
**Optics and optical instruments —
Vocabulary for microscopy —**

Part 2:

Advanced techniques in light microscopy

*Optique et instruments d'optique — Vocabulaire relatif à la
microscopie —*

Partie 2: Techniques avancées en microscopie optique



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Published in Switzerland

Foreword

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ISO 10934-2 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 5, *Microscopes and endoscopes*.

ISO 10934 consists of the following parts, under the general title *Optics and optical instruments — Vocabulary for microscopy*:

- *Part 1: Light microscopy*
- *Part 2: Advanced techniques in light microscopy*

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Optics and optical instruments — Vocabulary for microscopy —

Part 2: Advanced techniques in light microscopy

1 Scope

This part of ISO 10934 specifies terms and definitions to be used in the field of advanced light microscopy.

2 Terms and definitions

NOTE Terms shown in **bold** within a definition or a note are defined elsewhere within this part of ISO 10934.

2.1

acousto-optical modulator

electronically-tunable device used to control the direction and/or intensity of a laser by an acoustically-induced diffraction grating in a crystal

2.2

acousto-optical tunable filter

AOTF

electronically-tunable filter for selection of wavelengths by an acoustically-induced diffraction grating in a crystal

2.3

aliasing

phenomenon caused by sampling at too low a frequency (i.e. lower than the Nyquist frequency) resulting in the loss of information and/or the creation of spurious information

2.4

auto-focus

method of bringing an object automatically into focus, controlled by an imaging software algorithm and/or a hardware device that detects the object position

2.5

axial resolution

resolution in the direction of the optical axis

2.6

background subtraction

removal of that part of the signal that is present in the absence of the object, to reveal underlying image information

2.7

binning

mode of operation of an image sensor where the charge of adjacent pixels is accumulated and is read out as a single value