

# ISO 17862:2013-12 (E)

## Surface chemical analysis - Secondary ion mass spectrometry - Linearity of intensity scale in single ion counting time-of-flight mass analysers

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Symbols and abbreviations .....</b>	<b>1</b>
2.1	Abbreviated terms .....	1
2.2	Symbols .....	1
<b>3</b>	<b>Outline of method .....</b>	<b>2</b>
<b>4</b>	<b>Procedure for evaluating the intensity linearity .....</b>	<b>5</b>
4.1	Obtaining the reference sample .....	5
4.2	Preparation for mounting the sample .....	5
4.3	Mounting the sample .....	5
4.4	Operating the instrument .....	6
4.5	Acquiring the data .....	8
4.6	Checking the linearity .....	12
<b>5</b>	<b>Interval for repeat measurements .....</b>	<b>17</b>
<b>Annex A (normative)</b>	<b>Computation of raster size, ion beam current, number of frames for analysis, and counts per pulse .....</b>	<b>18</b>
<b>Annex B (normative)</b>	<b>Charge compensation setting .....</b>	<b>20</b>
<b>Annex C (normative)</b>	<b>Ion detector setting .....</b>	<b>21</b>
<b>Annex D (informative)</b>	<b>Instrumental factors affecting linearity .....</b>	<b>23</b>
<b>Bibliography .....</b>		<b>25</b>