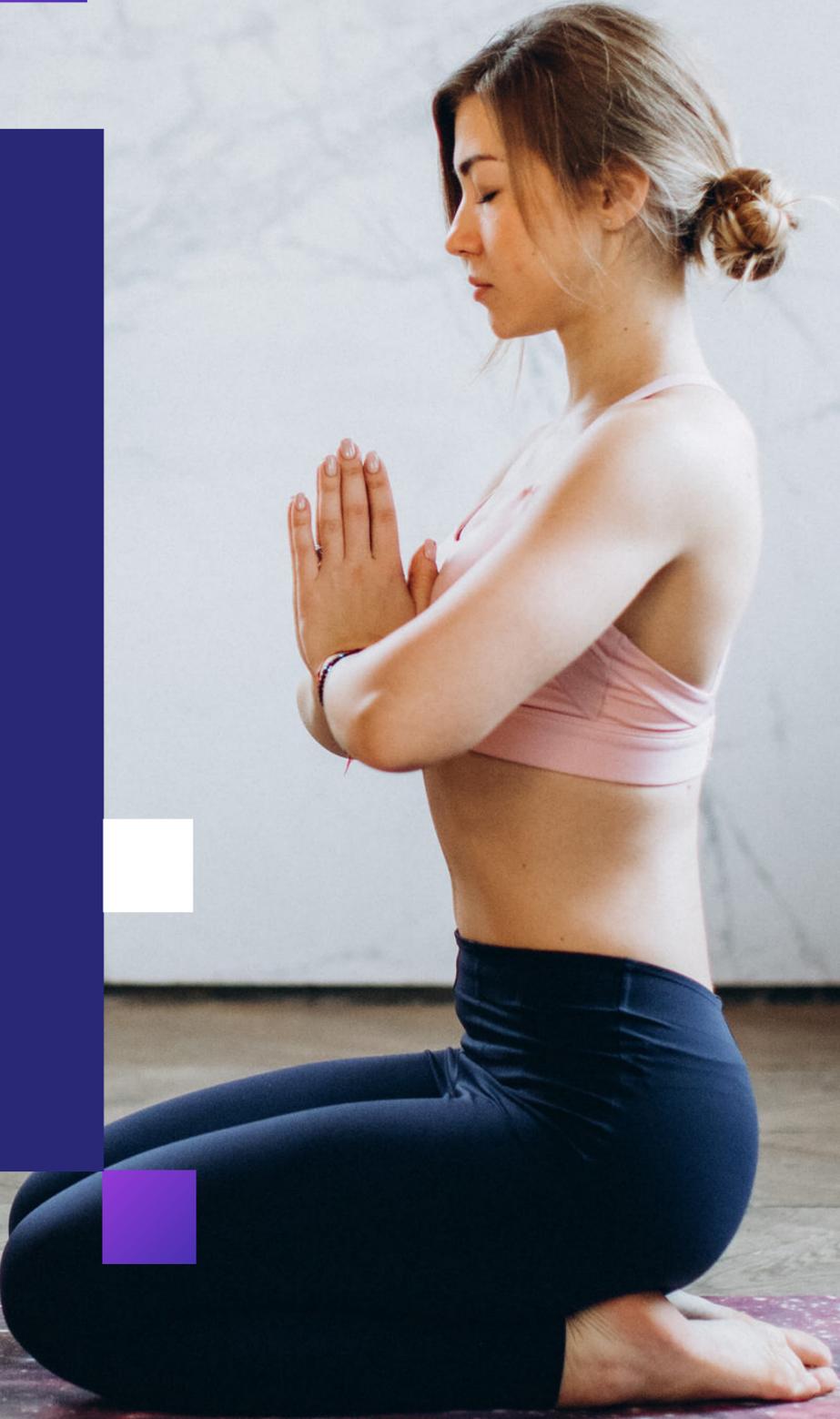




PRESENTING

# INTELLIGENT AIR IONIZERS

FEEL THE POWER OF  
'IONS'





## IMMUNIZE YOUR AIR FOR SAFE AND HEALTHY LIVING

The world is dealing with the pandemic and millions of people are directly and indirectly affected by the deadly Coronavirus (SARS-CoV-2) with severe effects on the human respiratory system and drastically lowering immunity. The air inside your home may look clean and pure, but the truth is that it is buzzing with many viruses, bacteria, allergens and other harmful pollutants that are invisible to the naked eye. Inhaling this polluted air can lead to various health problems like chest congestion, rhinitis, blocked nose and eye irritation to name a few. Hence, maintaining a clear air within your living spaces is of utmost importance.

Expecting women, young children and older adults need to ensure that the indoor air is clean as their immune system may be compromised. They are more susceptible to contagious infections, asthma, lung diseases and heart diseases. Daikin Air Purifiers with Streamer Discharge Technology inactivates viruses and eliminates many such pollutants to create a healthy and fresher environment inside our homes.

# The Current Quality Of Air



Out of 17 countries across 4 continents, Indians have the poorest lungs.



13 of the 20 most polluted cities in the world are in India.



Indian cities witness hazardous levels of harmfully suspended particles in the air called Respirable particulate matter ( $PM_{10}$ ) and Fine particulate matter ( $PM_{2.5}$ ).

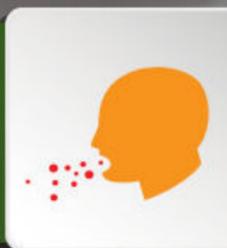


PM (particulate matter) 2.5, which can not only get deep into a person's lungs but can also enter the blood stream, has reached extremely dangerous levels.

As a result of air-pollution even healthy, non-smoking Indians have 30% lower efficiency of breathing (lung function) as compared to Europeans.



Air-pollution leads to chronic bronchitis, allergies, persistent cough and inflammation of airways.



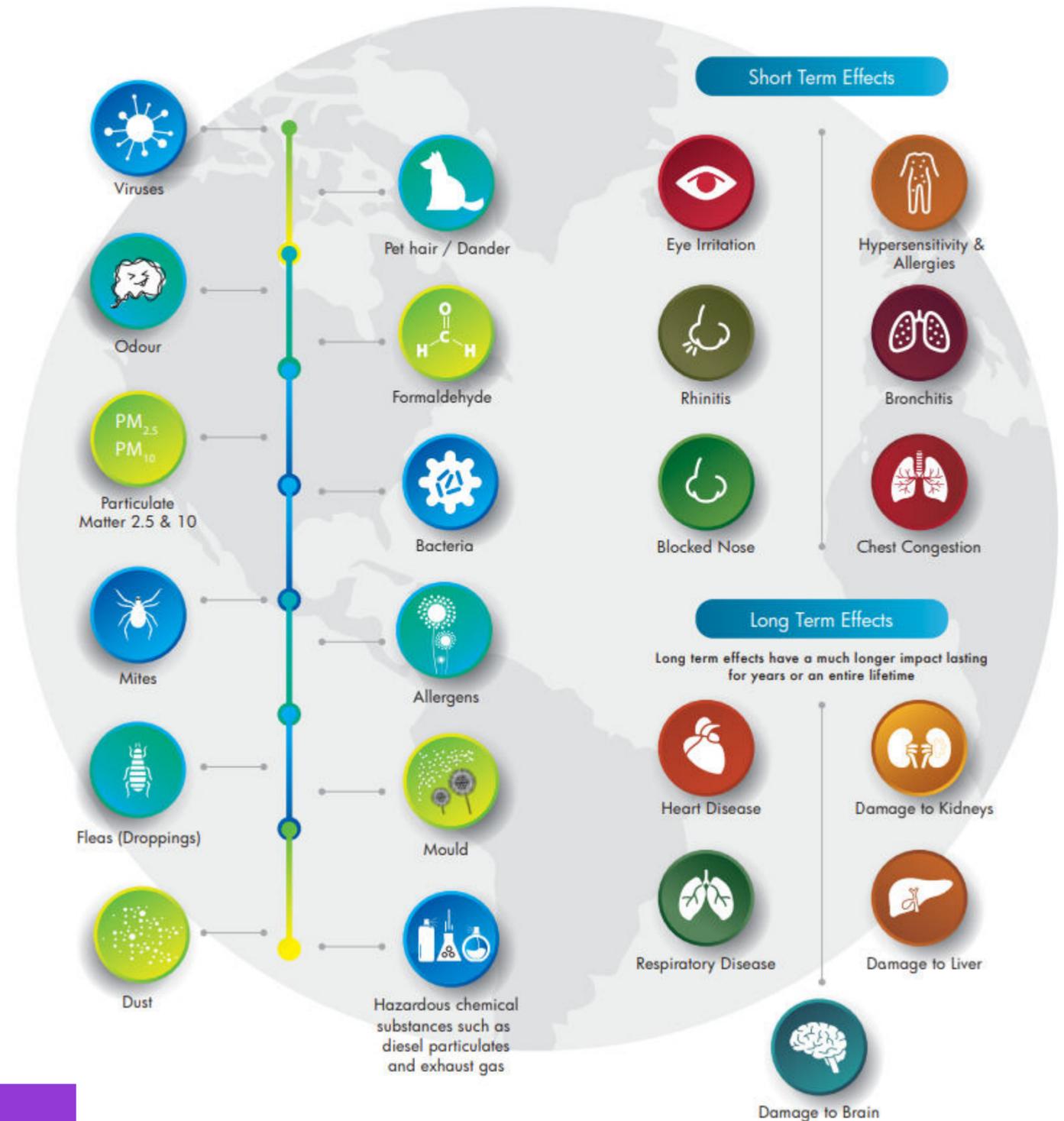
Pollutants released into small enclosed areas like homes and offices builds up more than open spaces.



Hence, indoor air can be upto 5X more contaminated than the outdoor air.



# Kinds of Indoor Pollutants & Health Hazards



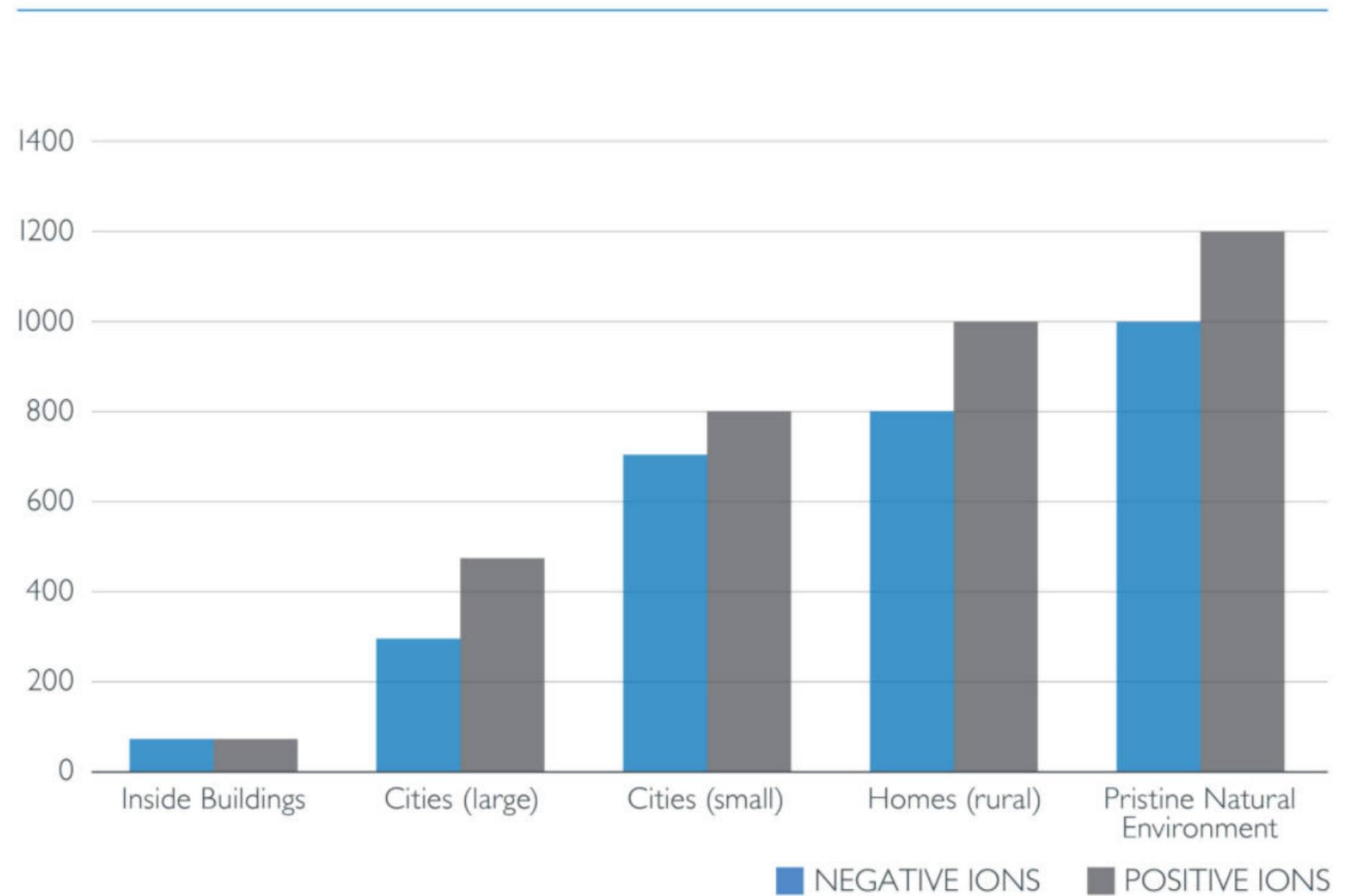
# UNDERSTAND NATURE'S WAY TO CLEAN AIR

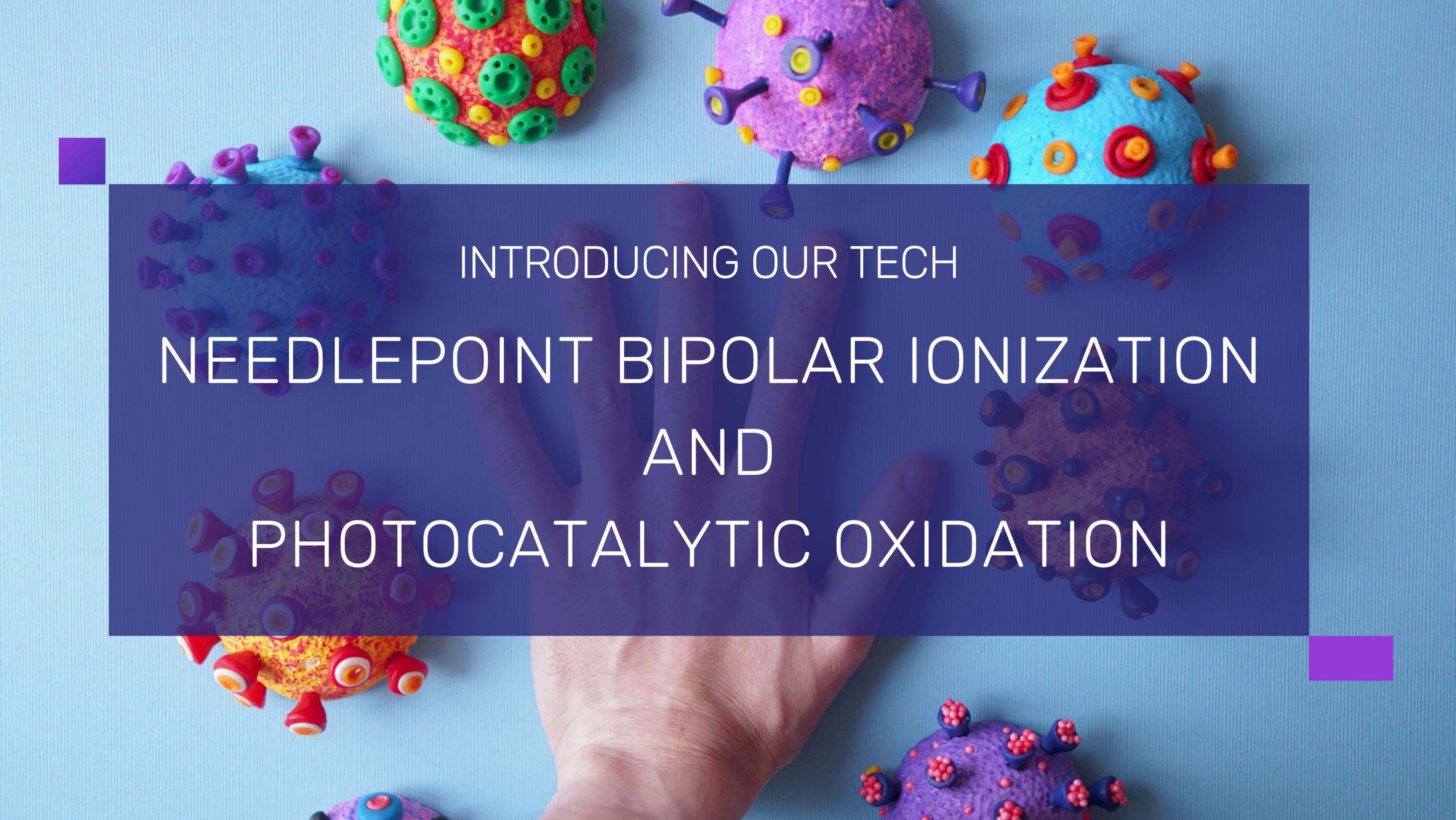
Mother Nature constantly undertakes to clean the atmosphere of pollutants and, therefore, uses the release of IONS in the atmosphere as a tool for cleaning the environment from pollutants from time to time.

Notable examples are thunder lightning after which we experience clean and lighter air around us which is a consequence of the release of an infinite number of IONS due to lightning. Similarly, we experience cleaner and pristine air while walking along the seaside where saltwater striking against the landmass releases a burst of IONS consequently cleaning the air of the pollutants in the vicinity. Another example is a walk near a waterfall where the water falling from a height and striking the rocks release IONS performing the process of Ionizing and cleaning the environment.

What is an  
'ION'?  
Ions Levels in  
Nature

Small Ion Count At Various Locations

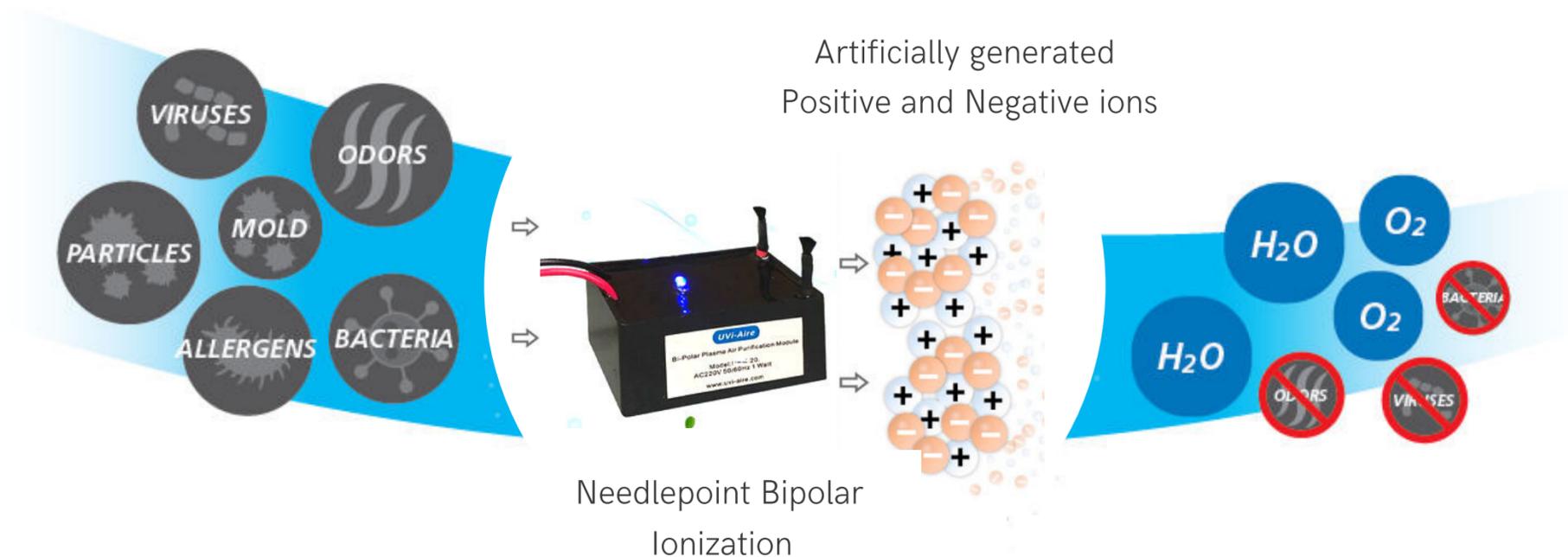


A hand is shown holding a blue, spherical virus model with purple spikes. The background is a light blue surface with several other colorful virus models in red, purple, and blue, each with various colored spikes and protrusions. A dark blue horizontal band is overlaid on the image, containing white text. There are purple squares in the top-left and bottom-right corners of the image.

INTRODUCING OUR TECH  
NEEDLEPOINT BIPOLEAR IONIZATION  
AND  
PHOTOCATALYTIC OXIDATION

# Needlepoint Bipolar Ionization (NPBI)

NPBI technology produces millions of positive and negative oxygen ions. The negative ions contain an extra electron while the positive ions are missing an electron resulting in an unstable condition. When these ions disperse throughout a space, they seek out and form bonds with particles in the air through a process called agglomeration. This creates a snowball effect in which particles begin to cluster together. The larger a cluster of particles becomes, the easier it is for your system to safely filter it out of the air. The ions produce a chemical reaction on the cell membrane surface that inactivates the virus. It is an active process that provides continuous disinfection. Bipolar ionization has already been proven as effective against various influenza strains as well as norovirus, SARs, and other coronaviruses like H1N1.



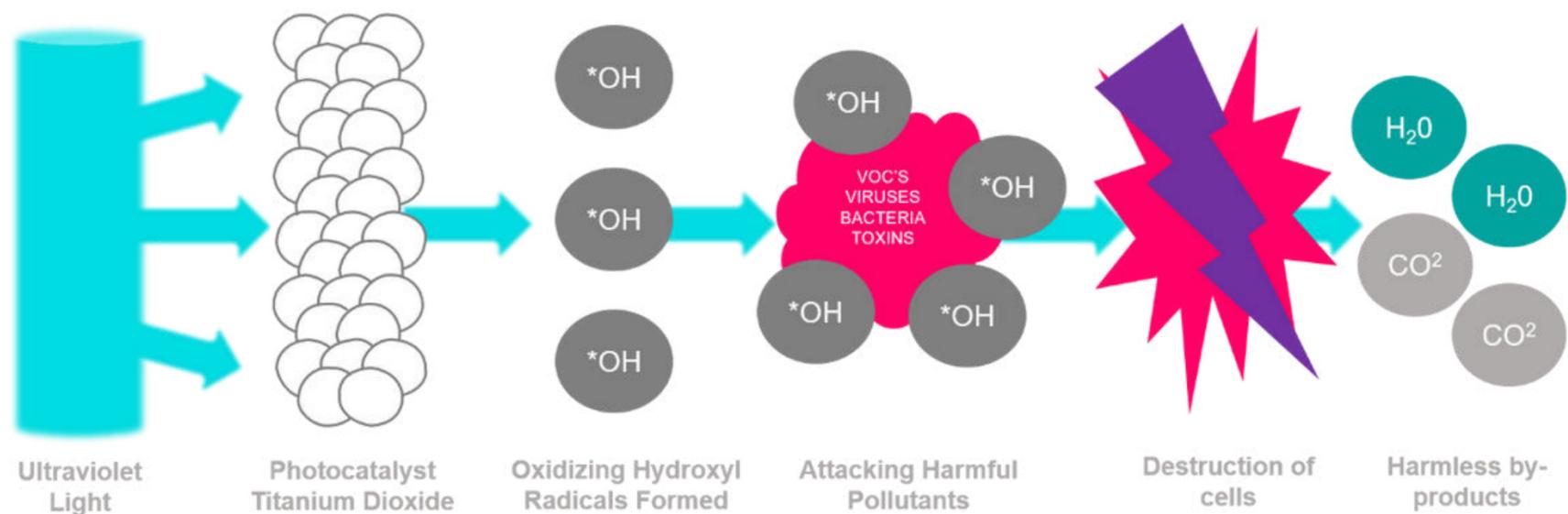
# Photocatalytic Oxidation (PCO)



**SPACE TECHNOLOGY**

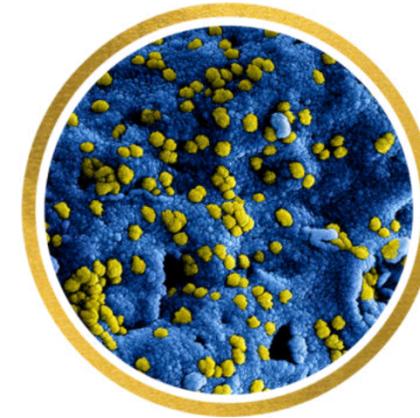
Certified Space Technology by NASA, USA

Photo Catalytic Oxidation (PCO) was originally developed in the 1990s by scientists at the National Aeronautic and Space Administration (NASA) to treat air in an enclosed environment in the spacecrafts. It converts moisture in the air and breaks them up into hydroxyl radicals which are highly reactive. These hydroxyl radicals are small and agile and get pushed into the environment where they attack bigger organic pollutant molecules like fungi, mold, odour causing bacteria, viruses and various VOCs (Volatile Organic Compounds) including ethylene and formaldehyde, even the ones in hard to reach places, breaking apart their chemical bonds and turning them into harmless substances such as carbon dioxide and water. It is proven to reduce up to 99.99% of surface micro-organisms and dramatically reduce airborne contaminants and allergens in the air.



# Eliminate Air & Surface-Bound Viruses And Bacteria

01 SANITIZE



02 STERILIZE



03 IONIZE

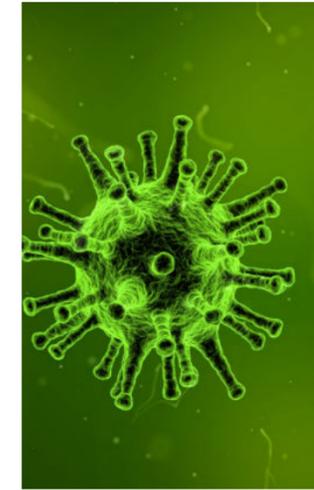


04 PURIFY



# Treats and Eliminates

Our aggressive air sanitization technology can reduce the quantity of viruses including SARS-COV-2 i.e. COVID-19 virus, bacteria, and other harmful substances in the air as well as surface-bound, including Klebsiella pneumonia, Escherichia coli, Staphylococcus aureus, Staphylococcus albus, etc. simultaneously it improves overall Indoor Air Quality.



**VIRUSES**  
upto 99.99%



**MOLD**  
upto 99.99%



**BACTERIA**  
upto 99.99%



**ODOR**  
upto 98%



**VOC'S**  
upto 97%



**PM2.5 & PM10**  
upto 99%

Eliminates  
upto 99.99%  
of Noval  
coronavirus  
(SARS-COV-2)  
within 10 minutes

CERTIFIED BY ICMR-DHR LABORATORY

काशी हिन्दू विश्वविद्यालय BANARAS HINDU UNIVERSITY  
सूक्ष्म जीव विज्ञान चिकित्सा विज्ञान संस्थान  
वाराणसी-221005 Department of Microbiology,  
Institute of Medical Sciences,  
BHU Varanasi-221005  
AN INSTITUTION OF NATIONAL IMPORTANCE ESTABLISHED BY AN ACT OF PARLIAMENT

No. MB/GN/VRDL/ 20-21/101 25.10.2020

M/S AVC Industrial Sales Private Limited  
S-385, Greater Kailash Part-1, South Delhi,  
Delhi-110048

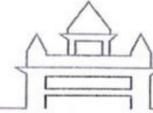
**Subject:** Efficacy testing of product RydAir RP3302 Air Purifier with photocatalytic oxidation (PCO) Technology

The above mentioned equipment was submitted by M/S AVC Industrial Sales Private Limited for testing of their efficacy on bacteria, bacterial viruses (bacteriophages) and Corona Virus (COVID-19) The equipment was tested twice on aerosols of *Klebsiella pneumoniae*, bacteriophages of *K. pneumoniae* and COVID-19 positive samples from patients. We followed the standard microbiological and molecular tests for the evaluation.

The product showed 99.99% reduction from aerosol containing *Klebsiella pneumoniae*, bacteriophages of *K. pneumoniae* and COVID-19 within 10 min of the contact time.

*Gopal Nath*  
25-10-2020  
**Gopal Nath**  
Principal Investigator  
State Level Viral and Research Diagnostic Laboratory  
Principal Investigator  
Scheme No. 5066  
Microbiology, IMS  
BHU

Dr. Gopal Nath, M.D., Ph.D., F.A.M.S.  
Professor,  
0542 6703484 (O), 05422300420 (H), 9335058394 (M)  
Email: gopalnath@gmail.com; Email: gnath@bhu.ac.in

 **BHU**  
capital of knowledge

# Reduction upto 99.99% in Bacterial concentration (Biological Test) in 24 hours

CERTIFIED BY DUBAI MUNICIPALITY

Organization unit:	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية:				
Document title:	Electrical Appliances Sanitizing Effectiveness Test Report	عنوان الوثيقة:	بلدية دبي DUBAI MUNICIPALITY			
Document ref.:	DM-DCLD-F-CP-2170	رقم الوثيقة:				
Report number: TR-0972-2021						
<b>Test description</b>	Antimicrobial Coating Effectiveness longevity					
<b>Test method</b>	DM-DCLD-SOP-CP-2040					
<b>Test condition</b>	<p>The test equipment RydAir Air purifier with PCO technology RP3302 had placed inside the testing room at an area of 50 m<sup>3</sup>.</p> <p>Before operating the unit, a wooden surface had contaminated with known quantities of test bacteria and kept inside the testing room and the device switched on for 6 hours (3000 FT, High )</p> <p>The bacterial reduction on the testing surfaces had measured by using a surface contact plate after 6 hours of exposure. A control test also done in parallel without testing device and calculated the bacterial reduction percentage.</p>					
Test microorganisms	Sampling location	Initial bacterial concentration (CFU/ml)	Duration	Number of bacteria after 24 hr at 35°C		Antimicrobial activity Reduction percentage (%)
				Control (CFU/Plate )	Test (CFU/ plate )	
Staphylococcus aureus ATCC 6538	Room, Wood surface	860	After 6 hrs	740	<1	99.9
Escherichia coli ATCC 10536		820		720	<1	99.9
<b>Remarks:</b> None						
<b>Test photos</b>						
						
RydAir Air purifier with PCO technology RP3302			Sampling room			
This is a system generated and electronically approved report						
Date of Issue : 08/09/2021			Rev. No. : 03			
Level of Confidentiality / درجة السرية : General / عام			Page 2 of 4			
بيانات مفتوحة / OPEN DATA						

# Meets UL2998 standards

Measurement of actual ozone emission is arrived by subtracting background ozone emission from the actual emission of the machine tested. The background emission of the test recorded in this report is 0.0037ppm. The actual average emission of the unit tested is 0.0073ppm. Subtracting the background from the actual emission gives a reading of 0.0036ppm, which meets the UL 2998 classification of Zero Ozone Emission device.

CERTIFIED BY ANALABS SINGAPORE

 **ANALYTICAL LABORATORIES (SINGAPORE) PTE. LTD**  
Analytical Chemists; Environmental and Materials Testing  
No. 8 Kaki Bukit Place, Singapore 416186 Tel: 6746 0886 Fax: 6746 3830 Email: analabs@singnet.com.sg  
CO. REG NO: 197302347G GST REG NO: M2-0017430-5

**REPORT**

Lab No : AC/ES/3183/21  
Company Name : Airverclean Pte Ltd  
Date Monitored : 03/06/2021 Date Reported: 03/06/2021  
Sample Description : Measurement of Ozone Emission for Air Cleaner Product

The ozone (O<sub>3</sub>) emission test was conducted by our technical personnel for air cleaner product using 2B Tech PO<sub>2</sub>M (USEPA EQQA-0815-227) operated based on the absorption of ultraviolet light at 254nm for 5-minutes interval over 30-minutes sampling and detail are marked as shown below:

Project Site : Airverclean Pte Ltd  
Address : 61 Kaki Bukit Ave 1, #03-19, Shun Li Industrial Park, Singapore 417943  
Test Cell Dimension : 0.3mH x 1.1mL x 0.39mW  
Equipment Tested : RydAir Hybrid Air & Surface Purifier RHP3501  
Results :

Background Concentration	
Time (hrs)	Results (ppm)
1555 – 1600 (Equipment OFF)	0.0017

Test Concentration	
Time (hrs)	Results (ppm)
1600 – 1605 (Equipment ON)	0.0025
1605 – 1610	0.0035
1610 – 1615	0.0021
1615 – 1620	0.0035
1620 – 1625	0.0036
1625 – 1630	0.0027
Average	0.0030

Conclusion : The average Ozone reading are recorded at 0.0030ppm for the 30mins running period while the background Ozone reading was recorded 0.0017ppm.

Notes:  
a) hrs – hours  
b) ppm – part per million

  
Zhou Xiang  
Assistant Manager

  
Liew Kok Yen  
Environmental Manager  
ANALYTICAL LABORATORIES (S) PTE LTD.

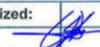
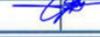
Airverclean Pte Ltd  
61 Kaki Bukit Ave 1,  
#03-19, Shun Li Industrial Park,  
Singapore 417943

\*This report shall not be reproduced except in full, without the written approval of the laboratory.\*

Page 1 of 1

Our devices have been tested and approved by Dubai Health Authorities for Dubai Hospital

APPROVED BY GOVERNMENT OF DUBAI

 <b>GOVERNMENT OF DUBAI</b>		إدارة الهندسة والمعدات الطبية <b>Engineering &amp; Biomedical Department</b>		 <b>هيئة الصحة بدبي</b> DUBAI HEALTH AUTHORITY	
Templet Title:	Material Approval		اسم النموذج		
Doc Ref.	DHA/CSSS/EN/FO--002		رقم النموذج		
Submittal No:	MAS-MEC-41	Rev:	04	Date	09-05-21 <input type="checkbox"/> New Submittal <input checked="" type="checkbox"/> Re-Submittal
DHA Project Code.	PJ0011	Plot No.	1220178		
DHA Project Title	B+G+4 Out Patient Clinics Buildings (B)- Expansion at Dubai Hospital in Al Baraha -Plot No : 1220178, Dubai, UAE.				
Consultant	M / s. National Engineering Bureau Architectural & Engineering Consultants	Contractor	M / s. Condor Building Contracting LLC		
Sub-contractor		Discipline	Mechanical		
Description / Technical Letrate:					
Material submittal for Bipolar Ionization Unit (Rev-04)					
Attachment	<input type="checkbox"/> Sample	<input checked="" type="checkbox"/> Technical Data sheet	<input type="checkbox"/> QA/QC Report	<input type="checkbox"/> Others	
Area of Application / Location	Whole Project				
Specs Ref.	15861	DWG Ref.	M-01 (B) & M 08(B)	BOQ Ref.	B3-Q/123
Origin	Singapore		Manufacturer Name	RydAIR	
Local Agent	AIRVERCLEAN FZC		E-mail/Tel.	9716 5730822	
Contractor's Attestation					
Material / Submittal Comply with Specifications			<input type="checkbox"/> Yes.	<input type="checkbox"/> Alternative.	
Details if Alternative:					
Certified By	Eng.Sanka Srinivas		Signature:		
			Date:	09-05-21	
For Consultant			For Dubai Health Authority (DHA)		
<input type="checkbox"/> No Objection. <input checked="" type="checkbox"/> No Objection With Comments. <input type="checkbox"/> Rejected.			<input type="checkbox"/> 1. No Objection. <input checked="" type="checkbox"/> 2. No Objection With Comments. <input type="checkbox"/> 3. Revise & re-submit, work may proceed subject to incorporation of comments. <input type="checkbox"/> 4. Rejected.		
Date Received From Contractor			Date Received by DHA		
Comments:			Date Returned to Consultant		
Refer to attached comments. 			Comments: 1. Unit to be acceptable as per medical standards 2. consultant stated as SS type needles not avbl in the system as per the vendor list provided hence deviation 3. Follow consultant comments 		
Consultant Authorized: Mr Walea Khalil			DHA Authorized: 		
Signature:  Date: 18-May 2021			Signature:  Date: 26/5/21		
Date Returned To Contractor			Submittal Period / days		
26-May 2021			Total Submittal Period 0		
<small>Note: Dubai Health Authority permission to proceed does not constitute acceptance or approval of materials developed or selected and does not absolve engineer/contractor and their subcontractors and suppliers from full compliance with contractual obligations including the quality of final product.</small>					
Code: DHA/CSSS/EN/FO--002 Issue date 17/11/2020 Issue no.1 Effective date 17/11/2020 Revision date: 16/11/2023					
800 342 (DHA)   www.dha.gov.ae   DubaiHealthAuthority   @dha_dubai					

# UVI-AIRE UBM20

With Needlepoint Bi-polar Ionization  
Technology

- Airflow Capacity:  
UBM20 - UPTO 2500 CFM / 4000 CMH
- Suitable for:  
FCU'S  
ELEVATORS  
TOWER AC'S  
CASSETTE AC'S



# UVI-AIRE UBP SERIES

With Needlepoint Bi-polar Ionization  
Technology

- Airflow Capacity:  
UBP 2500A & 5000A - 2500 & 5000CFM  
UBP 7500A & 10000A - 7500 & 10000CFM
- Suitable for:  
DUCTABLE UNITS  
TFA UNITS  
AHU'S



# RYDAIR RP501

With Photocatalytic Oxidation & Needlepoint Ionization Technology

- Area Coverage: Upto 1500 Sq. Ft.
- Area Flow Rate: 65 CFM
- Power Consumption: 230V AC 20 Watt
- Weight: 1.5 Kg
- Material: ABS Plastic



# RYDAIR RP3302

With Photocatalytic Oxidation & Needlepoint Ionization Technology

- Area Coverage: Upto 3000 Sq. Ft.
- Area Flow Rate: 65 CFM
- Power Consumption: 230V AC 50 Watt
- Weight: 7 Kg
- Material: ABS Plastic



# RYDAIR RHP SERIES

With Photocatalytic Oxidation & Needlepoint Ionization Technology

- Airflow Capacity:  
RHP3001 - 2500CFM / 4000CMH  
RHP5001 - 3500CFM / 6000CMH
- Suitable for:  
DUCTABLE UNITS  
TFA UNITS  
AHU'S



# Applications!

Corporate

Retail

Healthcare

Industrial

Hospitality

Banks & Theaters

Residential

Educational Institutes



We are proud to be associated with KOTAK MAHINDRA BANK, ensuring safe indoor air in their various offices and branches all over India





**SUMMER FIELDS**  
School  
Kailash Colony

We are proud to be associated with K. R. MANGALAM WORLD SCHOOL, ensuring safe indoor air in their various school and classrooms all over India



# Clients!



## ABOUT AVC INDUSTRIAL SALES PVT LTD

We, AVC Industrial Sales Pvt Ltd, India are a subsidiary of Airverclean Pte Ltd, Singapore, who have been in the air filtration business since 1990, manufacturing & distributing a range of Air Cleaners. To meet with new changes & challenges to the environment, we undertake intense Research & Development and follow the strictest of quality control and development measures/processes.

Our understanding of air filtration and pollution control systems has enabled us to refine our designs and products to suit changing environments and requirements. We follow strict quality control and undertake research and development activities to introduce newer products.

Our product range is marketed under our brand RydAir. Range of products related to Ultra-Violet, Ozone Generator, and Bipolar Ionizers are marketed under our sub-brand Uvi-Aire.

# Contact!

Presented By:

Mr. Puneet Kumar (Director - Sales)

M: 08950260042 | E-mail: [puneet@airverclean.in](mailto:puneet@airverclean.in)

## **AVC INDUSTRIAL SALES PVT LTD**

S - 385, Greater Kailash Part 1, New Delhi - 110048, India

T: 011-29234324 | E-mail: [enquiry@airverclean.in](mailto:enquiry@airverclean.in)

W: [www.airverclean.in](http://www.airverclean.in)

A SUBSIDIARY OF

## **AIRVERCLEAN PTE LTD**

61 Kaki Bukit Ave #03-19 Shun Li, Industrial Park, Singapore 417943

T: +65-67415800 | E-mail: [sales@airverclean.com](mailto:sales@airverclean.com)

W: [www.airverclean.com](http://www.airverclean.com)