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 hosted by Polytechnique Montréal and Université de Montréal

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**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

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**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"

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**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

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