

Microscopy Research Guide and Links

This document is intended for the fellow citizen researcher interested in documenting and reporting environmental contaminants. Included here are links for a modified set up with a [Barlow lens](#) to increase resolution and expand on characterization. Key to identification is the makeshift “[Epifluorescence](#)” set up using UV and Red light miniature flashlights supported in a lab stand. While there are different choices on microscopes, a [darkfield](#) option would offer added benefits. This set up costs approximately \$1200 and is able to achieve what would be possible on systems costing many times that. The system also requires a PC or laptop for the camera software.

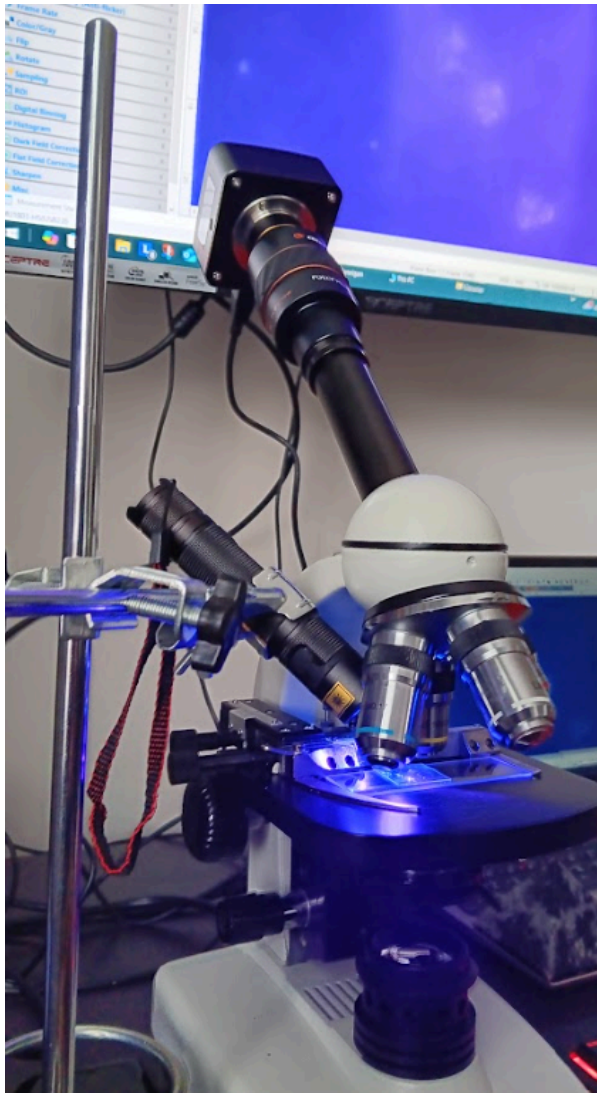


Image of rain water 4x Objective with UV

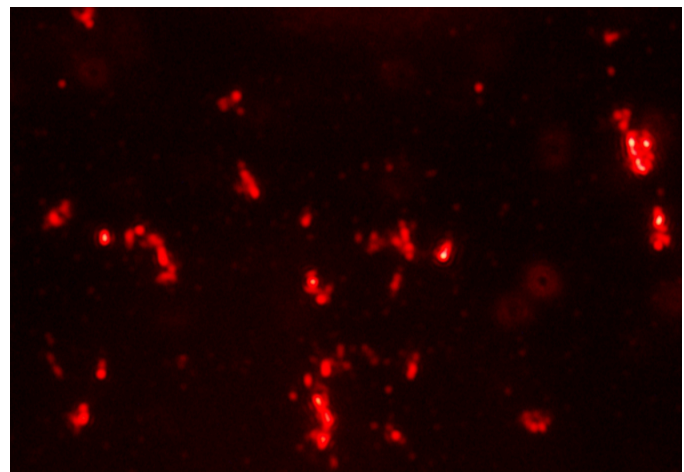


Image of rain water with 4x Objective with red light



AmScope T490 Series Simul-Focal Darkfield Trinocular Compound Microscope 40X-2000X Magnification with 20W Halogen and 3D Mechanical Stage

SKU: T490B-DK

★★★★★ 20 Reviews

QTY: - 1 +

ADD TO CART

AVAILABILITY: **IN STOCK**

\$596.99

Magnification Power

40X-1000X 40X-1600X **40X-2000X** 40X-2500X

Camera Type

None Selected USB 2.0 HDMI/USB 2.0 USB 3.0

Pixel

None Selected

Key Features

- 40X to 2000X magnification range for studying a range of specimens including hair follicles, cells, and bacteria. 10X and 20X eyepieces provide 8 unique settings.
- A top choice for veterinarians, clinics, and classrooms, this microscope features high quality optics and precision mechanics.
- Professional features include a Siedentopf trinocular head for precise adjustments, a

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AmScope MU Series 20.0MP USB 3.0 Color CMOS C-Mount Microscope Camera

SKU: MU2003

★★★★☆ 2 Reviews

QTY: - 1 +

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AVAILABILITY: **IN STOCK**

\$458.99

Key Features

- 20MP back-illuminated CMOS camera. Higher quantum-efficiency back-illuminated architecture collects more light to produce a stronger signal.
- User-friendly software for Windows offers editing/processing and advanced features including Stitching and EDF
- Fits four mounting sizes: 23mm, 30mm, 30.5mm, and C-mount
- Two mounting adapters and a calibration slide are included



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Celestron 1.25 Inch X-Cel LX 3X Barlow Lens, Black

[Visit the Celestron Store](#)

4.6 ★★★★★ (1,015) | [Search this page](#)

50+ bought in past month

-20% \$99⁹⁹

List Price: \$124.95 | [Price history](#)

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Size: **3x - 1.25"** – X-Cel LX Barlow Lens

Style: X-Cel LX 3x Barlow Lens

Brand	Celestron
Model Name	X-Cel LX 3x Barlow Lens - 1.25"
Eye Piece Lens	Barlow
Description	
Telescope Mount	Altazimuth Mount
Description	

Focus Type: Manual Focus

[See more](#)



UV Flashlight Black Light, USB Rechargeable Flashlight with Magnetic Base - High Light, Side Light, 7 Modes, Zoomable, Waterproof – LED Torch for Mechanics Pet Urine Stains Detection (1)

[Visit the Spriak Store](#)

4.5 ★★★★★ (1,418) | [Search this page](#)

Amazon's Choice

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-10% \$17⁰⁹

Typical price: \$18.99 | [Price history](#)

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Red Light Therapy Device for Joint and Muscle, 660nm&850nm LED Lights Therapy Wand, Portable Infrared Light Therapy Torch, Near Infrared Light for Body, Face, Neck, Back,Knee (Black)

Brand: YKoloron

4.3 ★★★★★ (17) | [Search this page](#)

100+ bought in past month

\$24⁹⁹

[Price history](#)

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Thank you for being a Prime Member. Pay ~~\$24.99~~ **\$0.00** for this order; get a \$200 Amazon Gift Card upon approval for the Amazon Business Prime Card. Terms apply. [Learn more](#)

Color: **Black C**



QWORK Laboratory Stands Support Set, Steel Lab Stand Set with Cast Iron Base, Rod 16" L with Burette Clamp and Flask Ring Clamps

[Visit the QWORK Store](#)

4.3 ★★★★★ (362) | [Search this page](#)

Overall Pick

100+ bought in past month

\$14⁹⁷

[Price history](#)

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Size: **16"**

16"

24"