19th

Chairperson: Prof. Antonio Riul Jr.

Time	Presenter	Program	Place
08:30-9:30		**Registration**	Mezzanine
09:30-10:20		**Opening Ceremony**	New York room
10:20-10:40		**Coffee Break**	Mezzanine
10:40-11:30	**Paul Heinz Mayrhofer**	Materials science-based guidelines to develop robust hard coatings	New York room
11:30-12:00	**Prof. Ana Sofia D'Oliveira**	Protective graded coated for high temperature applications	New York room
12:00-14:00		**Lunch**	

Chairperson: Prof. Fernando Alvarez

Time	Presenter	Program	Place
14:00-14:50	**Prof. Abdou Djouadi**	CANCELLED	New York room
14:50-15:20	**Sara Aldabe Bilmes**	Tuning defects and pores by “chimie douce”	New York room
15:20-15:40	**Lara Eggert**	Layer characterization by ellipsometry of thin Ti2CTx and Ti3C2Tx films prepared with low concentrated hydrofluoric acid	New York room
15:40-16:00	**Fabiola Bravo Hualpa**	Development of Cu-doped AZO sensors connected with artificial neural network for organic volatiles detection linked to coffee quality	New York room
16:00-16:40		**Coffee Break**	Mezzanine
16:40-17:10	**Prof. Chengyong Wang**	Ultrafast Laser Manufacturing of Cemented Carbide Coated Tools	New York room
17:30-19:00		**Happy Hour**	Pool area

20th

Chairperson: Prof. Luiz Fernando Zagonel

Time	Presenter	Program	Place
08:30-09:20	**Fernando Lázaro Freire Junior**	2D materials: electronic structure and doping	New York room
09:20-09:50	**Tiberiu Minea**	Ultra-thin functional coatings and in situ monitoring of the growth	New York room
09:50-10:30		**Coffee Break**	London room
10:30-10:50	**Luis Francisco Sanchez Sovero**	Aluminum-Doped Amorphous Silicon Carbide Thin Films as Photocathodes for Green Ammonia Production	New York room
10:50-11:10	**Shirley Hossack**	Study of the relative humidity dependence on film growth of self-healing polymeric surface	New York room
11:10-11:30	**Fabiola Bravo Hualpa**	Enhancing Organic Volatiles Gas Sensing Capabilities by Cr Doped AZO Thin Films Bilayer Systems: Optoelectronic and Structural Properties	New York room
11:30-11:50	**Leandro Merces**	Active Micro-Origami Hinges for Dynamically Morphing Microelectronics	New York room
11:50-14:00		**Lunch**	

Chairperson: Profa. Sara Aldabe Bilmes

Time	Presenter	Program	Place
14:00-14:50	**Douglas Soares Galvão**	STRUCTURAL, ELECTRONIC, AND MECHANICAL PROPERTIES OF 2D FULLERENE NETWORKS	New York room
14:50-15:20	**Carlos Figueroa**	Fundamentals of Nanotribology and Phototribology	New York room
15:20-15:40	**Rafael Sánchez Reátegui**	Tuning and measurements of ionization in HiPIMS	New York room
15:40-16:20		**Coffee Break**	London room
16:20-16:40	**Chenguang Wang**	Analysis of tool wear and cutting characteristics in milling by various coatings	New York room
16:40-17:10	**XIUQING HAO**	Effect of Si content on microstructure, mechanical properties, and cutting performance of TiSiN/AlTiN dual-layer coating	New York room
19:00-23:00		**Closed Dinner**	

21th

Chairperson: Prof. Carlos Alejandro Figueroa

Time	Presenter	Program	Place
08:30-09:20	**Prof. Qimin Wang**	Fabrication and properties of hard coatings for high-speed machining by hybrid PVD methods	New York room
09:20-09:50	**Prof. Tiegang Wang**	Regulation, and Cutting Performance of the AlCrMoSiN Tool Coatings with Gradually Increasing Mo Concentration	New York room
09:50-10:30		**Coffee Break**	London room
10:30-10:50	**Shengsheng Zhao**	Determination of internal stress in ceramic coatings by application of the Stoney formula	New York room
10:50-11:10	**Guilherme Segolin Selmi**	Transient electrical response of reduced graphene oxide liquid-gated transistor towards synaptic devices	New York room
11:10-11:30	**Yuxiang Xu**	Design and deposition of hard oxide coatings with improved high-temperature properties	New York room
11:30-11:50	**Gabrielle Coelho Lelis**	Molecularly Imprinted Polymer Functional Coating on Eletrolytic Transistors for Point-of-care Sensing Technologies	New York room
11:50-14:00		**Lunch**	

21th

Chairperson: Prof. Antonio Riul Jr.

Time	Presenter	Program	Place
14:00-14:50	**Vladimir Jesus Trava-Airoldi**	DLC and CVD Diamond Single Crystal growth demanding a lot of high value-added applications	New York room
14:50-15:20	**Roberto Souza**	Numerical Modeling of Contact and Residual Stresses of Hard Thin Films	New York room
15:20-15:40	**Luis Alonso Enrique Morán**	Co-doping of zinc oxide thin films with aluminum and terbium to engineer a conductive, transparent and luminescent multifunctional material	New York room
15:40-16:20		**Coffee Break**	London room
16:20-16:40	**Erick Serquen**	On the color emission of Tb ions embedded in indium tin oxide thin films	New York room
16:40-17:10	**Prof. Wenfeng Ding**	Superhigh-speed grinding and surface integrity of difficult-to-cut materials	New York room

17:20-18:20	**IFGW visit**

22th

Chairperson: Prof. Fernando Alvarez

Time	Presenter	Program	Place
08:30-09:20	**Zhiguang Guo**	Biomimetic materials of Tribology and their applications	New York room
09:20-09:50	**Luiz Fernando Zagonel**	Using an off-axis parabolic mirror to inject and collect light inside an STM in UHV	New York room
09:50-10:30		**Coffee Break**	London room
10:30-10:50	**Xia Ji**	Evaporation effects on thermal and fluid behaviors of melt pool in laser powder bed fusion	New York room
10:50-11:10	**Maria Claudia Marchi**	Upconversion thin films based on photonic structures for sunlight capture	New York room
11:10-11:30	**Leonardo Mathias Leidens**	High-Entropy Nitride Coatings Deposited by Magnetron Sputtering as Sensing Units in Enhanced Impedimetric E-Tongues	New York room
11:30-14:00		**Lunch**	

Chairperson: Prof. Luiz Fernando Zagonel

Time	Presenter	Program	Place
14:00-14:30	**Harry Westfahl Junior**	Sirius: Transforming Research with Fourth-Generation Synchrotron Light	New York room
14:30-15:30		**Coffee Break**	London room
15:30-17:30		**Sirius/CNPEM visit**	

23th

Chairperson: Prof. Carlos Alejandro Figueroa

Time	Presenter	Program	Place
08:30-09:20	**Daniel Mario Ugarte**	New paradigms for the quantitative structural and chemical characterization of nanomaterials by advanced TEM methods	New York room
09:20-09:50	**Jyh-Wei Lee**	The development of transition metal nitride thin films: effects of compositions, microstructure, and PVD processing parameters	New York room
09:50-10:10	**Kevin lizarraga olivares**	Optical Charcterization of Excitonic Absorption in Metal Tri-Halide Pervoskites using Dispersion Models, a Hydrogen-Polaron Model and First Principles.	New York room
10:10-10:30		**Coffee Break**	Mezzanine
10:30-10:50	**Shreelekha Mishra**	Revisiting the Optoelectronic Characterization and Bandgap Narrowing of Sputtered Aluminum-Doped Zinc Oxide Thin Films	New York room
10:50-11:10	**Carla Daniela Boeira**	Microfluidic E-Tongue Using Metallic Nitride Nanofilms for Soil Macronutrient Analysis	New York room
11:10-11:40	**Zaoli Zhang (on-line)**	Study hard coatings through advanced electron microscopy methods	New York room
11:40-12:00		**Closing ceremony**	