



Expansion Electronic Srl  
via delle industrie, 18 - 36050 Cartigliano (VI) (I)  
CF-PI/VAT: IT 00799450242 -Cap. Soc.: 50'000€ i.v.  
REA: VI/162925 - Reg. Impr. Vicenza 00799450242  
Tel +39(0)424 592400 2linee r.a. - Fax:+39(0)424 827061  
email: info@expansion-electronic.com  
web: www.expansion-electronic.com

## **Correlation between Corona Virus and fine particles**

In the last few days, mass media talked about a correlation between the spread of the Corona Virus and environmental pollution. This was stated by a group of researchers of Italian Society of Environmental Medicine (SIMA) who, in collaboration with the Universities of Bari and Bologna, examined the data published on the Regional Agencies for Environmental Protection (ARPA) websites. On the national territory, there are measurement stations which record the levels of pollution. Researchers observed that the virus expansion curves had abnormal accelerations two weeks after the highest concentrations of atmospheric particulate matter. This is clearly visible in the Po valley or in Lombardy, Emilia Romagna and Veneto where between 10<sup>th</sup> and 29<sup>th</sup> February the concentrations of Pm10 exceeded legal limits (50 micrograms/m<sup>3</sup>) and the beginning of March when peaks of Corona Virus infection occurred. The particulate would have given a boost to the spread of the virus. Not only because particulate is a carrier of the viruses but also because it acts as a substrate. The substrate enables the virus to remain alive in the air for a long period from hours to days. Gianluigi de Gennaro, professor at the University of Bari affirms that the higher the pollution level is, the more highways are created for the virus. Minimizing emissions could help. Scientists from other parts of the world where peaks of infection occurred and are occurring agree with the correlation between pollution and Corona virus. It seems that also SARS, in 2003, was more harmful and caused higher deaths in regions with high pollution.

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