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# GTS MAGAZINE

NEWS MAGAZINE FROM GTS ENVIRO INDIA PVT LTD

GTS'S INNOVATIVE APPROACHES TO ENVIRONMENTAL  
POLLUTION CONTROL AND SUSTAINABLE DEVELOPMENT "

## WHAT DREAMS ARE MADE OF

STANDING ON TOP OF THE WORLD AND  
TAKING IN THE AWE-INSPIRING PANORAMIC

THE WORLD IS MOVED ALONG NOT ONLY BY THE  
MIGHTY SHOVS OF ITS HEROES, BUT ALSO BY  
THE AGGREGATE OF THE TINY PUSHES OF EACH  
HONEST WORKER

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**NUMBER 01 | AUGUST 2023 | News Magazine from GTS Enviro India Pvt Ltd**  
GTS's Innovative Approaches to Environmental Pollution Control and Sustainable  
Development "

**GTS MAGAZINE**  
Number 01 | AUGUST 2023

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## EDITOR'S PAGE



***“The world is moved along not only by the mighty shoves of its heroes, but also by the aggregate of the tiny pushes of each honest worker”***

Our respected Readers...

I am glad to welcome you all to explore our Magazine.

**GTS MAGAZINE** is more than a Newsletter of **GTS ENVIRO INDIA PVT LTD**, a multi-disciplinary, Open Access journal publishing novel information within the broad field of ' Environmental Pollution control and Sustainable Development'.

Our Coverage in GTS MAGAZINE includes, but is not limited to, the following topics:

- 1) Environmental Technologies, Important GO / Amendments of Statutory (CPCB/SPCB/MOEF &CC, MNES etc.) & Energy & Environmental Policies, Our Environment & Trends in Climate change, Biodiversity Sustainability and Public health, our exploration and hearty appreciations of the Leaders engaging in environmental and socially responsible activities.
- 2) Articles from responsible persons about the innovative Environmental Technologies, environmental health, resource recovery, social economics, and sustainability. We welcome articles about research and development related to environmental pollution control and process utilities and Environmental laws and latest regulations and amendments.

GTS Enviro India Pvt Ltd is a rapidly expanding project engineering organization that specializes in the design, engineering, manufacturing, and construction of Air pollution control systems (wet scrubber system, dust collector, fume extraction system, pulse jet bag filter), various types of Zero Liquid Discharge Effluent Treatment Plants, RO/UF/MVR recycling systems, and Raw Water Treatment / Sewage Treatment Projects and Solid waste management Systems and equipments, Heavy Process Equipment Fabrication, Pipeline contract works and Environmental Management Consulting.

**GTS MAGAZINE** is a fully open access journal for which you doesn't need to pay. Once published, the contents will be permanently available in our website [www.gtsenviro.com](http://www.gtsenviro.com) for readers to read, download, and share.

Thanks for every one with warm regards,

**G.THIRUGNANAM**

**EDITOR | GTS MAGAINE**

**CEO | GTS ENVIRO INDIA PVT LTD**

# TECHNOLOGIES

## GTS PROJECTS's DISSOLVED AIR FLOATATION SYSTEM

### FOR CARWASH EFFLUENT TREATMENT & RECYCLING SYSTEM

The perfect combination of UF membrane technology and DAF with efficient system design

#### **OVERVIEW:**

Floatation Dissolved Air (DAF) is the process of removing suspended solids, oils and other contaminants via the use of air bubble flotation. Air is dissolved into water, mixed with the waste stream and released from solution while in intimate contact with the contaminants. Air bubbles form, attach to the solids, increase their buoyancy and float the solids to the water's surface.

The dissolved air comes out of solution, producing millions of microscopic bubbles. These bubbles attach to the solids and float them to the surface where they are mechanically skimmed and removed from the tank. GTS PROJECTS's Skid Mounted DAF cum UF System is designed to remove fats, oils & grease (FOG), suspended solids, hydrocarbon oils/emulsions and many other contaminants.

#### **Benefits**

1. Cost is lower than any other system of comparable waste extraction performance.
2. The unit is typically delivered fully prefabricated.
3. Space requirements are minimal.
4. Capability to treat a wide variety of organic, inorganic solids and dissolved waste.
5. Low retention time from wastewater stream to effluent ejection.
6. Superior clarification of most waste streams.
7. Easy to clean and maintain.

8. Higher density sludge with low water content.

Ultra filtration (UF) is a continuous process for separating high molecular weight, colloidal or suspended solids from fluid streams. The key to the process is a thin, polymeric, semi-permeable membrane. Feed solution is pumped at low pressures and high flow rates across the surface of the membrane. Solutes whose sizes are greater than the pore size (0.1-micron) of the membrane and all suspended solids are retained and concentrated. Water, salts, and small molecular weight constituents pass through, or permeate, the membrane. Thus, the pore structure of the membrane acts as a molecular filter that does not become plugged because the retained components of the feed are rejected at the surface and do not penetrate the membrane.

### **Benefits**

1. Provides a verifiable physical barrier to turbidity, bacteria, Cryptosporidium and viruses
2. Water recycle yields Zero Liquid Discharge capabilities.
3. High concentration and minimizes disposal costs.
4. Low initial set up costs.
5. Minimal pretreatment chemicals needed.

Thanks & Regards

**G.Thirugnanam**

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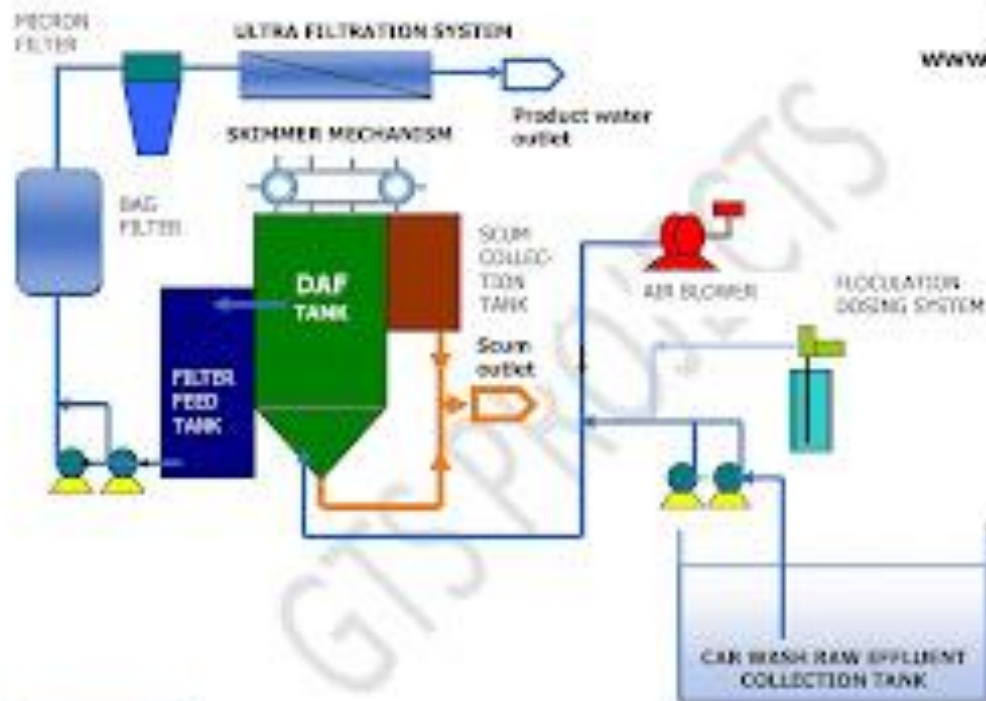
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SCHEMATIC FLOW DIAGRAM OF DISSOLVED AIR FLOTATION SYSTEM FOR CARWASH EFFLUENT TREATMENT & RECYCLING SYSTEM



CARWASH EFFLUENT  
TREATMENT &  
RECYCLING SYSTEM  
by GTS PROJECTS



www.gtsprojects.in

# **Our Environment & Trends**

## **GTS's Innovative Approaches to Environmental Pollution Control and Sustainable Development"**

In a world teeming with technological advancements and unprecedented growth, the delicate balance of our ecosystems is under constant threat. As the ominous shadow of environmental pollution looms larger, the need for innovative and sustainable solutions has never been more urgent. In this edition of GTS Magazine, we delve into the cutting-edge strategies and inspiring initiatives that are shaping a cleaner, greener future for our planet.

### **Harnessing the Power of Nature: Bio-Remediation Takes Center Stage**

The age-old wisdom of nature is now guiding us in the battle against pollution. From phytoremediation to biomimicry-inspired solutions, researchers and environmentalists are tapping into the inherent resilience of natural ecosystems. Explore how plants, microorganisms, and ecological processes are being harnessed to detoxify contaminated soils, waters, and air, breathing new life into polluted environments.

### **Tech-Driven Innovations: AI and IoT for Pollution Management**

The marriage of technology and environmentalism is yielding remarkable results. Discover how Artificial Intelligence (AI) and the Internet of Things (IoT) are revolutionizing pollution monitoring and control. From smart sensors that provide real-time data insights to predictive analytics that help anticipate pollution hotspots, technology is enabling us to take proactive measures to safeguard our planet.

### **Circular Economy: Pioneering a Pollution-Free Paradigm**

Shifting from a linear "take-make-dispose" model to a circular economy holds the promise of reducing pollution at its source. Learn about the trailblazing businesses and governments that are embracing sustainable practices, such as recycling, upcycling, and resource-sharing, to minimize waste and pollution while fostering economic growth.

### **Ocean Warriors: Battling Plastic Pollution Head-On**



Our oceans are drowning in plastic waste, posing a grave threat to marine life and ecosystems. Meet the individuals and organizations committed to tackling this crisis, from innovative waste collection technologies to global initiatives focused on plastic waste reduction. Through collaborative efforts, we are witnessing the gradual turning of the tide against plastic pollution.

#### Renewable Renaissance: Clean Energy's Role in Pollution Mitigation

The transition from fossil fuels to renewable energy sources is a cornerstone in the fight against pollution. Dive into the success stories of solar, wind, hydro, and geothermal energy projects that are not only curbing pollution but also steering us towards a low-carbon future.

#### Community Catalysts: Grassroots Movements Driving Change

Real change often starts at the grassroots level. Explore the inspiring stories of communities around the world that are taking matters into their own hands, from urban gardens reclaiming polluted spaces to citizen-led clean-up drives making a tangible impact. These community-driven initiatives prove that every individual has a role to play in pollution control.

#### Conclusion:

The battle against environmental pollution is an ongoing struggle that demands our collective efforts, unwavering commitment, and creative thinking. As we traverse uncharted territory, the stories shared in this issue of **GTS Magazine** (newsletter of GTS Enviro India Pvt Ltd) serve as a testament to human ingenuity, resilience, and determination. By embracing innovation, technology, and collaboration, we hold the power to forge a path towards a cleaner, healthier planet for current and future generations.

# "Urgent Call to Action: Uniting Against Climate Change for a Sustainable Future"

## Introduction:

In an era marked by scientific advancements and technological marvels, humanity faces an unprecedented challenge that threatens the very fabric of our existence – climate change. As our planet heats up, ecosystems crumble, and extreme weather events become the new normal, it's high time we recognize the urgent need for collective action. This editorial aims to shed light on the critical importance of addressing climate change and the role we all play in shaping a sustainable future.

## The Warming Reality:

The signs of climate change are undeniable: melting ice caps, rising sea levels, and record-breaking temperatures. The urgency of this crisis cannot be overstated. Every fraction of a degree matters, and the time to act is now. The world has witnessed devastating wildfires, destructive hurricanes, and prolonged droughts. It's evident that climate change knows no borders and affects every corner of the globe.

## Humanity's Footprint:

While natural processes contribute to climate change, the primary driver is our own actions. The burning of fossil fuels, deforestation, and industrial processes release greenhouse gases into the atmosphere, trapping heat and exacerbating the problem. It's time to take responsibility for our actions and transition to cleaner, sustainable alternatives.

## Shaping Policy and Innovation:

Governments, industries, and individuals all share a role in curbing climate change. Strong policies that incentivize renewable energy adoption, limit carbon emissions, and promote sustainable land use are crucial. However, policy alone is not enough. Innovation must be harnessed to develop breakthrough technologies that reduce our carbon footprint and mitigate the effects of climate change.

### Global Collaboration:

Climate change is a global challenge that requires global solutions. Countries must set aside political differences and work together to achieve a sustainable future. The Paris Agreement was a pivotal step in this direction, but more needs to be done. International cooperation can accelerate the shift towards renewable energy, protect biodiversity, and ensure climate justice for vulnerable communities disproportionately affected by climate change.

### Individual Empowerment:

While governments and industries play a significant role, individual actions are equally essential. Small changes in our daily lives, such as reducing meat consumption, using public transportation, and conserving energy, can collectively make a substantial impact. Education and awareness campaigns can empower people to make informed choices that contribute to a greener world.

### The Road Ahead:

The path to a sustainable future is challenging, but it's not insurmountable. It requires a commitment to change – from policymakers enacting bold reforms to industries adopting sustainable practices, and individuals embracing eco-friendly lifestyles. By investing in renewable energy, reimagining urban planning, and protecting natural ecosystems, we can forge a path towards a climate-resilient world for future generations.

### Conclusion:

Climate change is no longer a distant threat; it's a stark reality that demands our immediate attention. The time for complacency has passed. It's time for action, for unity, and for a shared commitment to safeguarding our planet. Together, we can mitigate the worst effects of climate change and build a future where humanity thrives in harmony with nature. The choice is ours – let us choose wisely for the sake of our planet and all its inhabitants.

# Useful & Important GO / Amendments of Statutory

## CPCB

### **Environmental Guidelines for Stone Crushing Units (31.07.2023)**

<https://cpcb.nic.in/openpdffile.php?id=TGF0ZXN0RmlsZS8zNzhfMTY5MDgwNjlxOF9tZWVpYXBob3RvMjM0MjEucGRm>

Draft Report for Comments or Suggestions on Classification of Industrial Sectors into Red, Orange, Green and White Categories, A Tool for Progressive Environmental Management (25.07.2023)

<https://cpcb.nic.in/openpdffile.php?id=TGF0ZXN0RmlsZS8zNzdfMTY5MDI2Mjg1OV9tZWVpYXBob3RvMjM0MjEucGRm>

**online monitoring of industrial emission and effluent**

**first amendment of revised guidelines for “Continuous emission monitoring system”**

<https://www.cpcb.nic.in/upload/thrust-area/revised-ocems-guidelines-amendment.pdf>

## **NATIONL GREEN TRIBUNAL**

BIRD’S EYE VIEW OF NGT PERFORMANCE IN THE LAST FIVE YEARS (JULY, 2018 – JULY, 2023)

[https://greentribunal.gov.in/sites/default/files/important\\_orders/NGT\\_Initiatives%20final-1.pdf](https://greentribunal.gov.in/sites/default/files/important_orders/NGT_Initiatives%20final-1.pdf)

## **TNPCB**

**TNPCB CONSENT FEES (air & water) DETAILS TO CALCULATE FOR RED, ORANGE AND GREEN CATEGORY INDUSTRIES TO APPLY FOR CONSENT ORDER**

[https://tnpcb.gov.in/pdf/consentfee/GONo40\\_WaterNotification12418.pdf](https://tnpcb.gov.in/pdf/consentfee/GONo40_WaterNotification12418.pdf)

**TNPCB NOTIFICATION FOR INSTALLING RETROFIT EMISSION CONTROL DEVICE / EQUIPMENT FOR DG SET OF 125 KVA AND ABOVE IN TAMILNADU**

[https://tnpcb.gov.in/pdf\\_2021/RetrofittingTimeExtn31121.pdf](https://tnpcb.gov.in/pdf_2021/RetrofittingTimeExtn31121.pdf)

## **KSPCB**

**KARNATAKA STATE POLLUTION CONTROL BOARD – OFFICIAL MEMORANDAN FOR SEWAGE TREATMENT PLANT (STP) GUIDELINES FOR DESIGN AND LOCATION**

<https://kspcb.karnataka.gov.in/sites/default/files/inline-files/new%20stp%20G.pdf>

# Our Salute to the Leaders engaging in environmental and socially responsible activities

Our respected Ladies and gentlemen, distinguished guests, and fellow citizens...

We pay our heartfelt salute to the exceptional leaders who have taken up the mantle of responsibility in championing environmental sustainability and social responsibility BY APPRECIATING SOME OF OUR LEADERS IN EVERY ISSUE OF OUR GTS MAGAZINE. In an era where the pressing challenges of climate change, ecological degradation, and social inequity loom large, these leaders have risen above the ordinary to ignite positive change, leaving an indelible mark on our world.

Their endeavors remind us that leadership goes beyond traditional boundaries. It transcends sectors, industries, and borders, encompassing a shared vision for a better future. These remarkable individuals have dedicated their time, energy, and resources towards shaping a world that thrives harmoniously, where every action is a step towards safeguarding our planet's natural beauty and ensuring the well-being of all its inhabitants.

Through innovative initiatives, tireless advocacy, and a steadfast commitment to progress, these leaders have pioneered transformative strategies that inspire us all. Whether it's advocating for cleaner energy alternatives, spearheading reforestation efforts, combating plastic pollution, or advancing sustainable agricultural practices, their actions have spoken louder than words, setting a precedent for responsible and ethical leadership.

But their influence extends beyond the environmental sphere. These leaders recognize the interconnectedness of social issues, working tirelessly to address inequality, promote inclusivity, and uplift marginalized communities. They understand that a thriving society goes hand in hand with a thriving environment, and they've made it their mission to foster a world where no one is left behind.

Their dedication serves as a beacon of hope, motivating us to follow in their footsteps and contribute to the collective effort. Their stories remind us that each one of us has the power to be a leader in our own right, to effect positive change within our spheres of influence, and to become catalysts for progress.

So, as we stand here today, let us not only salute these extraordinary leaders for their vision and determination, but let us also pledge to support and amplify their efforts. Let us forge a path towards a more sustainable and socially just future, where our actions reflect the values of responsibility, compassion, and stewardship. Let us be inspired by their example and work together to leave a lasting legacy for generations to come.

To the leaders engaging in environmental and socially responsible activities, we salute you. Your dedication shines as a guiding light, illuminating the path towards a better world. Thank you for your unwavering commitment, and may your endeavors continue to inspire and ignite change across the globe.