



FCSE-2024

1st ANNOUNCEMENT www.fcse-montreal.ca



10th 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 **IUVSTA** - International Union for Vacuum Science,
Technique and Applications,

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 2-5
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 and Tuesday, June 4, 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) – Wednesday, June 5, 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, J. Lefebvre, A. Pajak, C. Paquet,
 P. Rumsby, F. Schiettekatte, O. Zabeida

RQMP CHAIRS | D. Cooke, D. Danovitch, L. Martinu, T. Pereg-Barnea, F. Schiettekatte, L. Taillefer
 (www.rqmp.ca)

**Université
de Montréal**

