



**UNIVERSITY OF NAIROBI**



**Workshop “Electrochemistry for sensing and energy, and beyond”**

**Department of Chemistry (University of Nairobi, Faculty of Science and Technology)  
& Chimie ParisTech-PSL  
Paris, France**

**Amphi Moissan**

**Tuesday 6<sup>th</sup> june**

10:00-10:15

Dr Christian Lerminiaux, Director Chimie ParisTech-PSL

Dr Armelle Ringuedé & Dr Fethi Bedioui (CNRS/Chimie ParisTech-PSL)

Welcome & Introduction

10:15-10:45

Prof. Leonidah O.Kerubo (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Insights of the Faculty of Science & Technology

10:45-11:15

Prof. David K. Kariuki (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Electrochemistry in the Department of Chemistry

11:15-11:45

Prof. Catherine Ngila (University of Nairobi)

Women and African Women in Science

-----

14:00- 14 :30

Prof Sophie Griveau (Chimie ParisTech-PSL, Institute of Chemistry for Life and Health Sciences, i-CLeHS)

## Ultramicro electrochemical sensors for biological applications

14 :30-15 :00

Serah Njoroge (Department of Chemistry (University of Nairobi, Faculty of Science and Technology) & Institute of Chemistry for Life and Health Sciences i-CLeHS (Chimie ParisTech-PSL))

Surface modification based on metallic nano-objects for the construction of electrochemical biosensors

15:00-15:30

Dr. Immaculate N. Michira (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Electro -Mediation Platform for Biosensing - A Modern Tool Towards Rapid Detection of Pollutants

15:30-16:00

Dr Thierry Pauporté (Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

The preparation of halide perovskite thin film semiconductors

## Thursday 8<sup>th</sup> June

10:00-10:30

Prof. Duke O. Orata (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Quartz Crystal Microbalance used in Conjunction with Electrochemistry to Study Redox Properties of Conducting Polymers.

10:30-11:00

Dr. Damaris Mbui (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Waste to Bioenergy with Microbial Fuel Cells: A Case study of Nairobi, Kenya

11-00-11:30

Ass. Prof. Polina Volovich & Adèle Debono Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Application of in situ coupled techniques to access environmental stability of multi-materials

11:30-12:00

Dr. Lucia Kii (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Fabrication of immunosensor for electrochemical detection of lung cancer biomarkers

-----  
15:00-15:30

Dr Styliani Papadopoulou Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Liquid-liquid extraction of rare earth elements in ionic liquids

15:30-16:00

Simon Hubert Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Composite materials for electrochemical devices in hydrogen energy

16:00-16:30

Prof. Duke O. Orata (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Surface Modified Electrode as A Nano-Detection Tool in the Qualitative and Quantitative Assessment of Hydroquinone in Cosmetic Cream

16:30-17:00

Prof. Kawthar Bouchemal Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Effect of micro- and nanoparticle shape on biological processes

## Friday 9<sup>th</sup> June

10:00-10:30

Dr Jolanta Swiatowska Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Electrochemically induced modifications at electrode/electrolyte interphases characterized by means of surface sensitive techniques.

10:30-11:00

Dr. Damaris Mbuï (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Biosensors for BisPhenol Alcohol determination: The Kenyan Story

11:00-11:30

Ass. Prof. Domitille Giaume (Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Rethink Lithium-ion materials for the next generation batteries

11:30-12:00

Corentin Noel Chimie ParisTech-PSL, Institut de Recherche de Chimie Paris, IRCP)

Electroreduction of CO<sub>2</sub> into molten carbonates.

---

14:00-14:30

Dr. Bridget Mutuma (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Tuning Properties of Carbon Nanomaterials for Selective Electrochemical Detection of Biomolecules

14:30-15:00

Prof. Catherine Ngila (University of Nairobi)

Electrochemical Sensors for Water Quality Monitoring and Pollutant Speciation Analysis

15:00-15:30

Dr. Rachael N. Njogu (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Cyclometalated Ir(III) Complexes: Synthesis and Applications in Photocatalysis, Health and Agriculture

15:30-16:00

Dr. Fredrick Mwazighe (Department of Chemistry (University of Nairobi, Faculty of Science and Technology))

Use of Multiwalled Carbon Nanotubes in The Electrochemical Detection of Anthracene and Pyrene.