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## The other pollutants

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### Material developed to absorb more pollutants.

Most scientists worldwide, who are concerned with absorption and disposal of pollutants caused by traffic, focus on benzene which is very harmful to health even in low concentrations. But now, a research team from the University of Granada has taken their research further by developing an absorbent material that can eliminate benzene, toluene and xylene, and organic solvents widely used in the hydrocarbon industry and generated by road traffic in cities.

Monolithic [carbon](#) aerogels can retain these pollutants and then regenerate them for several cycles. The aim of this study was to develop the materials as absorbers of adsorbers of benzene, toluene and xylene (BTX).

In order to eliminate these pollutants, "it is necessary to use materials with a high concentration of micropores, which is where the absorption of pollutants takes place, but these pores must be the correct size and properly arranged. Thus, we achieve a high level of efficiency when eliminating and retrieving BTX after the saturation of the material," said David Fairén, from the University's Department of Inorganic Chemistry.

Furthermore, the design of the adsorbent must allow a sufficient contact for the elimination of compounds and at the same time avoid a decrease in pressure. Finally, the material used must withstand the mechanical forces of vibration and movement. Fairén explained that "the monolithic [carbon](#) aerogels, which are the materials we worked with, satisfy all these requirements".

Results of this research are published in Carbon, the Journal of Physical Chemistry and Langmuir.

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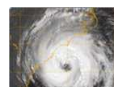
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