

# ISO 23893-1:2007-11 (E)

## Water quality - Biochemical and physiological measurements on fish - Part 1: Sampling of fish, handling and preservation of samples

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Principle .....</b>	<b>1</b>
<b>3</b>	<b>Equipment .....</b>	<b>2</b>
<b>4</b>	<b>Fish sampling .....</b>	<b>3</b>
4.1	Statistical aspects .....	3
4.2	Frequency and season for sampling .....	3
4.3	Selection of sampling sites .....	3
4.4	Sampling procedures .....	4
4.5	Handling of samples and analytical procedures .....	6
4.6	Background information .....	7
<b>5</b>	<b>Quality assurance .....</b>	<b>7</b>
5.1	General .....	7
5.2	Fish sampling .....	7
5.3	Tissue sampling .....	7
5.4	Biochemical/chemical analysis .....	7
5.5	Evaluation .....	7
<b>6</b>	<b>Report .....</b>	<b>8</b>
6.1	General .....	8
6.2	Data logging, data hosting .....	8
6.3	Evaluation .....	8
<b>Annex A (informative) Summary of variables used as biomarkers in fish .....</b>		<b>9</b>
<b>Annex B (informative) Guide to interpretation of biomarker responses with references .....</b>		<b>12</b>
<b>Annex C (informative) Suggested report for fish sampling .....</b>		<b>15</b>
<b>Annex D (informative) Suggested report for tissue sampling .....</b>		<b>16</b>
<b>Bibliography .....</b>		<b>18</b>