Author's Accepted Manuscript

www.elsevier.com/locate/talanta

Ultrasound-assisted emulsification microextraction combined with graphite furnace atomic absorption spectrometry for the chromium speciation in water samples

Jucimara Kulek de Andrade, Camila Kulek de Andrade, Maria Lurdes Felsner, Vanessa Egéa dos Anjos

PII: S0039-9140(18)30775-6
DOI: https://doi.org/10.1016/j.talanta.2018.07.067
Reference: TAL18896

To appear in: *Talanta*

Received date: 2 June 2018
Revised date: 19 July 2018
Accepted date: 20 July 2018

Cite this article as: Jucimara Kulek de Andrade, Camila Kulek de Andrade, Maria Lurdes Felsner and Vanessa Egéa dos Anjos, Ultrasound-assisted emulsification microextraction combined with graphite furnace atomic absorption spectrometry for the chromium speciation in water samples, *Talanta,* https://doi.org/10.1016/j.talanta.2018.07.067

Ultrasound-assisted emulsification microextraction combined with graphite furnace atomic absorption spectrometry for the chromium speciation in water samples

Jucimara Kulek de Andrade[a], Camila Kulek de Andrade[b], Maria Lurdes Felsner[b], Vanessa Egéa dos Anjos[a*]

[a]Departamento de Química, Universidade Estadual de Ponta Grossa (UEPG), Ponta Grossa, PR, 84030-900, Brazil.

[b]Departamento de Química, Universidade Estadual do Centro-Oeste (UNICENTRO), Guarapuava, PR, 85040-080, Brazil.

jucimarakulekdeandrade@gmail.com

camilakulek@gmail.com

mlfelsner@gmail.com

veanjos@uepg.br

vanessaegea.quim@gmail.com

[*]Corresponding author. Tel.: +055-42-3230-3731

ABSTRACT

A simple method was proposed by ultrasound-assisted emulsification microextraction (UAEME) combined with GF AAS for Cr speciation in water samples using tributhylphosphate (TBP) as extractor solvent and dispersion with ultrasound, without disperser solvent. The selective separation and pre-concentration of Cr(VI) species in an