Hack:

- Nanyang Technological University apparently shows the way to better drinking water
- Its water monitor is said to be capable of detecting impurities such as heavy metals - lead, mercury, and more in just 5 minutes without another laboratory
It has now become relatively easy to detect if your water is potable or not, and this can be done in an amazing 5 minutes, courtesy of a new handheld hardware developed by scientists at Nanyang Technological University (NTU) who claim that the degree of contamination by heavy metals in water can be accurately estimated. This means that you could check if you were consuming lead, mercury, and more metals instead of actual water, all this while.

USP of the NTU water monitor is the fact that it is claimed to be capable enough of sensing nearly 24 types of harmful agents in water; this is definitely more than what is available currently in India - most of which require users to introduce an external buffer to the water sample during the test, while ensuring that such usage is carried out really quickly after exposing the sensor to external air. Also, some test involve the usage of colour-changing strips; results of which may not be accurate. At this point in time, this water monitoring kit is yet to be made commercial - availability is reportedly said to penetrate markets in the near future. Also, with NTU based in Singapore, it remains to be seen if the portable water monitor would make it to India - but it does do a world of good for the country.

With rapid results, of the water tests, being generated (in 5 minutes), the water samples may not be required to be taken into a laboratory again for evaluation. The device should also support fitments onto externals such as water filters. Detection of contaminants in water samples, within the device takes place via the Chelating agent (found in human blood) that binds closely with the contaminants to accurately determine these and estimate the contamination levels.

“Using a chelating agent in the device ensures that its sensor is as sensitive in detecting heavy metals as the body's natural defence mechanism against metal intoxication,” stated Yong Ken-Tye - a scientist behind the innovation during an interaction. The innovators are also reportedly hard at work to develop an application that takes information from water in water bodies in certain Asian countries including India to monitor water quality over extended time intervals.

“While our product is competitive enough to penetrate the market, we are still working to enhance and expand our water sensor product line. For instance, we are exploring ways to translate this technology for domestic use, such as in domestic water filtration systems and electric water kettles,” added Ken-Tie. Finally, NTU is also said to be taking steps to ensure commercial availability of the water monitor by reducing the overall real-estate of the hardware.