



WORKSHOP CAPES PRINT

2D materials and nanodevices for energy, telecommunications, and sensor applications

Coordinator: Prof. Christiano J. S. de Matos

Day: June 4, 2024 – Tuesday

Local: MackGraphe auditorium, 5th floor

Morning:

Time	Description
8:30 - 9:00	Welcome to the CAPES Print Workshop
9:00 - 10:00 <i>50 min. presentation</i> <i>10 min. questions</i>	Prof. Cecília C. C. Silva – Mackenzie Presbyterian University (Brazil) Title: Advancements in graphene-based materials for biosensing electronics
10:00 - 11:00	Prof. Carlos A. Rios Ocampo – University of Maryland (USA) Title: Nonvolatile reprogrammable photonics using chalcogenide phase change materials
11:00 - 11:30	<i>Coffee Break</i>
11:30 - 11:50 <i>15 min. presentation</i> <i>5 min. questions</i>	Prof. Juan Diego Zapata – Universidad de Antioquia (Colombia) Title: Design of ultrafast laser and photonics devices: a collaboration between Universidade Presbiteriana Mackenzie and Universidad de Antioquia
11:50 - 12:10	Dr. Danilo Nagaoka – Mackenzie Presbyterian University (Brazil) Title: CVD Synthesis of TMDs: Characterization, Conversion, and Prospective Applications
12:10 - 12:30	Ms. Matheus Guitti Bonando – Mackenzie Presbyterian University (Brazil) Title: All-inkjet-printed microneedles for in-vivo biosensing

Afternoon:

Time	Description
14:00 - 15:00 <i>50 min. presentation</i> <i>10 min. questions</i>	Prof. Dario Bahamon – Mackenzie Presbyterian University (Brazil) Title: Chirality and electronic transport
15:00 - 15:20 <i>15 min. presentation</i> <i>5 min. questions</i>	Prof. Marco Antonio S. Montalva-Medel – Universidad Adolfo Ibáñez (Chile) Title: Structural and dynamical properties of reversible and conservative cellular automata
15:20 – 15:40	Dr. Pacôme Perrotin – Mackenzie Presbyterian University (Brazil) Title: Distributed consensus problems with automata networks
15:40 - 16:10	<i>Coffee Break</i>
16:10 - 16:30	Dr. Santiago Gimenez de Castro – ICN2 (Spain) Title: Signal processing techniques for quantum transport
16:30 - 16:50	Dr. Pilar Vianna – U.S. Army Combat Capabilities Development Command - DEVCOM (Brazil) Title: Pathways in 2D: Navigating Careers and Crossing Boundaries
17:00 – 18:30	Round table discussion – International opportunities in Brazil and around the world