




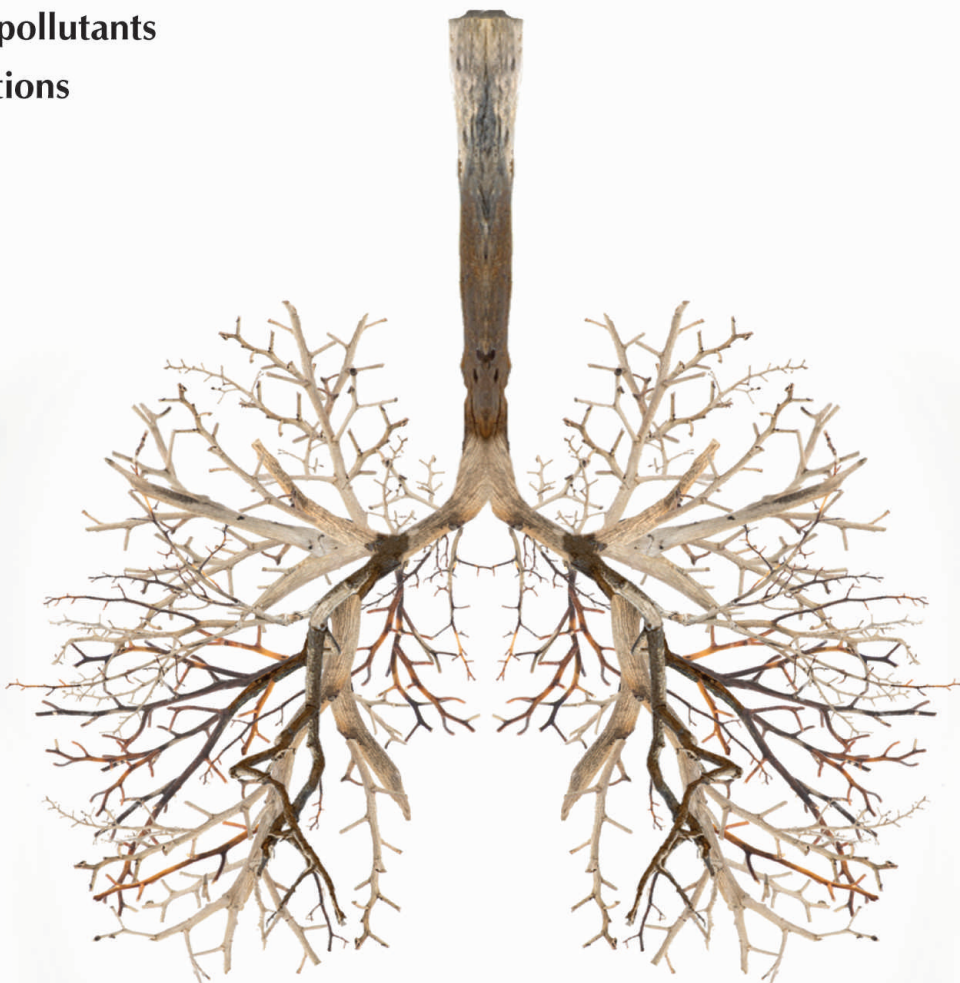
Be Protected!



Air pollution is now the world's largest single environmental health risk and the household air hygiene spoilers are not less dangerous¹

Asthma exacerbations may be caused by a variety of triggers including²

-  **Indoor allergens (e.g. domestic mites and fungi)**
-  **Indoor air pollutants**
-  **Viral infections**



Three Pakistani cities among the most polluted cities in the world³

Three Pakistani cities are listed among 20 most polluted cities in the world, according to the World Economic Forum. **Karachi, Peshawar and Rawalpindi** are among the 20 most polluted cities in the world, as per the most recent statistics from the **World Health Organisation (WHO)** compiled from more than 1,600 cities for the years 2008 to 2013.



According to GINA Guideline 2015

Factors that may trigger or worsen asthma symptoms include viral infections, domestic or occupational allergens (e.g. house dust mites, pollens, cockroaches) tobacco smokes, exercise and stress.*



Non-Pharmacological Strategies and Interventions

In addition to medications, other therapies and strategies may be considered where relevant, to assist in symptom control and risk reduction.

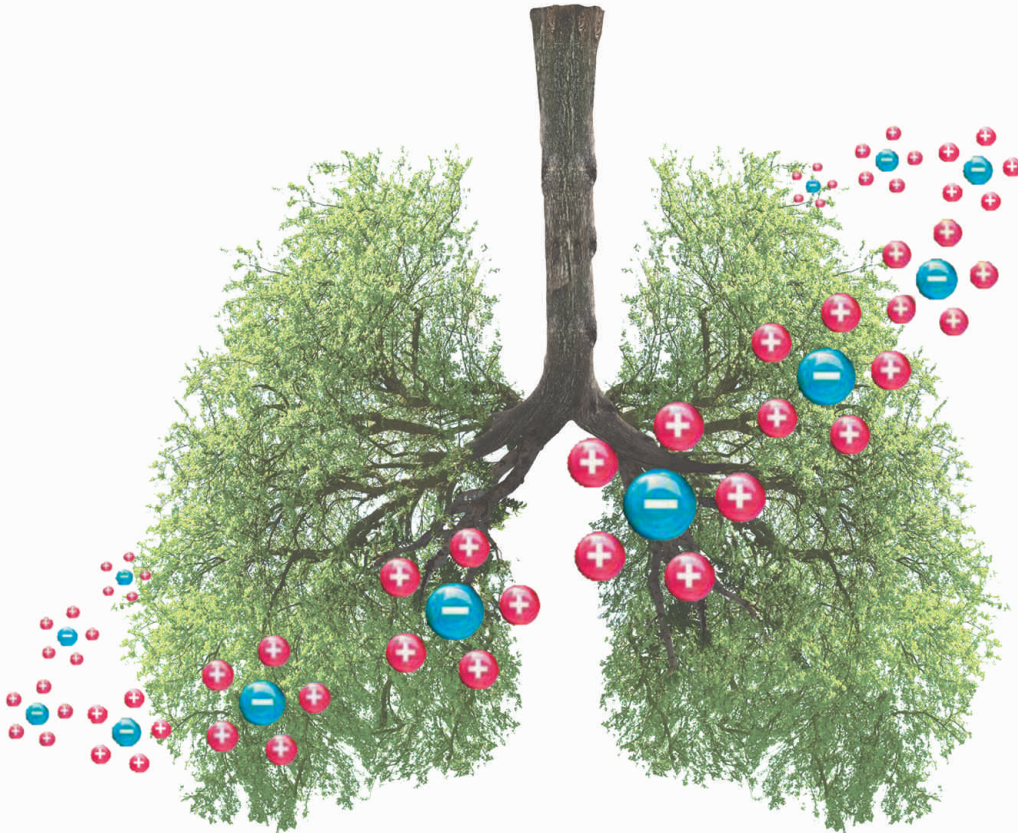
Guideline focuses on strategy to address strong precipitating factors including viral respiratory infections, smoke, dust and other factors.

What is Plasmacluster?



Plasmacluster technology is the innovative and unique Japanese technology that belongs to SHARP.

With its unique scientific concept, Plasmacluster technology is considered to be one of the safest and most effective air decontamination technologies that can provide an optimum and continuous protection against: Viruses, Bacteria, Dust Particles, Dust Mites and Bad Odors to create a safe and healthy environment.



Plasmacluster Devices

SMART

Unlike regular air filtration systems, Plasmacluster technology is not dependent on the microbe size or on the device suction power.

Instead, Plasmacluster can tackle the different airborne microbes based on their structure.

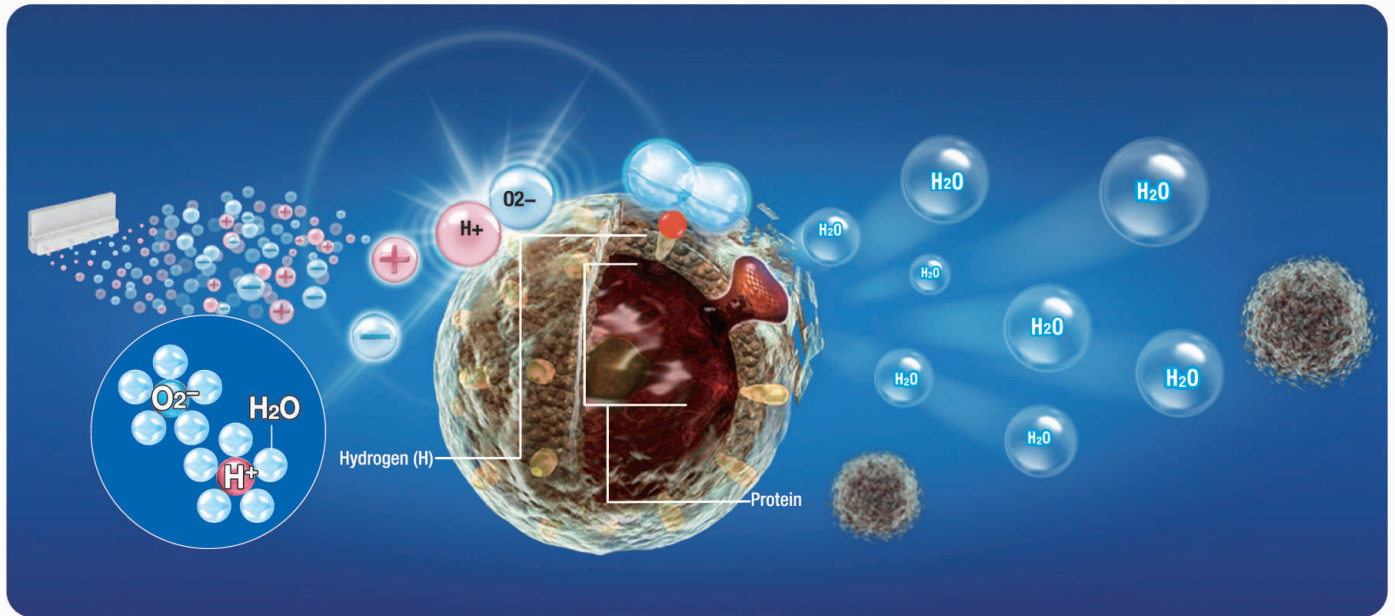
SPECIFIC

Thanks to its unique mechanism of action, Plasmacluster is proven to be very specific to assure the complete eradication of the different airborne microbes.

SAFE

As per the **FDA** and the **EPA** standards, Plasmacluster meets **Ozone** safety levels (between 0.05 to 0.10 million by volume of air).

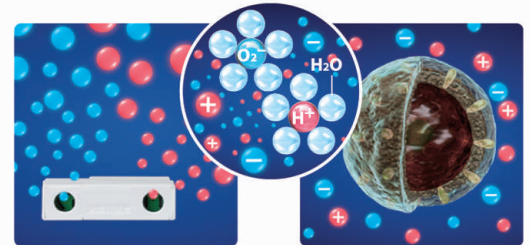
How Plasmacluster works against microbes and airborne allergens?



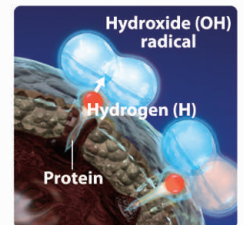
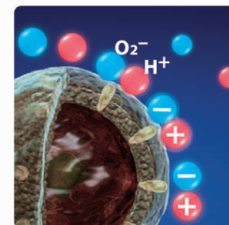
The ions are long-lasting* because they are surrounded by water molecules.

1 Ions are released.
Plasmacluster ions, the same positive and negative ions found in nature, are generated by plasma discharge and released into the air.

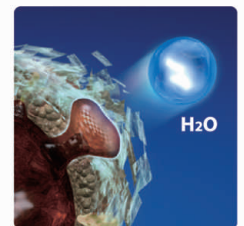
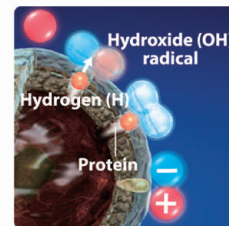
* Verified in Sharp test comparisons of ions not surrounded by water molecules.



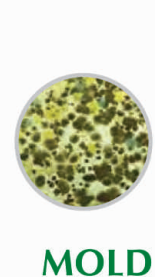
2 The ions act on airborne microbes.
The ions form hydroxide (OH) radicals that are highly oxidizing only when they adhere to the surfaces of mold and viruses. They instantly remove the hydrogen from the surface proteins, breaking them down.



3 The broken-down components return to the air as water.
The hydroxide (OH) radicals combine with hydrogen (H) to form water (H₂O), which returns to the air.



Plasmacluster is Effective Against



Proven Effectiveness Of Plasmacluster Ions

SHARP



Eradication of Viruses

Plasmacluster ions break down and remove projecting spike-shaped proteins of suspended viruses, and reduce their effects.

Experiments showed:

Viruses were suspended in a 1m³ box with a Plasmacluster ion density of 7,000 ions/cm³. The percentage of airborne viruses inactivated was 99% within ten minutes.¹

When the Plasmacluster ion density was increased to 50,000 ions/cm³, the percentage of airborne viruses inactivated increased to 99.9% within ten minutes.²

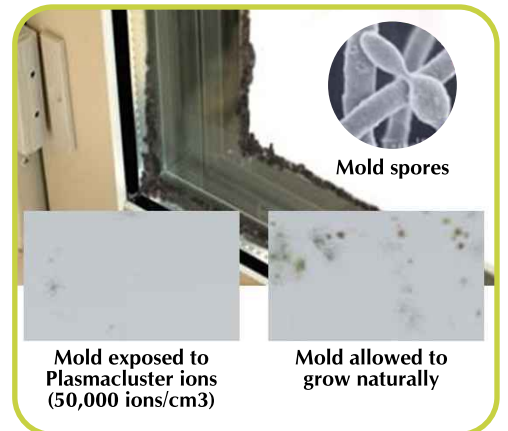


Eradication of Mold

Plasmacluster ions cut through and remove the cell membrane proteins on suspended mold surfaces inhibiting their effects.

Experiments showed:

Airborne mold was suspended in a chamber with a floor area of 31m³. Plasmacluster ions with a density of 3,000 ions/cm³ were emitted and measured with an air sampler. Elimination reached a minimum after 90 minutes.³



Eradication of Allergens

Plasmacluster ions cut through and remove proteins in suspended allergens generated by dust mite, faeces and dead mites, reducing their effects.

Experiments showed:

The effect of dust mite allergens in an uncleaned room measuring 13m², showed that with a Plasmacluster density of 3,000 ions/cm³, a zero increase in allergens occurred.⁴



Plasmacluster Ions remove static electricity

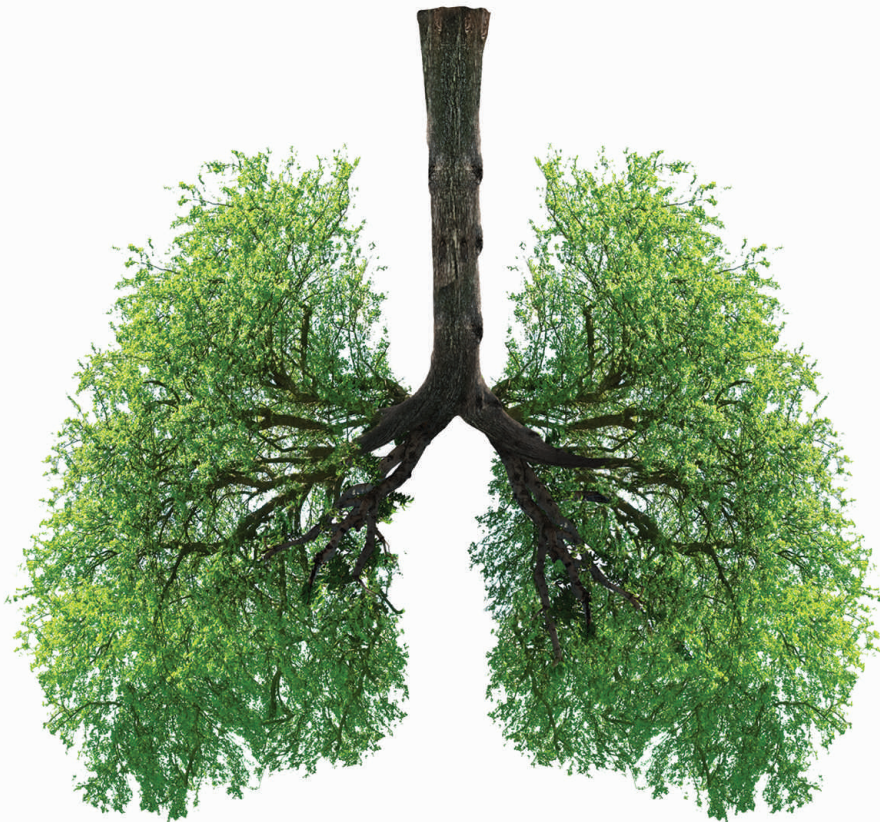
Static electricity can make deposited house dust and pollen stick to furniture, sofas and clothing. By removing the static electricity, dust and pollen cannot cling to furnishings, so they can easily be removed through the Plasmacluster Air Flow System.



Experiments conducted by public testing institutions:

1. Retroscreen Virology Ltd, UK.
2. Retroscreen Virology Ltd, UK.
3. Ishikawa Health Service Association.
4. Graduate School of Advanced Sciences of Matter, Hiroshima University, Japan.

Plasmacluster Air Decontamination efficacy in inhibiting the activity of various pathogens confirmed through collaborative research



U.K.

Airborne viruses

- Retroscreen Virology Ltd., London

China

Airborne viruses

- Shanghai Municipal Center for Disease Control and Prevention

Airborne bacteria

- Shanghai Municipal Center for Disease Control and Prevention

Adhering bacteria

- Shanghai Municipal Center for Disease Control and Prevention

Adhering mold fungi

- Shanghai Municipal Center for Disease Control and Prevention

Germany

Adhering bacteria

- University of Lübeck
- Dr. Gerhard Artmann, Aachen University of Applied Sciences

Adhering mold fungi

- University of Lübeck
- Dr. Gerhard Artmann, Aachen University of Applied Sciences

Japan

Airborne allergens

- Department of Biochemistry and Molecular Pathology, Osaka City University Graduate School of Medicine
- Graduate School of Advanced Sciences of Matter, Hiroshima University
- Soiken Inc.

Airborne viruses

- Kitasato Research Center of Environmental Sciences
- Public Health Research Foundation, Graduate School of Medicine, Tokyo University
- Kitasato Institute Medical Center Hospital
- Shokukanken Inc.

Airborne mold fungi

- Ishikawa Health Service Association
- Japan Food Research Laboratories

Adhering bacteria

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Adhering mold fungi

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Airborne bacteria

- Ishikawa Health Service Association
- Kitasato Research Center of Environmental Sciences
- Kitasato Institute Medical Center Hospital
- Animal Clinical Research Foundation
- Japan Food Research Laboratories
- Shokukanken Inc.

Adhering viruses

- Shokukanken Inc.

South Korea

Airborne viruses

- Seoul National University

Vietnam

Airborne viruses

- Pasteur Institute, Ho Chi Minh City

Adhering viruses

- Hanoi College of Technology, Vietnam National University

U.S.A.

Airborne bacteria

- Dr. Melvin First, Prof. Emeritus, Harvard School of Public Health

• Sharp does not guarantee that test results can be replicated in actual user situations.
• Plasmacluster's effectiveness will vary depending on the ion density and product.

Plasmacluster safety has been further confirmed by having more than 60 Million units sold with absolutely NO safety incidences ever reported



Be protected with Plasmacluster

Double Air Decontamination effect



Plasmacluster ions

Protection against microbes and airborne allergens



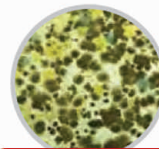
VIRUSES



BACTERIA



DUST MITES



MOLD

HEPA Filtration capturing 99.97% of air pollutants



POLLEN



DUST



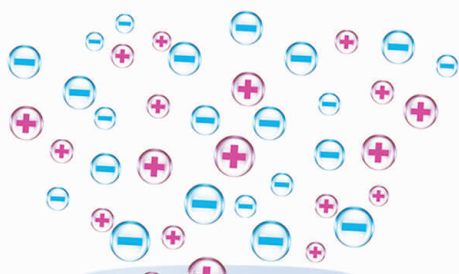
PET DANDER



SMOKE



HEPA Filter

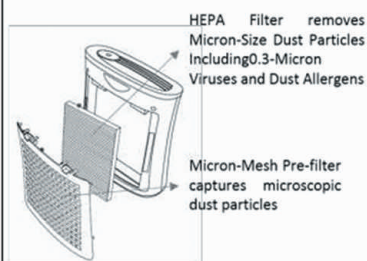


BREATHE mode

equipped

With just a press of BREATHE button, Plasmacluster Air Decontamination system starts high-density Plasmacluster shower with a stronger air flow for 60 minutes, dispersing the Plasmacluster ions to the entire room assuring an optimum protection.

Efficiently collect and capture the dust and bacteria



Manufactured by:

SHARP



Authorised Partner

Medinostic

Medinostic Health Care (Pvt.) Ltd.
Karachi - Pakistan.

www.medinostic.com/sharp

📞 0346 8208910 (business hours)