Symposium L: Materials degradation and solutions to increase its lifespan

Scope of the Symposium

Understanding the fundamental science behind the degradation of materials and how to improve them by reducing wear, corrosion and fatigue is vital more than ever. This symposium covers all aspects of fundamental and applied research on the degradation of metallic, ceramic, glasses, polymeric and composite materials. Characterization techniques needed to understand degradation phenomena and solutions to increase materials lifespan submitted to degradation, tribological fundamentals, tribocorrosion, tribotesting (micro and nanoscale), tribomaterials and in-situ tribology are also included. We welcome contributions to improve scientific and mechanistic understanding of the degradation of materials, characterization tools, and solutions to avoid or reduce degradation. Full papers of presented works may be submitted for publication in a special issue of the Journal of Bio- and Tribo-Corrosion (Springer).

Abstracts will be solicited in (but not limited to) the following areas

- Advanced materials and tribomaterials;
- Biotribology;
- Coatings and surface treatments;
- Corrosion, tribocorrosion and biotribocorrosion;
- Degradation of materials;
- Lubrication and lubricants, including solid lubricants;
- Materials for corrosion control;
- Mechanisms of friction and wear;
- Surface treatments and multifunctional surfaces
- Tribology fundamentals.

Tentative list of invited speakers (To be confirmed)

prof. Dr. Andre Paulo Tschiptschin (Escola Politecnica da Universidade de Sao Paulo. Departamento de Engenharia Metalurgica e Materiais.)
Prof. Dr. Peter Hammer (Universidade Estadual Paulista (UNESP). Campus de Araraquara. Instituto de Quimica (IQ))
Prof. Dr. Roberto Martins Souza (Escola Politecnica da Universidade de Sao Paulo).

Symposium Organizers

Polyana Alves Radi (Universidade Federal de Sao Paulo - UNIFESP)
Lucia Vieira (Universidade do Vale do Paraiba - UNIVAP)
Luis Augusto Sousa Marques da Rocha (Universidade Estadual Paulista Julio de Mesquita Filho - Unesp - Campus de Bauru)
Marcelo Augusto Gonalves Bardi (Universidade Sao Francisco).

https://sbpmat.org.br/18encontro

XVIII Brazil MRS Meeting