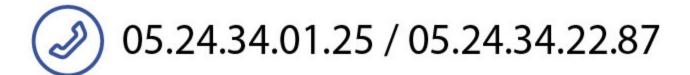
## PRESENTATION

Interdisciplinary quality of scientific research, solid pedagogical and educational training are considered among the key parameters in the sustainable development of a society. The research activities carried out within the ENS, UCA-Marrakech, have allowed the emer gence of diversified themes around bio-resources, nano-materials and renewable energies. In this context, the Interdisciplinary Laboratory Research in Bio-resources, Materials and the Environment (LIRBEM) organizes a Doctoral Day on Thursday May 26th, 2022. This day is an opportunity for doctoral students and researchers to:

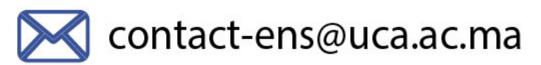
- present the state of progress and the results of their research work,
- exchange and discuss with experienced researchers in order to guide them in their research themes.
- constitute a network of researchers who will be of interest for a promising scientific career.

## Organizing committee:

- Pr. My Abdelaziz Koumina, Coordinator
- El Hassane Mourid (PhD, ENS UCA)
- Younes Bahammou (PhD, ENS UCA)
- Abderrahim Bakkak (PhD, ENS UCA)
- Youssef Ait Hamdan (PhD, ENS UCA)
- Samia Elouali (Master degree, ENS UCA)













Interdisciplinary Laboratory Research in Bio-resources Materials and Environment (LIRBEM, ENS-UCA)

Organizes a Doctoral Day under the theme:

## SCIENTIFIC RESEARCH ASTRATEGICIEVER FOR DEVELOPMENT



## PROGRAME

08:30-09:00 Welcome and registration

09:00-09:30 Opening

Pr. Khadija EL HARIRI (ENS Director)

Organizing committee

Oral Session

09:30-10:50 Theme 1: Nanosciences and Environment

Moderator: Younes BAHAMMOU

- Nada AGHADE: Two-dimensional Core-shell rods photonic metasurface by FDTD and PWE methods,
- Driss LAHBOUB : Solution of Basset integro-differential equations by IIR digital filters
- Abdelhakim MOUTAOUAKIL: An Overview of 5G Mobile Network Antennas: Trends and Challenges,
- Abedellah SELLAM, An ab-initio study of the adsorption of CO, H2, and N2 molecules on deformed or stretched graphene
- Abderrahim BAKAK: Rheological properties of nano-fluids graphene/ethylene glycol,
- Souad AIT SAGHIR: Experimental optimization and Theoretical modeling of ferroelectric properties and electro caloric effect,
- Yassine OUALCADI: Inhibitory effect of almond stem bark extract as a corrosion inhibitor for S240 steel in 3.5% NaCl medium,
- El Hassane MOURID : Sustainable treatment of food dye from wastewater using a low-cost anionic clay,

Debate and discussion

10:50-11:40 Theme 2: Bioresources and innovative biomaterials

Moderator : El Hassane MOURID

- Nadia ELADLANI: Recovery of Cr (III) from tannery wastewater by chitosan, its nanoparticles and whiskers,
- Youssef AIT HAMDAN: Contribution to the study of a new chitosan source for the development 3D chitosan-alginate hydrogel: Initiation to tissue engineering,
- Samia ELOUALI: Application of chitosan in wastewater treatment,
- Mustapha HASNI: The use of seaweeds and abiotic parameters for the biomonitoring of Moroccan coastal areas: case study of Safi city,
  Debate and discussion

11:50-12:30 Theme 3: Efficient solar processes

Moderator: Youssef AIT HAMDAN

- Younes BAHAMMOU: Thermophysical characterization and simulation study of an eco-friendly building material reinforced with chamarrops humilis fibers,
- Mounir KOUHILA: Drying kinetics and exergy performance of traditionally earth mortar drying system based on hybrid solar-electrical dryer,
- Hamza LAMSYEHE: Study of desorption isotherms of anchovy: Characterization and Modeling,

Debate and discussion

Poster Session

12:30-12:40

Moncef BELMAJDOUB & Oumaima DAHBANE :

Valorization of a new chitinous source: Black soldier fly

COFFEE BREAK & CLOSING