



IWWA MC
YouTube -

https://www.youtube.com/channel/UCyV5ztX7f14Fv6ksP7m_Emg

DROPLET

VOLUME-I • ISSUE-I • APRIL-MAY 2021

www.iwwamumbai.info

MUMBAI CENTER

- **Er. Maniessa Palande**
- Chairperson
- **Er. Pramod Dalvi**
- Hon. Secretary

EDITOR

- **Er. Dilip Sonwane**
- **Dr. Ulhas Naik**

CONTENTS

<i>From Chairperson Desk</i>	1
<i>Editor Brief</i>	1
<i>Stalwart Advise</i>	2
<i>Research Articles</i>	2
<i>News Articles</i>	2
<i>Events Information</i>	3
<i>Management Committee (2021-23)</i>	4



from Chairperson Desk

Hello IWWA Mumbai Centre members,

To begin with I thank all the committee members of IWWA Mumbai Centre for providing me the opportunity to be Chairperson of IWWA Mumbai Centre. It is one of the most vibrant centres and has always remained forefront for knowledge spread through various platforms, seminar conference, workshops, lectures,

site visits and much more. I assure you on behalf of my team members that we shall take forward this legacy with all efforts and enthusiasm.

With immense pleasure welcome to the first issue of reactivated centre newsletter, "Droplet". Using this mode of communication, we intend to keep you informed with the activities of our Mumbai Centre and appraise you with latest happenings in water and environment sector.

We appeal all the professionals to use this Droplet as a platform to exhibit their initiatives and best practices in various sectors to bring about techno-economical managerial and social efficacy and sustainability.

We recently conducted webinar on Solid waste Management which received an overwhelming response from all professionals three renowned experts shared their experience and results. We are thankful to Directorate of Municipal Administration office for making the event successful. Many further events are on the horizon.

We have started our YouTube channel and have uploaded recently conducted webinars. Appeal to all of you to visit and subscribe for it.

We have a special focus on the youth and the next generation professionals and for that we are planning many events such as lectures, competitions, site visits, workshops, and field activities in association with colleges and institutions.

We have started a special feature in this new letter, "Stalwart Advise", to seek knowledge, advice, tips from the renowned experts in our field. Dr. Sanjay Dahasahasra consented our request for this inaugural feature.

There is a lot more in store that shall be unfolded as we progress, we also appeal to all members and readers to come forward with new ideas, initiative of developing this. Keep providing your suggestions and ideas for improvements.

Stay safe and healthy

"Nature is pleased by Simplicity and Nature is No Dummy" - Issac Newton

- **Er. Maniessa Palande**



Editor Brief

The Indian Water Works Association, Mumbai center brings in first issue of its publication "Droplet". The bi-monthly publication covers various aspects in Water & Environment sector, activities by IWWA Mumbai center, webinars conducted during the period and experts talks.

India is one of the world's fastest growing economies and is experiencing an extraordinary development. The population increase is adding pressure on existing infrastructure and keeping pace with people requirements is the need considering sustainability aspects and Environmentally safe design. This requires adequate water sources or creation of new sources to meet the projected demand.

The recent launch of Jal Jeevan Mission (JJM) is aimed at providing piped water supply of adequate quality to rural households and remove the drudgery faced by women of travelling long distances to collect drinking water for daily household needs.

The need of safe and drinking water to urban and rural communities also requires focus on adjacent areas like rain water management, waste water and solid waste management to keep the water sources clean and unpolluted. We shall keep communicating with you on IWWA Webinars, Expert talks, Site visits, Workshops. Readers will also have updates on research news, good practices, important research contents and forthcoming events.

"Earth provides enough to satisfy every man's needs, but not every man's greed" - Mahatma Gandhi

- **Er. Dilip Sonwane**

Stalwart's Advise

Dr. Sanjay Dahasahasra

Former Member Secretary, Maharashtra Jeevan Pradhikaran



Exploding population, rapid urbanization, increasing industrialization, climatic

changes pose problems on freshwater demand, while reducing precipitation, depleting ground water table, pollution affect water availability. Therefore, the role of water supply managers is in stress. It is estimated that population of the world will touch 10 billion in the year 2050, and by that time India's figure may rise to 1.7 Billion. India's water Demand in 2050 is estimated

to 1450 billion cubic metres (BCM), while availability will be 1150 BCM, that means, a gap of 300 BCM will be required to be bridged. Is it impossible to do so for a country like ours, having full of natural resources, 3000 km long seashore, all biodiversity and most importantly intelligent manpower? It may be rather difficult, but once decided, can be achieved. It is sure!

In India, nearly 75% water is utilized for agriculture, 15% for domestic needs, 5% for industrial demand and 5% for satisfying the needs of environmental and socio-cultural purposes. Thus, there is lot of scope in improving water use efficiency in irrigation sector at least

by about 10-20%, reducing Non-revenue water (NRW) by 20 to 30% in domestic use and reuse-recycle of discharged fresh water. This would save 300 BCM water quantity. Thus, the gap can be met with successfully. Need of the time is to take immediate steps in implementation. For this purpose, appropriate reforms in policy at legislative level, paradigm shift in administrative side and motivating 1.3 billion peoples through participatory approach are the essential factors.

Indian Water Works Association (IWWA) is one of the prominent organizations in the country established in 1968, in Mumbai

.....cont'd Page 4



Dr. Parag Sadgir and Dr. Priyanand Agale received Indian Patent for SELF-PURIFICATION BASED POLLUTED WATER PURIFICATION



DR. PARAG SADGIR



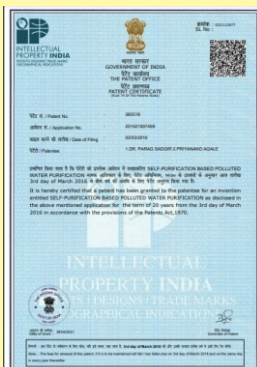
DR. PRIYANAND AGALE

The said patent was granted by the Patent of-ice, Government of India, Mumbai on 30th April 2021 with Patent No. 365518.

The open channel polluted water purification system comprises a tide generating structure, a plurality of baffle walls in varying width combinations and patterns, comprising a combination of pebble and sand, a up and down flow filtration mechanism and a final filtration tray. It consists with five stages of purification process. Each stage is designed on the principle of gravitational flow. The present invention is useful for treatment of domestic wastewater in which the main principle is self-purification of wastewater. No chemicals are used in this process. The materials/media used in this process are selected from

locally available material such as brickbats, pebbles, sand and coconut coir. This system is decentralized ecofriendly domestic wastewater treatment system. The main principle of this purification system is to accelerate the fundamental process of self-purification that is equalization, aeration, sedimentation. The system can be constructed in brick masonry, stone masonry, RCC, soil bunds or fabricated in fiber or Ferro-cement material. In this system, after treatment, BOD removal efficiency is 88-90% and COD removal efficiency is 89-90%. For this system, land requirement is 0.75 m² per 1 m³ and cost varies from Rs. 4000 to Rs. 5000 per m³ of wastewater. Treated wastewater can be reused for farming and gardening etc.

IWWA Mumbai Center is proud of these scholars on their achievement





Webinar on **SOLID WASTE MANAGEMENT**

Convened on
30-April-2021,
6.00 - 8.00 pm
Nearly 145
participants
attended.

Rapid growth of population and industrialization have led to an increase in the quantity and complexity of generated waste which is degrading the environment. India's waste generation will be 11,95,000 TPD by 2050. At present Maharashtra's waste generation is highest.

Indian Water Works Association, Mumbai Center organized a webinar

on this burning issue. This Webinar was focused on Best Practices in small towns and metro cities for sustainable waste management.

Mr. Pradeep Joshi, CEO, GREEN CIRCLE, INC., chaired the session.

Ms. Aparna Kapoor, Director, SFC Environmental Technologies Pvt. Limited and Navitas Waste Treatment Pvt. Limited gave presentation on BOT

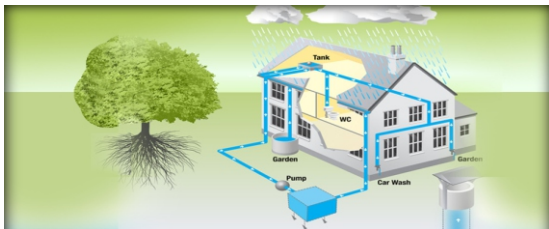
Annuity Model For 100 TPD MSW Plant in GOA

Ms. Pratibha Sharma, Project Manager, UNDP illustrated on Dry Waste Management Model in Mumbai

Ramdas Tukaram Kokare, Dy. MC, KDMC elaborated on success story of Vengurla Town - Zero Landfill Waste Management.

Webinar on **CATCH THE RAINS** Scheduled on 14 May 2021 at 6 PM

Visit IWWA, Mumbai Centre website for free Webinar link to participate



Water scarcity is a major concern in today's scenario.

Rainwater harvesting (RWH) is a technique that is used for collection and storage of rainwater into natural reservoirs or tanks or the infiltration of surface water into subsurface aquifers before it is lost by running off.

This webinar shall deliberate on various techniques, success and failure and wider aspects.

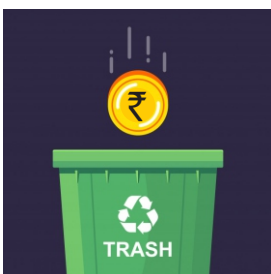
Er. Suprabha Marathe, Dy. MC, MCGM shall provide insight on "Government initiatives in Rain Water Harvesting and its assessment"

Er. Ulhas Paranjape, Trustee, Jalwardhini Pratisthan shall illustrate on "Emerging technologies in Rain Water Harvesting and water conservation"

Mr. Nirav Saraiya, MD, Vivaan Water & Enviro Solutions Pvt. Ltd., shall present on "Rain Water Harvesting in Urban Areas and Industry"

Webinar on **WASTE TO WEALTH** Scheduled on 5 June 2021 at 6 PM

Visit IWWA, Mumbai Centre website for free Webinar link to participate



IWWA Mumbai Center on the occasion of World Environment Day is organizing this webinar.

Mr. Pradeep Joshi, CEO, GREEN CIRCLE, INC., shall be delivering an elaborate knowledge sharing on "Waste to Wealth"

Stalwart's Advice... cont'd from Page 2

on the lines of AWWA. Today, it has 12,000 members spread in 35 centres at every corner of the country having cross section of a large number of water professionals (who have worked / working at higher administrative levels), contracting firms, research associates - academicians and dedicated engineers. This force can be utilized for shaping the country's "Vision-2050" task. If accelerated by dynamic leadership of Mumbai centre, with plus 2000 members and at head quarter location, it will definitely shoulder its responsibility, achieving a landmark for holistic development of country's domestic water front by way of-

- 1) Skill development in water domain,
- 2) Developing mechanism in achieving SDG-6 of UNO,
- 3) Improving Delivery Mechanism by way of 24x7 concept propagation,
- 4) Accelerating Integrated Water Resources Management,
- 5) Organizing programs on Capacity Building,
- 6) Initiating Water Literacy,
- 7) Rationale for Private Sector Participation,
- 8) Offer Potential Knowledge Partner.

Let us expect to run on this way forward.

POSTER COMPETITION



World Environment Day

05 June 2021

Visit IWWA Mumbai website for more details.

with best compliments from



WATERNET CONSULTING SERVICES PVT. LTD.

5/Ground Floor, Evergreen Apartment, Adjacent to Vandana Cinema,
L.B.S. Road, Thane (W) – 400602. Tel : +91 22 25407074 / 09920226060
Email : waternetcs@gmail.com • Web : www.waternet.in



Mumbai Center Management Committee (2021-23)

Hon. Chairperson

Er. Maniessa Palande

Hon. Vice Chairman

Er. K. B. Wadhavane

Hon. Secretary

Er. P. B. Dalvi

Hon. Jt. Secretary

Er. S. M. Vaidya

Er. S. A. Pawar

Hon. Treasurer

Er. A. S. Gadge

Hon. Jt. Treasurer

Er. V. L. Naykodi

Hon. Water Mentor

Dr. Smita Patil

Head RWH Cell

Er. U. N. Paranjpe

Ex. Hon. Chairman

Er. R. B. Bambale

Members

Er. Gajendra Ganla

Er. Deepak Sawant

Er. Dilip Sonwane

Er. Nirav Saraiya

Dr. Nitin Mukadam

Mr. Mohan Matsye

Co-opted Members

Er. Prashant Mahagaonkar

Er. Ajay Rathore

H.Q. Nominee

Dr. Ulhas Naik

Er. G. V. Patade

Invitees

Er. A. P. Nirbhavane

Er. Ajay Wankhede

