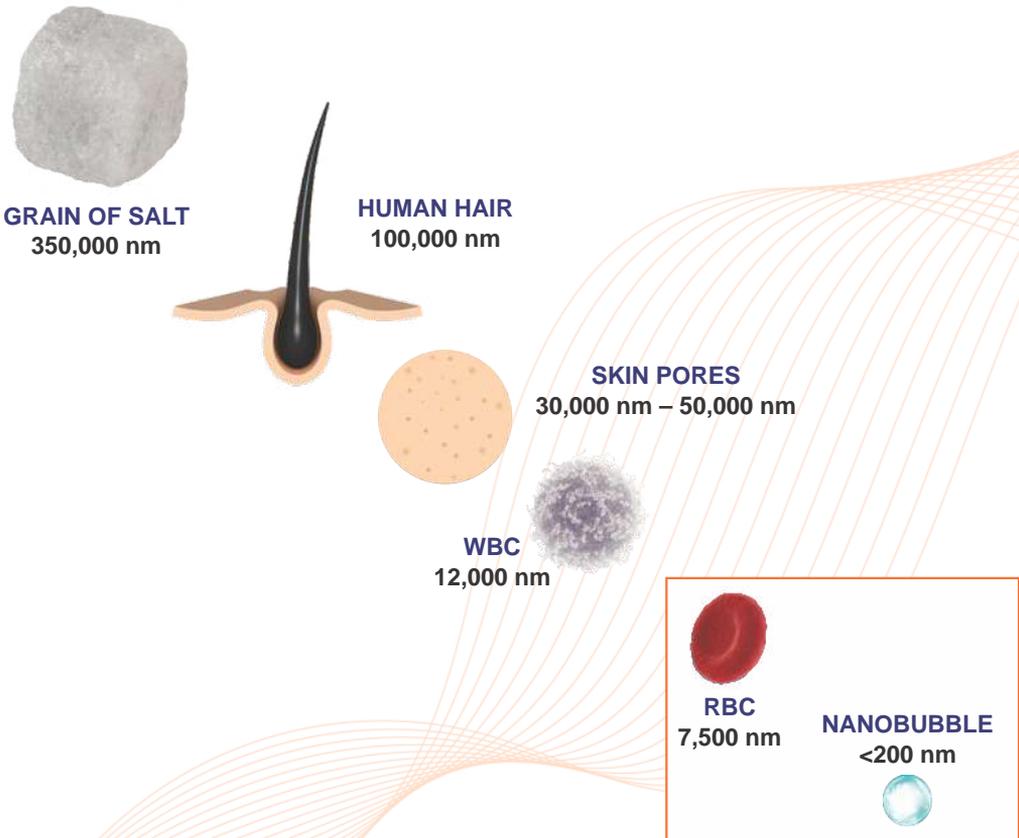
### IOTA STANDS FOR:

- I** **Innovative**  
Powered by cutting-edge nanobubble technology, setting IOTA WATER apart from traditional bottled water.
- O** **Oxygenated**  
Delivering oxygen-rich hydration that enhances wellness and boosts cellular-level oxygen delivery
- T** **Technology**  
Featuring a patented nanobubble infusion process that makes IOTA WATER scientifically advanced and highly effective
- A** **for All**  
Designed for everyone—from athletes to individuals seeking superior hydration and well-being.

# Tiny But Mighty: The Power of Nanobubbles

Nanobubbles, ranging from 70-200 Nanobubbles, are incredibly small, allowing them to pass through biological membranes and deliver oxygen right to the cellular level. To put their size into perspective, nanobubbles are:

- **1750 times smaller** than a grain of salt (350,000 nanometers).
- **500 times smaller** than a human hair (100,000 nanometers thick).
- **250 times smaller** than skin pores (which range from 30,000 to 50,000 nanometers), allowing deeper penetration into tissues.
- **145 times smaller** than a white blood cell (12,000 nanometers).
- **80-90 times smaller** than a red blood cell (about 7,500 nanometers), making it easier for them to travel through capillaries and tissues.





## How is IOTA WATER different?

IOTA WATER is uniquely infused with oxygen nanobubbles, designed to enhance oxygen availability at the cellular level. This may promote enhanced hydration, support natural metabolic processes, and contribute to overall vitality.

## Is IOTA WATER safe to drink daily?

Yes. IOTA WATER is completely safe for daily consumption. You can consume it just like regular water—typically 3–4 liters per day depending on your individual hydration needs. Its oxygen-rich formulation may support sustained energy, hydration, and post-activity recovery as part of a balanced lifestyle.

## What are the health benefits of drinking IOTA WATER?

IOTA WATER is designed to support overall wellness through oxygen nanobubble infusion. Its unique formulation may offer the following functional benefits:

**Enhanced Oxygenation** - Helps sustain natural energy and stamina

**Detox Support** – Aids kidney and liver function

**Digestive Balance** – May ease acidity and support gut comfort

**Recovery & Performance** – Ideal for active individuals seeking hydration and post-activity recovery

**Mental Clarity** – Supports focus and cognitive performance

## Is IOTA WATER approved by regulatory authorities?

Yes. IOTA WATER is produced in facilities compliant with FSSAI and BIS regulations, ensuring adherence to the highest standards of quality and safety.

## Does IOTA WATER contain chemicals or artificial additives?

No. IOTA WATER contains only pure water infused with oxygen nanobubbles and essential minerals like Calcium, Magnesium, and Potassium. It is completely free from chemicals, preservatives, and artificial additives.

## Is IOTA WATER safe for children and the elderly?

Yes, IOTA WATER is safe for people of all ages. It may help in enhanced hydration and support general well-being for children, adults, and seniors.

However, it's always wise to adjust intake based on personal health needs or consult a healthcare provider if unsure.



**NANO BUBBLE INDIA CO.™**

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