

Surface Science Western

Surface Analysis Leader

If we are to understand how reliable materials are, and how well they can perform, it is critical to first analyse their surfaces. To accomplish this task, many companies approach **Surface Science Western (SSW)** at Western University, which has been Canada's most comprehensive surface analysis laboratory since it was founded in 1981.



In addition to academic research, Surface Science Western provides high-quality, reliable analytical services to facilitate development and production, decrease costly returns, innovate processes and increase profitability.

What is Surface Science Western?

- A very highly regarded, full-range research and development consulting and research laboratory specializing in the analysis and characterization of surfaces and materials
- Supports academic and industrial clients looking for technological innovations in these areas
- Uses cutting-edge surface and analytical techniques to help businesses that produce metallic and plastic components analyse and evaluate the surfaces of their materials and understand why they might fail
- Provides exceptional service to clients in various industry sectors, including energy and nuclear, mineral resources, health services, automotive, aerospace, environmental and electronics
- Provides services to more than 200 companies annually
- Home to more than 250 people-years of experience and unparalleled interpretive skills

Research and Facilities

- State-of-the art instrumentation, including surface profilometry, dynamic secondary ion mass spectrometry and scanning electron microscopy with energy dispersive X-ray capabilities
- SSW's researchers are experts in a number of areas, ranging from the analysis of paint defects and thin films to polymer surface modification
- Specific facility research strengths include corrosion and metallurgy, polymer chemistry, microelectronic materials and catalytic reactions

Researchers at Surface Science Western are also engaged in projects that involve:

- Surface characterization and failure analysis
- Corrosion science and electrochemistry
- Process simulation and development
- Studies of surface chemistry for mineral processing
- Post-analytical processing studies
- Photomasks and circuit boards
- Electronic device analysis
- Nuclear materials analysis

Highlights

- Intimately involved in research and development projects with leaders in the communications, automotive, energy, health, mining and consumer goods industries
- Serve as academic researchers and industry consultants, having produced more than 500 publications in the field of materials and surface analysis, and having obtained numerous patents annually
- The first Canadian-based materials research centre to obtain the highest level of quality accreditation
- Certified to International Organization for Standardization (ISO) 9001:2008
- Facility research strengths include: corrosion and metallurgy, polymer chemistry, microelectronic materials and catalytic reactions
- Ability to service a range of clients – from very small to very large manufacturing facilities – using a broad range of resources and analytical techniques

For more information, please visit: www.uwo.ca/ssw



**Western
Research**