

**World first : LOD, the Air "Vaccine" demonstrates its effectiveness
The French lamp kills more than 99% of viruses, bacteria and allergens present in the air in 20 minutes**



Against all odds, while 95% of covid-19 is transmitted through the air, nothing has yet been done to... treat the air !

A world first, the LOD technology which combines lighting and decontamination is the only solution :

- to be proven and certified after a study worth €515,000,
- to kill all viruses present in the air,
- to be deployed in the presence of people and continuously, without contaminated filter to be treated later (also not very ecological formula).

It is also the first time that a lamp has demonstrated its effectiveness.

At a time when it has just been announced that a booster vaccination is necessary every six months, when cases of avian flu are back in the spotlight, when bronchiolitis epidemics are announced without precedent, the LOD technology, which is French, has already protected 30,000 people in France in just a few months and is acclaimed internationally.

It is the subject of a double patent in 184 countries.

"Today there is no treatment for RSV (Respiratory Syncytial Virus, pathologies such as bronchiolitis, pneumopathy, covid...), not to mention the 4 million working days lost each year due to influenza or gastro-enteritis..."

Air quality is a major key to airborne transmissions : the future lies in prevention through air decontamination.

Dr Manuel Rosa-Calatrava, Director of Research, Director of the VirNext laboratory.

Evaluated and certified by the VirNext technological research platform, the LOD technology has been scientifically proven and certified for the first time in the presence of real viruses in a highly contaminated atmosphere, comparable to an everyday atmosphere. In 20 minutes of use and in the presence of people, the covid-19 virus is 99% deactivated.

VirNext, spin-off (EZUS Lyon) of the Claude Bernard University Lyon 1 Biopole (UCBL1).**

With respiratory pathogenic viruses as its core business, VirNext, which is based in the Lyon biopole, was created to dedicate R&D to the transfer of knowledge to industry.

It is above all the **the only high security research laboratory (biosafety level 3 (P3/P4) laboratory) in France and Europe** to be able to :

- generate experimentally a highly contaminated, quantified, qualified and reproducible atmosphere,
- conduct qualitative, quantitative and representative evaluations of an everyday environment in large volumes, to prove, in a reproducible way, the effectiveness and the performances of the decontamination technologies: UVC, filtration, photocatalysis...

LOD lamps, a certified efficiency

The LOD technology was evaluated for a period of 5 months from May to September 2021, in a confined space :

- materialized by a 3 m3 enclosure,
- where a contaminated atmosphere was generated by nebulization of **true SARSCoV2 virus** (covid-19) with Alpha and Delta variants.

The efficacy of the DRLs was determined by calculating the viral abatement (% antiviral efficacy), based on the titration of infectious viruses from the air samples in the chamber (expressed in TCID50/m3 of air).

Here the results are convincing: more than 99% viral abatement in only 20 minutes in an atmosphere with more than 10 million viruses in the enclosure, i.e. more than 1,000 times the dose generally considered in the presence of contaminated people.



LOD, the air "vaccine", a 100% French breakthrough innovation

LOD (for Light of Disinfection) uses UV-C, the so-called ultraviolet light (or black light) whose sterilizing action, proven since 1878, has been used for more than 50 years in the decontamination of water, operating theatres, surgical instruments...

With LOD technology:

- For the first time, lighting and air decontamination are combined in a system that is safe for humans,
- All rooms with or without windows are completely disinfected,
- Viruses are destroyed immediately after passing through the LOD and continuously.

Effective against all coronaviruses, influenza, gastroenteritis in humans, LODs are also formidable in the animal world : already deployed to fight against equine rhinopneumonitis, they could also play a major role against avian flu or even promote the prevention of crops in organic greenhouses.

And this is not to mention the role they are already expected to play in the fight against allergies.

Presented at the CES in Las Vegas from January 5 to 8, 2022, the French innovation LOD, will be visible ?

Its founder, Olivier Moyen, a biology engineer, aims to become the Tesla of air within 3 years.

It should generate by 2023 ... **the creation of 1,000 jobs and a turnover of half a billion euros.**