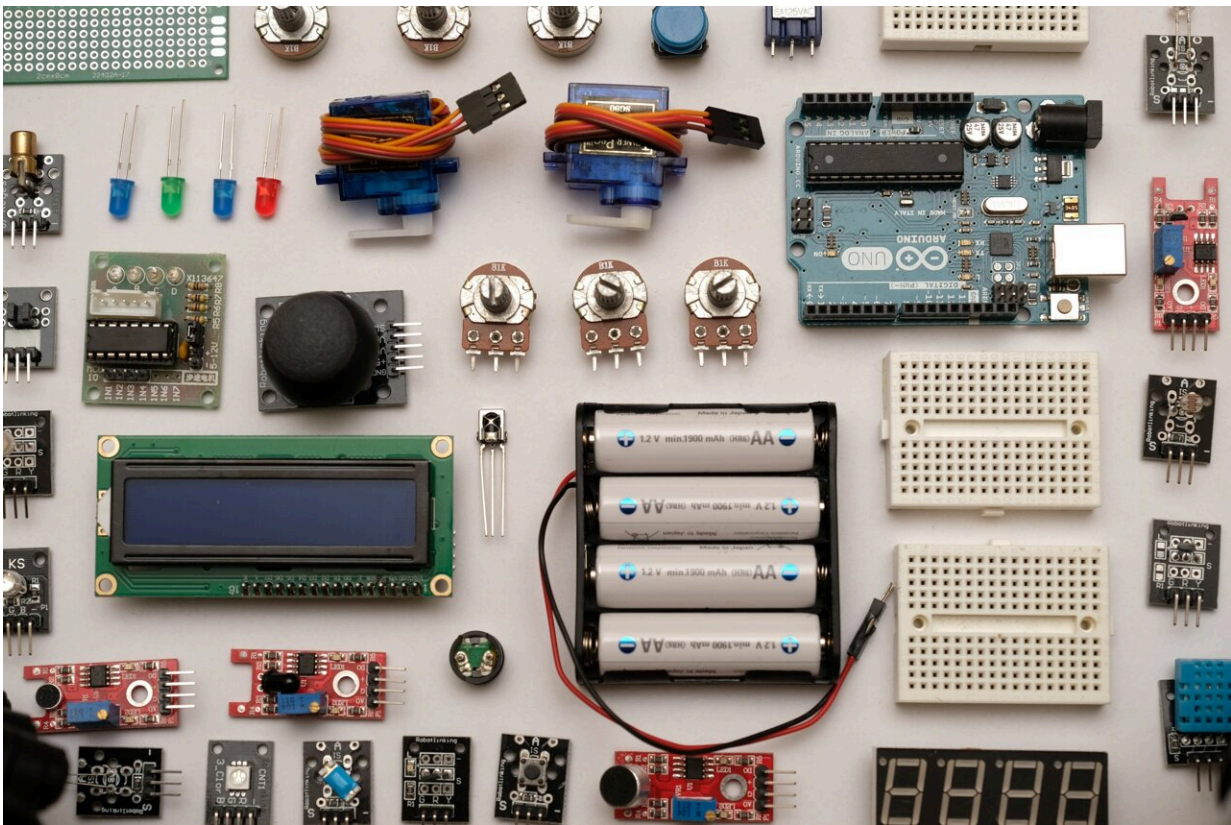


Standardizing 'low-cost' air quality monitors to help measure pollution

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In a recent paper published in *Nature Reviews Physics*, Professor Richard Brown and Dr. Nick Martin, discuss how the standardization of 'low-cost' air quality monitors can help measure pollution.

Clean air is essential for [human health](#), but [poor air quality](#) is an increasing concern in [urban areas](#). Government-run monitoring stations and innovative research projects, such as Breathe London, provide valuable [high-quality data](#) on the air we breathe but it is impossible to set up a network that continuously collects data from every corner of the country.

In recent years there have been significant advances in how air quality is monitored, with the development of 'low-cost' sensors. These miniaturized monitors are often substantially cheaper than traditional technologies and aren't limited by the constraints of traditional reference instruments remaining at fixed locations.

In their article, Brown and Martin discuss the requirements needed to take these 'low-cost' alternatives to the next level so they can properly support evaluation of the air we breathe. To ensure the technology is fit for its intended purpose, a robust assessment is needed, and documentary standards can help in qualifying the performance of these sensors.

These outcomes are important to ensure an open, level playing field for evaluating new products that enter the market, especially in the current absence of any overall regulatory control in the area. Over the next few years efforts will continue in this area to ensure the data from these 'low-cost' sensors remains appropriate for the measurement goals of the scientific community.

More information: Richard J. C. Brown et al, How standardizing 'low-cost' air quality monitors will help measure pollution, *Nature Reviews Physics* (2023). [DOI: 10.1038/s42254-023-00561-8](https://doi.org/10.1038/s42254-023-00561-8)

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