

Equipment name
Metafer Slide Scanning system



Category

D. In-vitro toxicity studies

Institute

NILU, Norwegian Institute for Air Research

Localization

Health effect Laboratory , Norwegian Institute for Air Research (NILU), Kjeller 2027, Norway

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Short technology description/ Overview

Metafer is a special platform to automatically scan samples. Metafer works in conjunction with every standard microscope (fluorescent and light). Metafer conveniently automates a wide area of microscopic image analysis applications for different kind of experiment. Due to Metafer's modularity and its flexible architecture, it is applicable to a vast array of applications, including cytogenetic diagnostics, hematology, pathology, toxicology, forensic sciences, and many more.

Technical Specification

- Automatic detection of micronuclei in mono and bi nucleated cells – software MNScore
- Automatic detection of single cell gel electrophoresis (Comet assay) samples – software CometScan
- Automatic detection of dicentric chromosomes - DCscore

Main Features

Each Metafer system consists of scanning hardware, microscope, and at least one Metafer main module. Main module:

Msearch - Metaphase finder

MSearch automatically finds metaphases on any slide, and it is easily adaptable to all kinds of preparations and staining, whether Giemsa or fluorescently stained. Detected metaphases are automatically stored as thumbnail images in an overview gallery

MetaCyte – Cell signal Analysis System

The user-trainable classifier precisely defines the analysis standards; and with the selection of another classifier the system is quickly switched to the next assay.

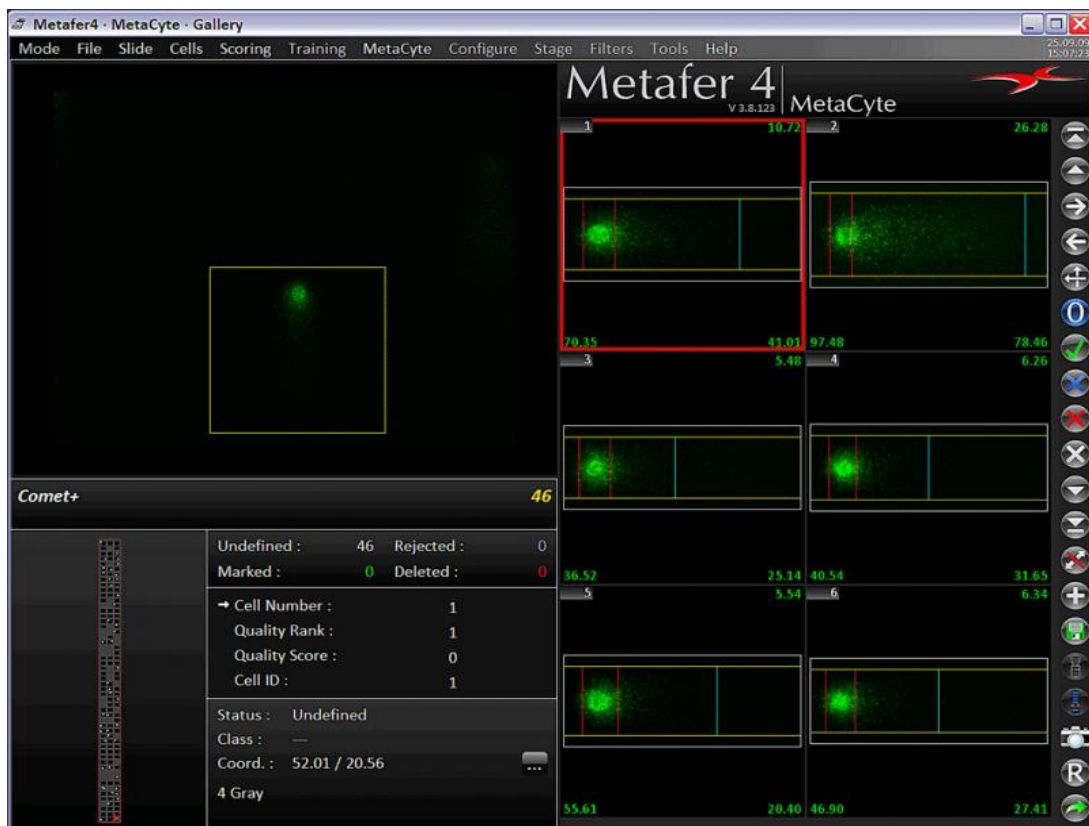
RCDetect - Rare Cell Detection System

Metafer RCDetect identifies rare cells based on their specific staining pattern. RCDetect is extremely fast and accurate, thus, ideal for applications such as finding isolated tumor cells in blood or bone marrow preparations. Each detected cell is stored with its precise location on the slide and a gallery image is generated.

VSlide - Virtual Slide System

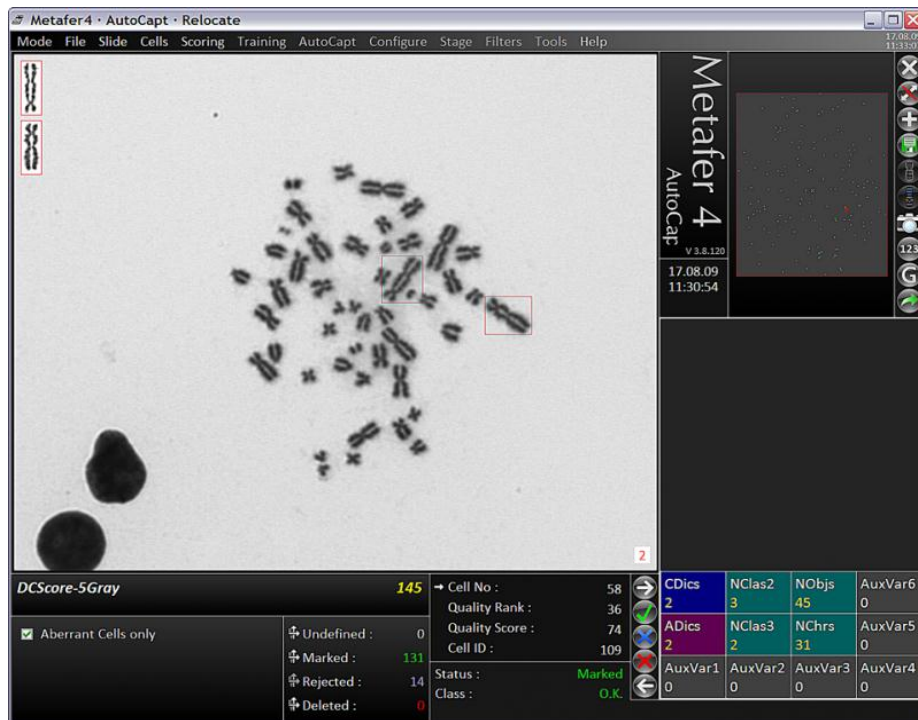
The system automatically reads and interprets bar code labels, and pre-scans facilitate tissue detection in bright field, transmitted light, dark field, or any other contrasting method. The final high resolution scan can be done with any microscope magnification.

Typical samples and images



Cometa scan gallery

Image: www.metasystems-international.com



Chromosomes scan gallery

Image: www.metasystems-international.com

Other information

