



Burgas State University “Prof. Dr. Assen Zlatarov” Faculty of Medicine

Evaluation of optical properties

- Measurement of optical characteristics: absorption coefficient, transmission, reflection
- Identification of substances
- Analysis of proteins, nucleic acids, etc.
- Analysis of functional groups of organic compounds
- Quality and purity control of products

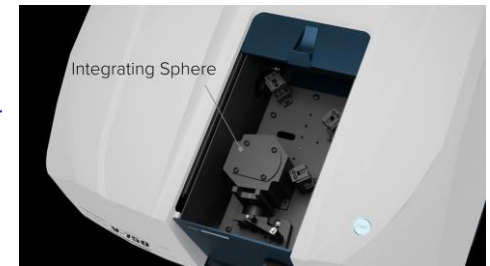
Double-beam spectrophotometer from the Japanese company Jasco with a wide wavelength range from 190 to 2700 nm for the study of solid and liquid samples.

Reproducibility: ± 0.05 nm (UV-VIS) and ± 0.2 nm (NIR)

Photometric accuracy: ± 0.0015 AU



**V-770 UV, VIS, NIR
Spectrophotometer**



STU „Prof. Dr. Assen Zlatarov“

Prof. Dr. Nina Sultanova
ninasultanova@yahoo.com



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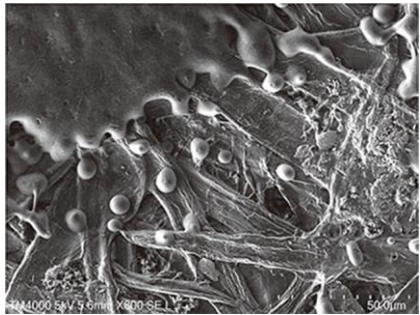
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Scanning electron microscope TM4000Plus

for surfaces without the need for metallization with TEM holder for biological samples

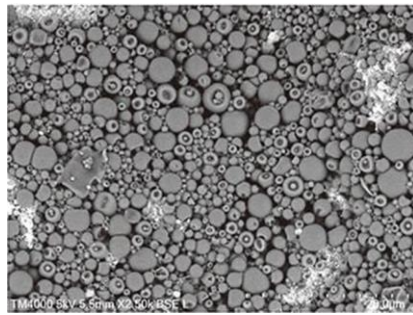
Highly sensitive system of detectors operating in SE, BSE and combined reflection modes.

SE mode



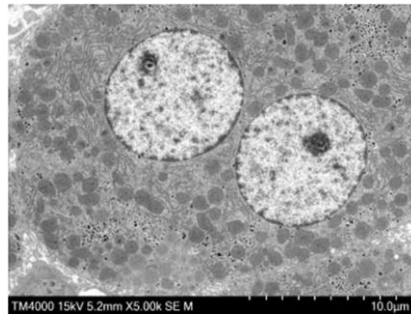
Accelerating voltage: 5 kV
Image signal: SE
Magnification: 800x

BSE mode



Accelerating voltage: 5 kV
Image signal: BSE
Magnification: 2,500x

TEM mode



Accelerating voltage : 15 kV
Image signal : STEM
Magnification : 5,000 x



Magnification: 10x ÷ 100 000x

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Thin film coating equipment

Optical thin films with improved characteristics, obtained by the spin-coating and dipping method with the possibility of controlling the technological parameters



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