

Australian Standard™

**Recommended practice for atomic  
emission spectrometric analysis**

**Part 2: Inductively coupled plasma  
excitation**

This Australian Standard was prepared by Committee CH/16, Spectroscopy. It was approved on behalf of the Council of Standards Australia on 29 October 1999 and published on 5 December 1999.

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STANDARDS AUSTRALIA

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**RECONFIRMATION**

**OF**

**AS 3641.2—1999**

**Recommended practice for atomic emission spectrometric analysis  
Part 2: Inductively coupled plasma excitation**

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Technical Committee CH-016 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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## PREFACE

This Standard was prepared by the Standards Australia Committee CH/16, Spectroscopy to supersede AS 3641.2—1990.

The objective of this Standard is to describe recommended procedures for the setting up and operation of inductively coupled plasma (ICP) instruments. The recommendations in this Standard are intended to apply to Australian Standard methods for ICP analysis.

This Standard is part of a series as follows:

AS

3641 Recommended practice for atomic emission spectrometric analysis

3641.1 Part 1: Principles and techniques

3641.2 Part 2: Inductively coupled plasma excitation

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## STANDARDS AUSTRALIA

## Australian Standard

## Recommended practice for atomic emission spectrometric analysis

## Part 2: Inductively coupled plasma excitation

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard sets out recommendations for instrumentation and operating procedures in the application of the inductively coupled plasma (ICP) excitation to chemical analysis by atomic emission spectrometry.

NOTE: This Standard is intended to be read in conjunction with AS 3641.1 and the instrument manufacturer's recommendations.

**1.2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard:

## AS

- 2162 Verification and use of volumetric apparatus
- 2162.1 Part 1: General—Volumetric glassware
- 2243 Safety in laboratories
- 2243.5 Part 5: Non-ionizing radiations
- 2772 Radiofrequency radiation
- 2772.2 Part 2: Principles and methods of measurement—300 kHz to 100 GHz
- 2850 Chemical analysis—Interlaboratory test programs—For determining precision of analytical method(s)—Guide to the planning and conduct
- 2883 Analysis of metals—Procedures for the setting up, calibration and standardization of atomic emission spectrometers using arc/spark discharge
- 2929 Test methods—Guide to the format, style and content
- 3641 Recommended practice for atomic emission spectrometric analysis
- 3641.1 Part 1: Principles and techniques

## AS/NZS

- 2243 Safety in laboratories
- 2243.2 Part 2: Chemical aspects

## ASTM

- E 135 Terminology relating to analytical chemistry for metals, ores and related materials

## BS

- 5760 Guide to data analysis and quality control using cusum techniques (series)

**1.3 DEFINITIONS** For the purpose of this Standard, the definitions in AS 2883 and ASTM E 135 apply.