



सीएसआईआर-भारतीय विषविज्ञान अनुसंधान संस्थान CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH



CSIR-IITR, Lucknow is the only multidisciplinary research institute in the field of toxicology in South-East Asia with the motto:

"Safety to environment & health and service to industry".



R & D Areas

- Food, Drug & Chemical Toxicology
- Environmental Toxicology
- Regulatory Toxicology
- Nanotherapeutics & Nanomaterial Toxicology
- Systems Toxicology & Health Assessment

R & D Partnership for Industries & Startup

- **S.S. Maser Technology Pvt. Ltd. is under incubation @**
Centre for Innovation & Translational Research (CITAR)

Recognitions

- Scientific & Industrial Research Organizations (SIROs)
- U.P. Pollution Control Board (Water & Air)
- Indian Factories Act (Drinking Water)
- Bureau of Indian Standards (Synthetic Detergents)
- Food Safety & Standards Authority of India (FSSAI)

Technologies Developed / Available

- Oneer - A Novel Solution for Safe Drinking Water
- Portable Water Analysis Kit
- Mobile Laboratory for Environment and Human Health
- AO kit for Rapid Screening of Argemone in Mustard Oil
- MO check for Detection of Adulteration Butter Yellow in Edible Oils



Manufactured by:

SSMaser Technology Pvt. Ltd.

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Global Office

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Co-Developed by:



Freedom

from ETP with 100% CPCB compliance



SWACHH LAB™

Laboratory Liquid Waste Treatment Equipment

- Ideal for Research Laboratories, Pathology, Private Clinics etc
- Uses CSIR-IITR Revolutionary Patent Technology
- Neutralizes lab effluent into permissible discharge
- Fully automated and maintenance free
- Can work on battery or solar power @ 2 watts / hour
- Automatic draining of treated waste to sewage lines at regular intervals
- Capacity : 100 Litres & 200 Litres
- No consumables required
- **Models: Swachh Lab - 100 & Swachh Lab - 200**

Quality Accreditations:



100%
COMPLIANT TO
CPCB
GUIDELINES



SWACHH LAB™

A Necessity for Good Earth - Good Health

Our understanding of the conditions required to prevent the transmission of disease has allowed the development of simple, yet highly effective management techniques for handling biologically contaminated liquid waste.

SSMaser Technology Pvt. Ltd. rated by SIDBI as the TOP 3 START UP IN INDIA 2018:2019 has developed an innovative translational device called SWACHH LAB, for the treatment of liquid effluent coming from the research laboratories, pathology, private clinics, chemical & pharmaceutical industry.

The device is co-developed by CSIR-IITR with clinical R&D to validate the efficacy and efficiency to Neutralize lab effluent into permissible discharge.

“We have developed an innovative translational device called SWACHH LAB, for the treatment of liquid effluent coming from the research laboratories, pathology, private clinics, chemical & pharmaceutical industry.”

Key Points For Good Earth Perfection::

- Fully automated & maintenance free
- Capacity: 100 litres & 200 litres / day
- CSIR-IITR based robust design & technology
- High disinfection efficacy of >8 log reduction
- Negligible consumables & power requirement
- Work on battery or Solar power @ 2 watts / hour
- Hot Cold water mixer with Washing Bay (Optional)
- No exogenous chemicals added during disinfection
- Treat disposes medical waste as per BMW guidelines
- Continuous treatment cycles ensures uninterrupted working
- Audio visual alarm to avoid overflow of waste processing unit
- Automatic draining of treated waste to sewage lines at regular intervals



Liquid Discharge post treatment compliant to CPCB/MoEFCC Waste Management Rules Notification No. G.S.R.343(E), 2018

TACKLING ANTIMICROBIAL RESISTANCE



Antimicrobial Resistance (AMR) presents a significant threats to human health. World leaders have agreed that tackling AMR will require addressing both health & agricultural concerns with a focus on prevention. Improving infection prevention & control (IPC) and water, sanitation & hygiene (WASH) is one of the five objectives in the WHO AMR Global Action Plan.

THE CURRENT SITUATION IN HEALTH CARE FACILITIES IN LOW- AND MIDDLE- INCOME COUNTRIES

WASH

38% of health care facilities do not have ANY water source

19% do not have improved toilets

35% do not have water and soap or alcohol-based hand rub for hand washing

Up to **90%** of health workers do not adhere to recommended hand hygiene practices

IPC

In Africa, up to **20%** of women get a wound infection after a caesarean section

Hospital-born babies in low-income settings are at a higher risk of being affected by neonatal sepsis, with infection rates **3 to 20** times higher than in high-income settings

On average **15%** of patients will acquire at least one infection in acute care hospitals

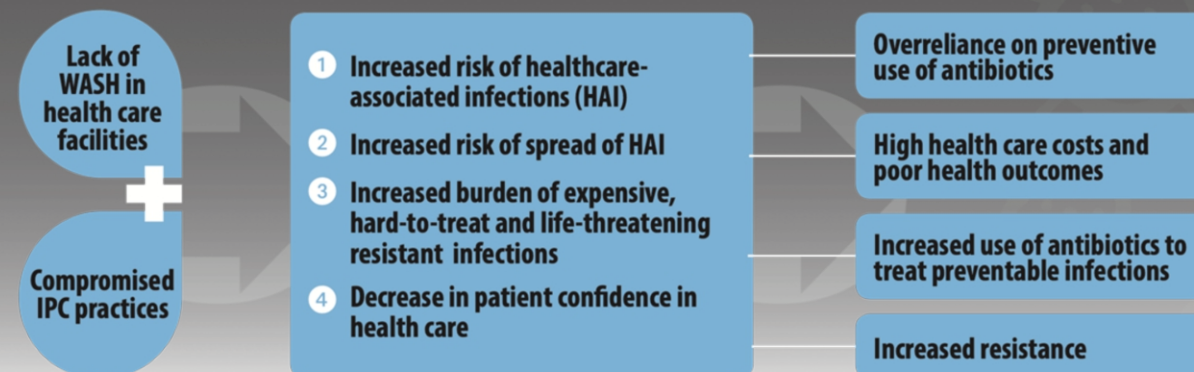
AMR

Prophylactic use of antibiotics is standard in over **80%** of maternity units in several counties

Patients with resistant Staphylococcus Aureus are **50%** more likely to die than those with a non-resistant infection

Each year hundreds of millions of cases of diarrhoea are treated with antibiotics. Universal access to WASH could reduce this by **60%**

THE CONSEQUENCES OF POOR WASH AND COMPROMISED IPC



Swacch Lab™ - ETP Infection Control Program has the following objectives:

- To minimize the risk of infection to patients, health care workers and visitors
- To formulate local guidelines and standard operating procedures (SOPs) for prevention & control of infection.
- To educate and train health care workers.
- To recommend antimicrobial policy for the hospital and formulate antimicrobial stewardship programme.
- To ensure implementation and monitoring of the programme.
- To conduct outbreak investigations, environmental surveillance activities (Air / Water Samples).
- To ensure compliance to biomedical waste disposal.