



United Nations
Educational, Scientific and
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UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

UNESCO Chair on Sustainability

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Jordi Morató i Ferreras, as Coordinator of the **UNESCO Chair on Sustainability and Director of the MSMLab of the Polytechnic University of Catalonia**, with ID no. 39340188E;

CERTIFIES,

That considering the environmental conditions developed during our study:

1) CATA Purifyer devices demonstrated very high aerosol disinfection efficiency against virus*, obtaining a 99.99% reduction after 10 min (power 6) and after 15 min (power 1 to 3).

*Tested with Phi6 bacteriophages.

2) CATA Purifyer devices demonstrated very high aerosol disinfection efficiency against bacteria.

- 99% reduction of *E. coli* in aerosols after 5 minutes at full power and 99% reduction of *S. aureus* after 10-15 minutes.
- Elimination of 90% of *Geobacillus* spores at 15 minutes and 99% at 50 minutes (bacterial spores are the most resistant cells known).
- These outstanding results in the inactivation of *Geobacillus* in aerosols were achieved in the LAB without the HEPA filter in the CATA Purifyer.

3) CATA Purifyer devices have also demonstrated very high surface disinfection efficiency.

- The device has a high capacity to reduce *E. coli* on surfaces under laboratory conditions, eliminating them 100% after 30 minutes.

4) In summary, the CATA Purifyer system demonstrated superior disinfecting activity against all tested virus and bacterial models.

5) CATA Purifyer plasma system together with the ozone released into the air, is capable of carrying out the disinfection of air and surfaces under conditions of high microbiological air pollution.



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In recognition of which, this certificate is signed,

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