



**UFIPOLNETnews No. 7 Oct-2006**

Dear reader,  
here are NEWS for measuring ultrafine particles in ambient air and related subjects.

- 1 **UFIPOLNET: 2<sup>nd</sup> Progress report available (EN)**
- 2 **Do the Nano-sized Particles we Breathe Pose a Risk to our Health?:  
DG ENV; Science for Environment Policy 14 September, 2006 Issue 34 (EN)**
- 3 **Declaration on need for stricter European Regulation of Air Pollution (4-Sep 2006) (DE/EN)**
- 4 **Herz-Kreislauf-Erkrankungen und Atemwegserkrankungen ursächlich mit NO<sub>2</sub> und PM<sub>10</sub> verknüpft (DE)**
- 5 **WHO fordert strengere Grenzwerte für Luftschadstoffe (DE)**

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**1 UFIPOLNET: 2<sup>nd</sup> Progress report available (EN)**

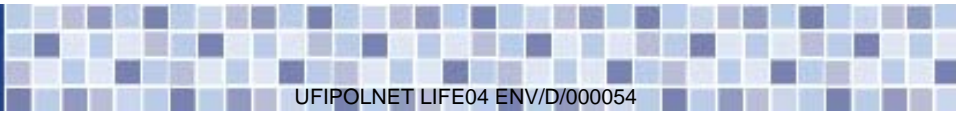
The second progress report of the EU-LIFE project UFIPOLNET is published on the website. First comparing measurements of the four UFI 330 devices have been done. The leaflet is now available in 4 languages: English, German, Czech and Swedish.



**Pictures of the 4 prototypes UFI 330 in Sep-2006 at the IfT calibration test laboratory in the Eisenbahnstr. in Leipzig situated in a flat. High polluted ambient air in a street canyon is measured (Photos: TOPAS).**

First measurements of UFI 330 device from the 4 monitoring sites will be available at the end of this year.

For more information look at:  
[www.ufipolnet.eu](http://www.ufipolnet.eu) and then DOWNLOAD, UFIPOLNET Reports.



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**2 Do the Nano-sized Particles we Breathe Pose a Risk to our Health?:  
DG ENV; Science for Environment Policy 14 September, 2006 Issue 34 (EN)**

“American researchers recently investigated the potential health risks of ultrafine particles in rats. The results show that the nano-sized materials inhaled by rats follow a rapid and efficient pathway from the nasal cavity to several regions in the brain. Exposure also caused signs of inflammation and stress. The ultrafine particles used in the study are the same size as nanoparticles, which are controversial due to concern about their safety.”

[http://europa.eu.int/comm/environment/integration/newsalert/themes\\_en.html#air](http://europa.eu.int/comm/environment/integration/newsalert/themes_en.html#air)

“American researchers have recently investigated the potential health effects of ultrafine particles by studying groups of rats exposed to ultrafine manganese oxide particles, commonly present in industrial plants and the same size as manufactured nanoparticles. The exposure concentration was similar to the concentration routinely inhaled by factory welders.

The scientists found that, when rats inhaled the nano-sized manganese oxide particles, these followed a rapid and efficient pathway from the nasal cavity to several regions of the brain.

After 12 days of exposure, the concentration of the ultrafine particles in the olfactory bulb, a region of the brain near the nasal cavity, had increased 3.5-fold and doubled in the lungs. The researchers found no sign of inflammation in the lungs, but according to the rat’s gene expression and protein analysis, there were signs of inflammation and cellular stress response in the brain. However, the results cannot determine if a build-up of ultrafine particles could cause brain damage. “

Source:

Source: Elder A, et al (2006) « Translocation of inhaled ultrafine manganese oxide particles to the central nervous system », Environ Health Perspectives, 114(8):1172-1178. For free access to the article, click here.

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**3 Declaration on need for stricter European Regulation of Air Pollution (4-Sep 2006) (DE/EN)**

DE: In einer gemeinsamen Erklärung haben Wissenschaftler der European Respiratory Society (ERS), der International Society for Environmental Epidemiology (ISEE) und der International Society for Exposure Assessment (ISEA) ihre Besorgnis über gegenwärtige Bestrebungen zum Ausdruck gebracht, die Grenzwerte für PM10 in der Europäischen Union zu verwässern.

EN: In a declaration scientist of the Respiratory Society (ERS), International Society for Environmental Epidemiology (ISEE) and International Society for Exposure Assessment (ISEA) have made a declaration. They express their fear, that the limit values of PM10 will be watered down.

Source: <http://www.gsf.de/neu/Aktuelles/Presse/2006/pdf/Declaration.pdf>

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**4 Herz-Kreislauf-Erkrankungen und Atemwegserkrankungen ursächlich mit NO2 und PM10 verknüpft (DE)**

„In der Septemбераusgabe der wissenschaftlichen Zeitschrift „Epidemiology“ ist eine wichtige Arbeit zu Auswirkungen von Feinstaub und Verkehrsbelastungen auf die Sterblichkeit in Deutschland erschienen. Ergebnisse: Während der Beobachtungszeit sind 8 % der Frauen verstorben, davon 3 % an

