



# FCSE-2024

1<sup>st</sup> ANNOUNCEMENT [www.fcse-montreal.ca](http://www.fcse-montreal.ca)



10<sup>th</sup> Symposium on

# FUNCTIONAL COATINGS AND SURFACE ENGINEERING

Organized by

**RQMP** - Regroupement québécois sur les matériaux de pointe and  
the St. Lawrence Chapter of the **AVS** Science and Technology of Materials, Interfaces and Processing,  
in collaboration with **SVC** - Society of Vacuum Coaters,  
and hosted by **Polytechnique Montréal** and **Université de Montréal**

## SYMPOSIUM TOPICS

- Thin films with tailored optical, mechanical, tribological, electrical, thermal and other functional properties
- Vacuum and non-vacuum deposition processes, process control and diagnostics
- Plasma processes and plasma-surface interactions
- Thin film systems for passive and active optical filters with enhanced durability
- Modeling and predictive tools for processes and coating system performance
- Protective tribological coatings with enhanced wear, scratch, abrasion, erosion, oxidation and corrosion resistance, hydro- and icephobicity and other functionalities
- Characterization methods: microstructure, composition and functional properties
- Thin film materials and systems for optical, optoelectronic, aerospace, outer-space, energy-control, biomedical, micro-system, sensor, energy and other applications
- Residual stress in films and coatings – origin, assessment and mitigation
- Surface and interface engineering approaches for the control of adhesion, stress and environmental stability
- Life cycle analysis for surface engineering solutions

**MONTREAL  
QUEBEC  
CANADA**

**JUNE 2-6  
2024**

## PROGRAM AND SCHEDULE

### Short courses (full day) – Sunday, June 2, 2024

Materials science and film growth  
Plasma processing of materials  
Mechanical, tribological and structural characteristics

### Symposium technical program – Monday, June 3 to Wednesday, June 5, 2024

Invited lectures and contributed oral presentations - Poster presentations - Awards for the best posters -  
Table-top exhibit by manufacturers and vendors - Visit of research facilities - Symposium reception and social networking event

### Hands-on workshops (full day) – Thursday, June 6, 2024

"Mechanical and tribological testing"  
"Optical characterization and reverse engineering - Spectroscopic ellipsometry"  
"Microstructural and compositional analyses"

**POLYTECHNIQUE  
MONTRÉAL**  
TECHNOLOGICAL  
UNIVERSITY



## ORGANIZERS OF THE FCSE-2024 SYMPOSIUM

**MEETING CHAIRS** | Ludvik Martinu and Jolanta E. Klemberg-Sapieha  
Department of Engineering Physics, Polytechnique Montréal

**MEMBERS OF THE LOCAL  
ORGANIZING COMMITTEE** | M. Azzi, B. Baloukas, S. Brown, A. Pajak, C. Paquet, P. Rumsby  
O. Zabeida

**RQMP CHAIRS** | D. Cooke, D. Danovitch, L. Martinu, T. Pereg-Barnea, F. Schiettekatte, L. Taillefer  
([www.rqmp.ca](http://www.rqmp.ca))

**Université  
de Montréal**  
**RQMP**