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TITLE

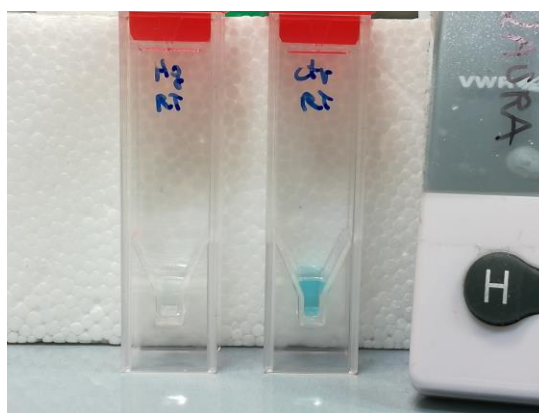
Colorimetric test for mercury detection

INVENTORS

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DESCRIPTION

The invention deals with an analytical method for the *in situ* determination of mercury in water, wherein the colorimetric determination step of the analyte is preceded by a pretreatment of the sample with a mild reducing agent in presence of a buffer solution at acidic pH. The colorimetric determination as such is instead based on a redox reaction, involving a chromogenic agent, catalyzed by nanoenzymes, which is inhibited in case of presence of the analyte in the sample. Indeed, the presence of mercury in a sample leads to the formation of an amalgam with the nanoenzymes and, therefore, the redox reaction above does not occur and its associated color variation cannot be observed. Furthermore, the invention deals with a kit for carrying out the above method.



APPLICATIONS

Potable water analysis, environmental monitoring

KEYWORDS

Colorimetric analysis, Hg determination, Hg speciation in water, peroxidase inhibition

BIBLIOGRAPHIC DATA

Metodo per la rivelazione della presenza di mercurio in acqua e kit per la realizzazione del metodo

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