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Second edition  
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## **Surface chemical analysis — X-ray photoelectron spectroscopy — Description of selected instrumental performance parameters**

*Analyse chimique des surfaces — Spectroscopie de photoélectrons  
X — Description de certains paramètres relatifs à la performance  
instrumentale*



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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 201, *Surface chemical analysis*, Subcommittee SC 7, *X-ray photoelectron spectroscopy*.

This second edition cancels and replaces the first edition (ISO 15470:2004), of which it constitutes a minor revision.

The changes compared to the previous edition are as follows:

- a typo has been corrected in [5.10](#);
- a Bibliography has been added;
- the text has been editorially revised to comply with the most recent drafting rules.

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## Introduction

X-ray photoelectron spectrometers are produced by many manufacturers throughout the world. While the basic principle of the XPS analytical method in each instrument is the same, the specific designs of the instruments and the way that performance specifications are provided differ widely. As a result, it is often difficult to compare the performance of instruments from one manufacturer with those from another. This document provides a basic list of items devised to enable all X-ray photoelectron spectrometers to be described in a common manner. This document is not intended to replace the manufacturer's specification, which may extend to 30 or more pages. It is intended that, where certain items are defined in that specification, there is an agreed and defined meaning to that item.