...... where you find affordable optical solutions and great support ......

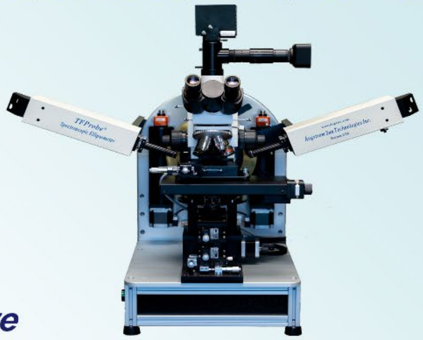
Ångstrom Sun Technologies Inc.

Film Thickness Test Station (SR)

TFProbe® Tools

Spectroscopic Reflectometer (SR)
Spectroscopic Ellipsometer (SE)
MicroSpectrophotometer (MSP)
In-Line Metrology
TFProbe Software
Analytical Service

Automatic Variable Angle Spectroscopic Ellipsometer

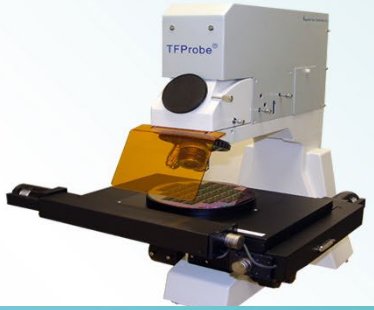


Affordable
Easy to Use
Fast Delivery
Free Evaluation
Lease to Buy Option
Trade-In Upgrade Option
Customizable & Integrable

Educational VASE

Advanced Software
Regression / Simulation
User Friendly Interface
Real -Time Monitoring
Digital Imaging Tool
Free NK Database
2D/3D Graphics
RS232 Protocol

Digital Imaging MSP Microspectrophotometer
Advanced Microspot Film Thickness Measurement Tool



Application
Film Thickness & Optical Constants
Thickness Range: up to 200 µm
Wavelength Range: DUV-UV-Vis-NIR-IR
Reflection and Transmission Spectra
Dielectrics, Polymers, Semiconductors
Micron Region on Patterned Structures

SRM Mapping System

31 Nagog Park
Acton, MA 01720
U.S.A.

Info@angstec.com www.angstec.com

Fraunhofer IOSB

Fraunhofer Institute of Optronics, System Technologies and Image Exploitation

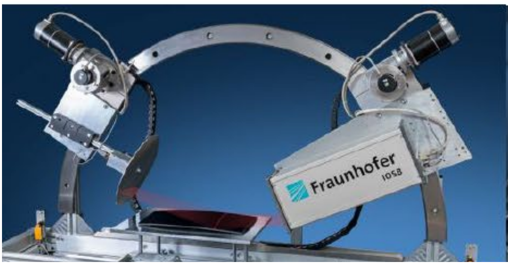
RETROREFLEX ELLIPSOMETERS

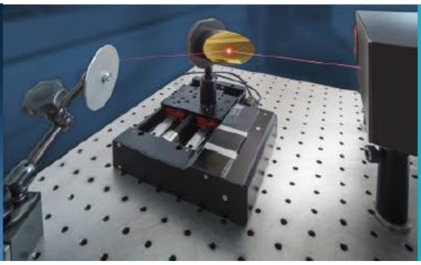
Laserscanner Systems

Features:
- Reflection or transmission arrangement
- Image based inspection of large areas of planar or nonplanar surfaces
- Huge depth of focus (up to 300 mm)
- Combined detection of defects (> 20 µm), polarimetric anomalies and ellipsometric or polarimetric measurements

Single Point Sensors

Features:
- Reflection or transmission arrangement
- Compact design
- Full Mueller matrix or Stokes vector measurements
- Fast measurements of Stokes vectors (up to 4 µs)
- Measurements at curved surfaces for two- and three-phase systems
- Optional multiple wavelengths





Contact:
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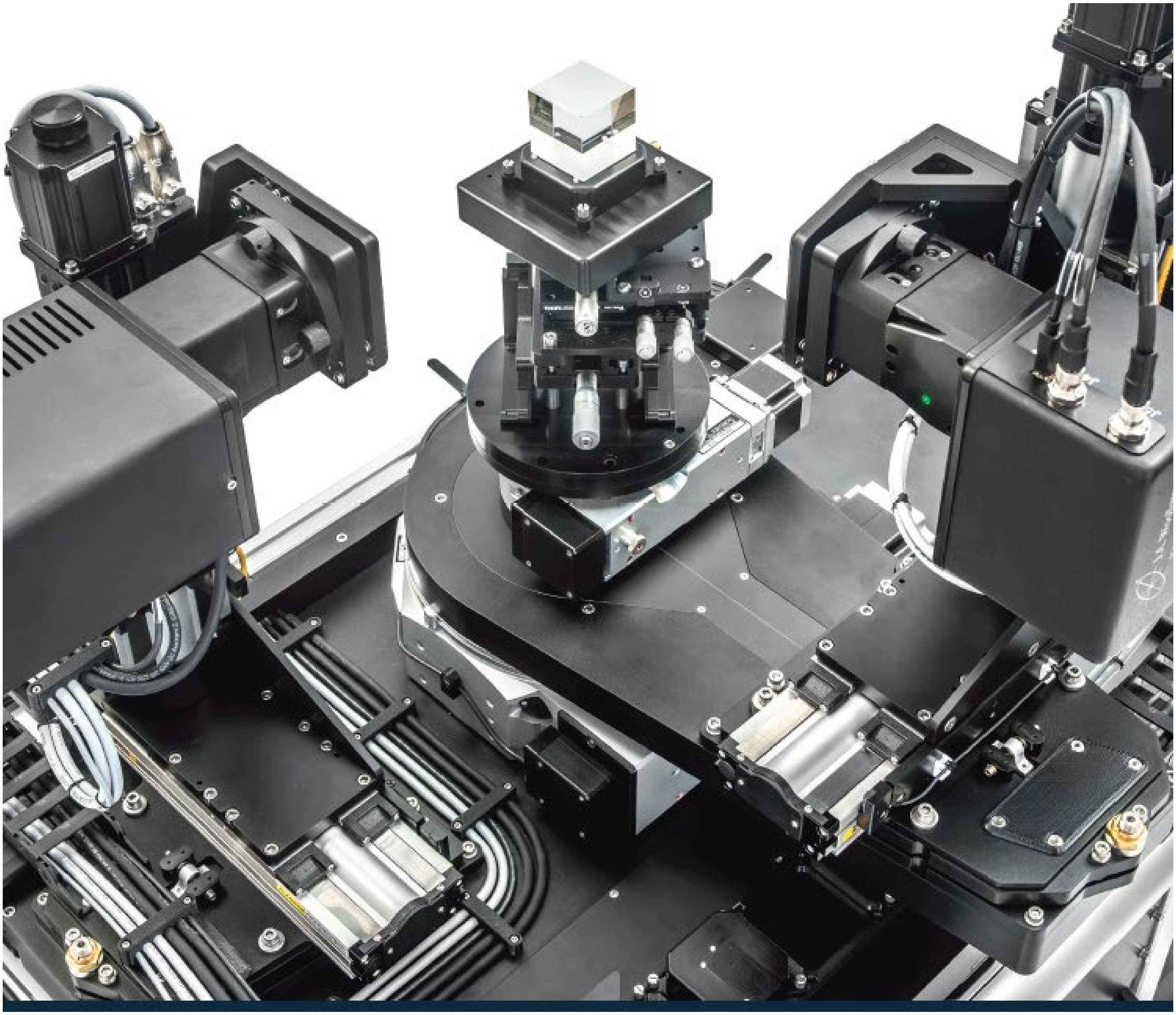
Phone: +49 721 6091-444
matthias.hartrumpf@iosb.fraunhofer.de
www.iosb.fraunhofer.de/SPR

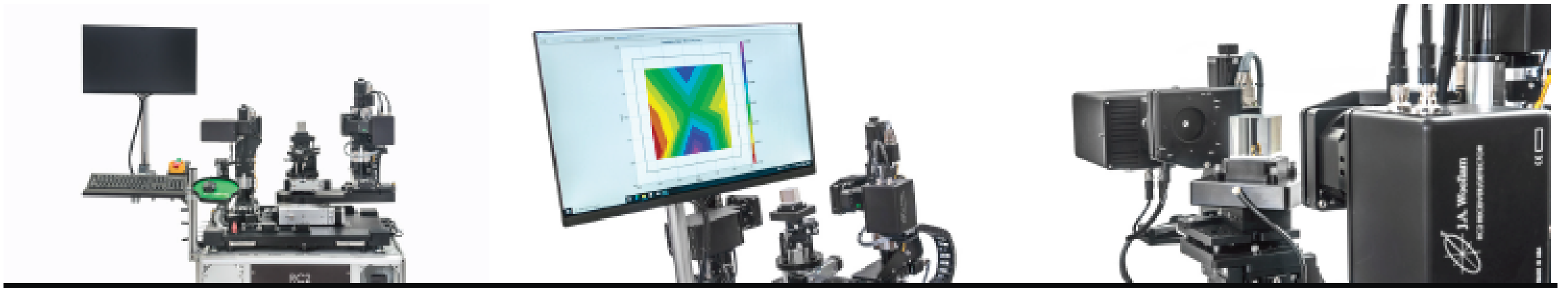
Customized Instruments for Revolutionary Research

Explore your options when it comes to our industry-leading spectroscopic ellipsometers.



With numerous configurations, our ellipsometers can be tailored to meet your research goals. The RC2 pictured above was custom designed for measurements of complex beam splitters and prisms. It includes DUV to NIR wavelengths and custom translation of the detector to capture the beam as it deviates through the cube.

J.A. Woollam Co.



WE INNOVATE, SO YOU CAN DISCOVER.

INSTRUMENTS

Our core technology has continuously evolved over the last 30 years leading to hardware with world-class accuracy and reliability. We continue to refine our line of ellipsometers with the latest technological advancements.

SOFTWARE

Our software includes a full data analysis suite that's intuitive and easy to use. We regularly update the software with features to improve the user experience while also developing technical solutions for new complex materials.

ACCESSORIES

Ellipsometry experiments can be combined with sample stages to vary the relative pressure, temperature and liquid ambient within the sample environment. We have integrated a large variety of accessories to create the experimental conditions you need.

OPTIONS

We offer the ability to customize our ellipsometers to match your budget and research requirements. Typical options include wavelength range, mapping area, and beam size. We'll help you determine which options are most relevant to your application.

SUPPORT

Our commitment to customer support sets us apart. We offer a variety of learning opportunities each year all over the world, both online and on-site. We stand behind our products and ensure that you can get the most out of them.

RESEARCH + DEVELOPMENT

Our dedication to innovation has led to over 200 patents in the field of ellipsometry. We are committed to providing market-leading, state-of-the-art software and instrumentation.

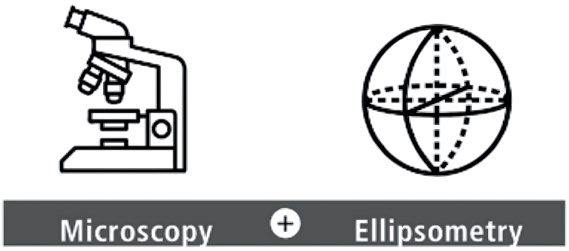
Enabling Nanoscale Advances

parksystems.com

Accurion EP4

Imaging Spectroscopic Ellipsometry for Microscopic Thin Film Metrology and Visualization

Accurion EP4 is the advanced imaging spectroscopic ellipsometer, combining ellipsometry and microscopy to measure thickness and refractive index on structures as small as 1 µm. Capture all features in the field of view simultaneously — precise, efficient, and powerful.



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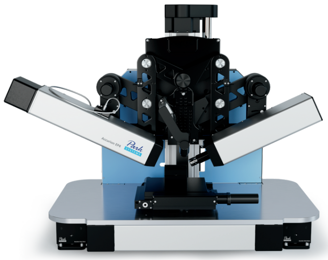
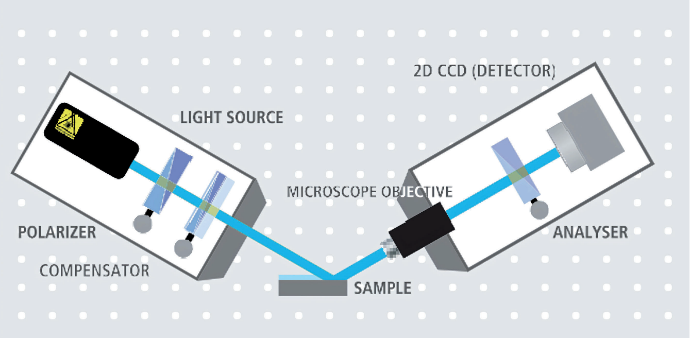
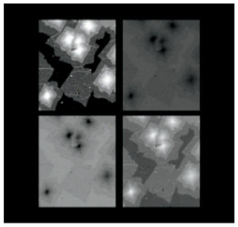




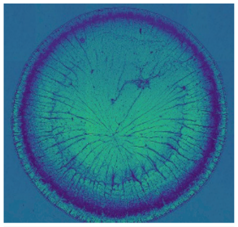
Key Features

- Highest lateral ellipsometric resolution for thickness and refractive index on microstructures as small as 1 µm.
- Intuitive selection of measurement region by drawing regions in live ellipsometric view
- Continuous spectroscopic imaging ellipsometry from UV to NIR.
- Expanded application of ellipsometry to small structures with new features and accessories.

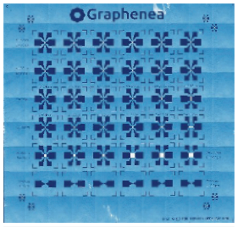
Selected Applications



Ellipsometric contrast micrographs of CWD graphene



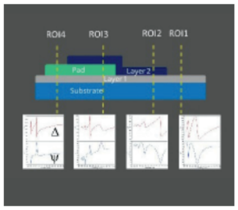
Drying of a sissile droplet of a graphene dispersion



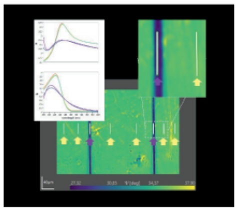
Characterization of Graphene devices

SCAN ME
To learn more

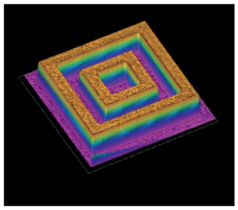
Please contact us for your integration ideas!



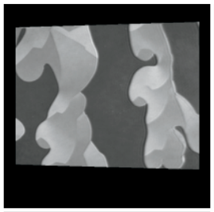
Characterization of complex layer stack of a pixel in parallel including common layer stack modelling



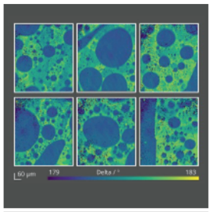
Optical properties of microscopic waveguides



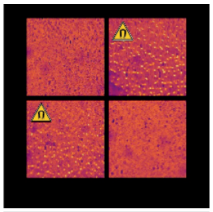
Microscopic maps of oxide layer thickness



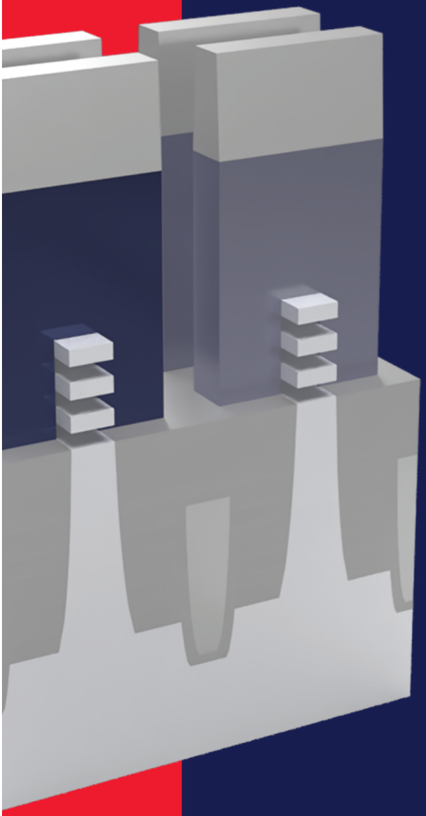
Overall focused Brewster angle microscopy with ultraobjective

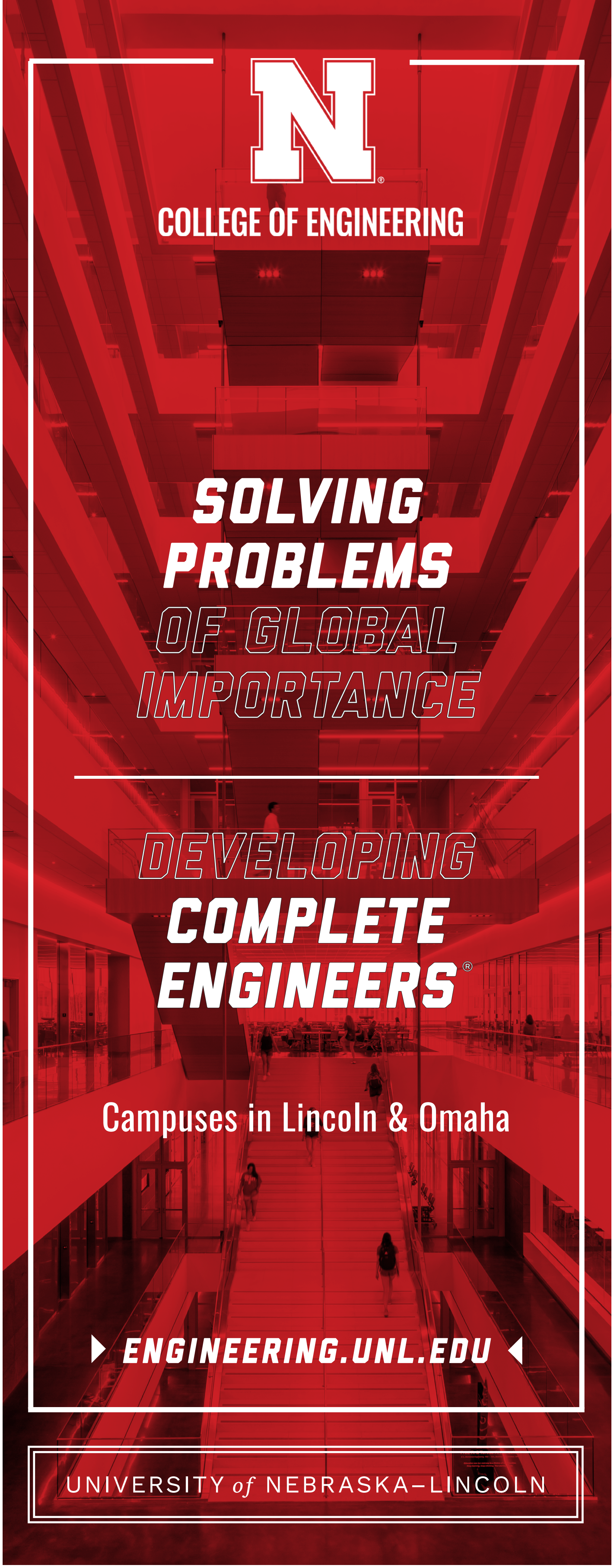


Microscopic Delta maps of lipid layers at the air/water interface



Effect of magnetic nanoparticles at the oil/water interface – with and without magnetic field





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