Online workshop

The workshop is beneficial to individuals who work in the areas of:

- Polymers
- Membranes
- Packaging Materials
- Porous Materials (of polymeric nature)
- Coatings and thin films



10am CEST (9am BST)

Duration: 2 hours

Join the workshop

Presenter:

Assoc. Prof. Catarina Esteves

Eindhoven University of Technology

Dr. Sabiyah Ahmed

Imperial College London

Meishan Guo

Surface Measurement Systems

For more information, please contact:

Nachal Subramanian

nsubramanian@surfacemeasurementsystems.com





Online workshop in collaboration with Eindhoven University of Technology

Characterization of polymeric materials by vapour sorption techniques (DVS)

The workshop covers in-depth Dynamic Vapor Sorption (DVS) technology and its applications on studies of materials such as polymers, membranes, porous materials, thin films, and so on.

Assoc. Prof. Catarina Esteves at Eindhoven University of Technology researches polymers & colloids, surfaces & interfaces. A large part of her work involves the design of "Smart Coatings" which have self-healing, self-cleaning, and stimuli responsive properties. We are pleased to have her give a short presentation on the role of DVS in her research work.

In this workshop, you will learn about:

- Capability of DVS technology and its applications in various industries
- Overview of benefits when coupled with different microscopic and spectroscopic techniques (Raman/NIR/video camera)
- Some examples and case studies for
 - Sorption isotherms and BET surface area
 - Vapour-induced phase changes (glass transition temperature and critical RH)
 - Vapour permeability and diffusion in porous materials and membranes

Agenda

- Introduction to Surface Measurement Systems
- DVS Introduction and Basic Applications
- Vapour permeability in porous materials (particularly membranes and thin polymer films)
- Role of DVS in our research group and examples of materials we analyse - Assoc. Prof. Catarina Esteves
- Instrument and Software demonstration