

Translated and Published by Japanese Standards Association

 $JIS\ K\ 0116^{\,:\,2014}$ 

(JAIMA/JSA)

General rules for atomic emission spectrometry

ICS 71.040.50

 $Reference\ number:\ JIS\ K\ 0116:2014\ (E)$ 

K 0116:2014

Date of Establishment: 1965-06-01

Date of Revision: 2014-02-20

Date of Public Notice in Official Gazette: 2014-02-20

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Chemical Analysis

JIS K 0116:2014, First English edition published in 2015-08

Translated and published by: Japanese Standards Association Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

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Printed in Japan

NH/AT

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### **Foreword**

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Analytical Instruments Manufacturers' Association (JAIMA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently, JIS K 0116:2003 is replaced with this Standard.

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# General rules for atomic emission spectrometry

JIS K 0116:2014

#### 1 Scope

This Japanese Industrial Standard specifies general rules when quantitative analysis is conducted using atomic emission spectrometer.

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

- JIS K 0050 General rules for chemical analysis
- JIS K 0211 Technical terms for analytical chemistry (General part)
- JIS K 0212 Technical terms for analytical chemistry (optical part)
- JIS K 0215 Technical terms for analytical chemistry (Analytical instrument part)
- JIS K 0216 Technical terms for analytical chemistry (Environmental part)
- JIS K 0553 Testing methods for determination of metallic elements in highly purified water
- JIS K 0557 Water used for industrial water and wastewater analysis
- JIS K 0970 Piston pipettes
- JIS K 1105 Argon
- JIS K 8001 General rule for test methods of reagents
- JIS Z 8402-1 Accuracy (trueness and precision) of measurement methods and results—Part 1: General principles and definitions
- ISO 3696 Water for analytical laboratory use—Specification and test methods

#### 3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS K 0050**, **JIS K 0211**, **JIS K 0212**, **JIS K 0215**, **JIS K 0216**, **JIS K 0553**, **JIS K 0557**, **JIS K 1105**, **JIS K 8001**, **JIS Z 8402-1** and **ISO 3696**, and the following apply.

#### 3.1 atomic emission spectrometry

quantitative analysis method carried out by measuring the emission intensity of atomic spectral line of target element of measurement contained in a sample obtained by a vaporizing and exciting discharge technique such as that by means of ICP (see **3.20**), MIP (see **3.21**) or spark discharge

Qualitative analysis is also possible by identifying the wavelength obtained.