Accepted Manuscript

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PII: S0165-9936(16)30152-2

DOI: 10.1016/j.trac.2016.09.014

Reference: TRAC 14837

To appear in: Trends in Analytical Chemistry

Received Date: 23 May 2016

Revised Date: 9 September 2016 Accepted Date: 30 September 2016

Please cite this article as: N. Ozbek, A. Baysal, Determination of sulfur by high resolution continuum source atomic absorption spectrometry: Evaluation of ten years, *Trends in Analytical Chemistry* (2016), doi: 10.1016/j.trac.2016.09.014.

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Determination of sulfur by high resolution continuum source atomic absorption

spectrometry: Evaluation of ten years

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ABSTRACT

Sulfur is one of the most abundant elements on the crust of Earth and also it is an essential

element for animals and plants. In addition to playing a vital role in the living things, it has a

very important use in industry as an ingredient in some chemicals, fertilizers, fungicides,

pesticides, pharmaceuticals etc. There are limit values for sulfur content in many matrices,

which originates why it is important to determine sulfur contents.

This review aims to give an overview of historical development and importance of sulfur

determination by high resolution continuum source atomic absorption spectrometry (HR CS

AAS). We primarily focus on recent applications and their optimized parameters for

determination of sulfur in many matrices. While application of sulfur determination by HR

CS AAS is evaluated, some scientific properties of the sulfur determination by HR CS AAS is

also presented.

Keywords: Sulfur; High resolution continuum source atomic absorption spectrometry;

Molecular absorption spectrometry; Line source atomic absorption spectrometry;

Diatomic molecule

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