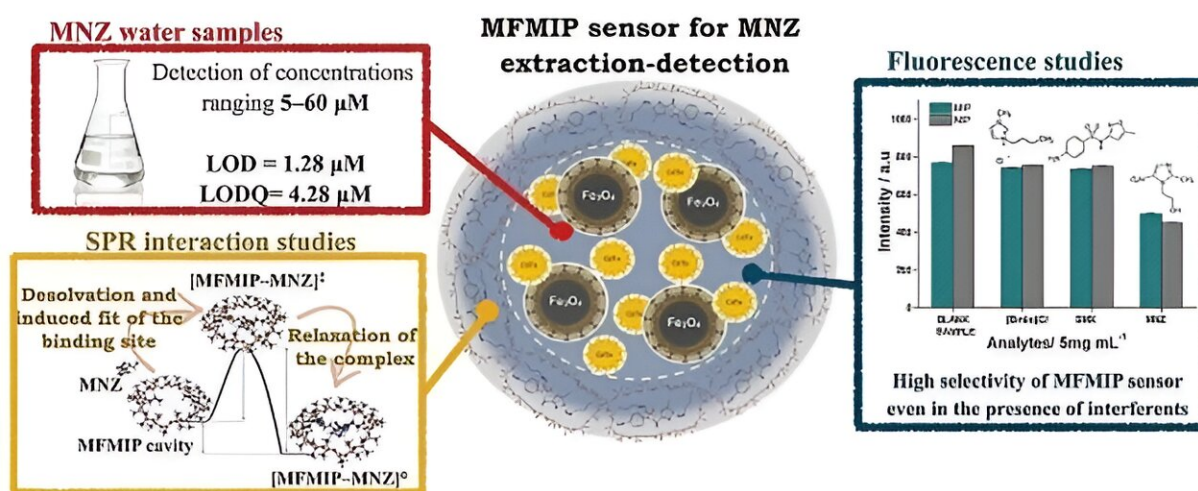


Brazilians create sensor to monitor levels of widely used antibiotic in water and food

December 7 2023



The device was tested on water samples, showing good sensitivity and ease of handling. Credit: CDMF

Researchers at the Center for Development of Functional Materials (CDMF) describe in the *Journal of Molecular Liquids* the development of a sensor that detects metronidazole in organisms and the environment. Metronidazole is an antibiotic used in human and veterinary medicine. Accumulation of this drug in the body can result in various health

problems, and levels in blood, water, meat, and milk, among others, need to be monitored.

The sensor combined magnetic fluorescent multi-functional molecularly imprinted polymers (MFMIP) with a non-imprinted reference composite. Tests on [water samples](#) showed good sensitivity and practical advantages, such as the possibility of real-time analysis and ease of handling.

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More information: Laís Mendes Alvarenga et al, Preparation of a composite sensor based on a fluorescent and magnetic molecular imprint polymer for metronidazole extraction–detection, *Journal of Molecular Liquids* (2023). [DOI: 10.1016/j.molliq.2023.123027](https://doi.org/10.1016/j.molliq.2023.123027)

Provided by FAPESP

Citation: Brazilians create sensor to monitor levels of widely used antibiotic in water and food (2023, December 7) retrieved 28 April 2024 from <https://phys.org/news/2023-12-brazilians-sensor-widely-antibiotic-food.html>

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