ESMA MAHFOUF sp. BOUCHAREB

University Lecturer and Researcher **(NATIONAL HIGH SCHOOL OF BIOTECHNOLOGY, Constantine Algeria)**
Cité 55 logts LSP UV01 Bt 03 N° 29 Nvl Ville Ali Mendjli Constantine, Algeria
BORN ON THE 22nd of July 1987 at CONSTANTINE, ALGERIA
Married, Two (02) daughters
(+213) 557-704-396 • mahfouf.asma@yahoo.fr

Personal Profile

I am an energetic, ambitious person who has developed a Mature and responsible approach to any task that I undertake, or situation that I am presented with. I am graduated with eight years of experience in teaching and research at the university.

Work Experience

From September 2014 up to Present: University Lecturer and Researcher at National High School of Biotechnology (ENSB) and Normal High School (ENS), Constantine, Algeria

- **Educational Years 2018/2019, 2019/2020 and 2020/2022:**
  - Biological treatments of wastewater module for Master of Science classes
  - Bioprocess engineering module for Master of Science classes
  - Health safety and environment module for graduation classes
- **Educational Year 2017/ 2018:**
  - Bioprocess engineering module for Master of Science classes
  - General chemistry module for preparatory cycle classes
  - Purification of drinking water for Master of Science classes
  - Water analysis for Master of Science classes
- **Educational Years 2014/2015, 2015/2016 and 2016/ 2017:**
  - General chemistry module for preparatory cycle classes
  - Kinetics chemistry module for graduation classes
  - Electro-chemistry module for graduation classes

From September 2013 to September 2014: Part-time Lecturer in a Professional Training Centre, Constantine, Algeria

- Water treatment module for under-graduated

Master supervision

- **2019/2020**
  - **Slimani Khaled, Lazreg Halima**

Biohydrogen production by dark fermentation milk industry waste water

  - **Bendiaf Dounia, yellfouf Assia**

Physicochemical treatment of chocolate industry waste water

- **2020/2021**
  - **Bedri rayane , Menas souha**

Enhanced biohydrogen production by enzymatic pretreatment

  - **Ouabdelkader Samir, maaref ferial**

Biohydrogen production by dark fermentation milk industry waste water using *Eshirichia coli*

  - **Saheb aya, sabri ouahiba**

Augmented biohydrogen production by nanomaterials

- **2021/2022**
  - **Khouni amani, khezzar anissa**

Application of dark fermentation of milk industry waste water CSTR bioreactor

  - **Fadel boutheina, soualmia aya**

Bioplastic synthesis from food wastes

  - **Benhamlaoui anfel, menmouhoub imene**

Clostridium butyricum isolation and application for fermentative biohydrogen generation

Educational

October 2022 : PhD of Science Preparation in Environmental Engineering at Process Engineering Faculty, University of Salah Boubnider, Constantine 3, Algeria

- Topic: Biohydrogen Production by dark fermentation (experimental and simulation study).

From September 2011 to June 2015: Post-graduation (Magister) in Chemical Engineering applied to Environment at Badji Mokhtar University, Annaba, Algeria

- Topic: Cooper Ions Reduction in Aqueous Environments

From September 2005 to July 2011: Process Engineering at Mentouri University, Constantine, Algeria

- Topic: Design of a Di-methyl-Ether Production Plant

Oral Communications

"**Biohydrogen production by anaerobic digestion**" 4th Days of Young Searchers "Applied Research", 14 and 15 May 2017, University Of Constantine 3, Algeria

"**Cooper Particles Synthesis and Elimination Cooper Ions by Chemical Reduction**" 3rd Days of Young Searchers "Applied Research", 08 and 09 May 2016, University Of Constantine 3, Algeria

"**Cooper Ions Reduction Using Ascorbic Acid in Aqueous Environments**" 6th Days of Chemistry (JCH, 2015), 24 and 25 March 2015, Military Polytechnic School Bordj El Bahri Algiers, Algeria

"Cooper Ions Reduction to Cooper Metal in Aqueous Environments" 2nd International Photo-catalysis & Environment Congress (CIPE 2014), 07 and 08 May 2014, University Of Constantine 3, Algeria

Articles & Scientific Production

- **Application of nanotechnology in anaerobic digestion for biohydrogen production improvement from natural coagulation/flocculation sludge using metallic oxide nanoparticles**

  Raouf Bouchareb , Derbal Kerroum, Yacin Ozay, Niboucha Chahrazed, Bouti Meroua, Esma Mahfouf Bouchareb, Nadir Dizge 10.1080/15567036.2022.2120931

- **Uptake of Methyl Red dye from aqueous solution using activated carbons prepared from Moringa Oleifera shells**

  Amel Khalfaoui, Esma Mahfouf Bouchareb, Kerroum Derbal, Souheila Boukhaloua, Bouchra Chahbouni, Raouf Bouchareb https://doi.org/10.1016/j.clce.2022.100069

- **Enhanced fermentative hydrogen production from potato waste by enzymatic pretreatment**

  Esma Mahfouf Bouchareb, Derbal Kerroum,Rayenne bedri, Menas souha and Nadir Dizge https://doi.org/10.1080/09593330.2022.2154171

- **Production of bio-hydrogen from bulgur processing industry wastewater**

  Esma Mahfouf Bouchareb, Derbal Kerroum,Ezgi Bezirhan Arikan, Zelal Isik and Nadir Dizge

  https://doi.org/10.1080/15567036.2021.1877853

- **Synthesis of copper particles and elimination of cupric ions by chemical reduction**

  Esma Mahfouf Bouchareb, Souad Djerad and Raouf Bouchareb

  https://doi.org/10.35208/ert.717086

- **Investigation of fungal treatment potential for bulgur cooking process wastewater**

  Ezgi Bezirhan Arikan, Esma Mahfouf, Bouchareb and Nadir Dizge

  https://doi.org/10.1016/j.biteb.2020.100468

- **Ecologically friendly production of copper powder and elimination of cupric ions from aqueous solutions using D-Glucose and ascorbic acid**

  Esma Mahfouf Bouchareb, Souad Djerad and Raouf Bouchareb

  https://doi.org/10.35208/ert.802170

Languages	**Arabic : Mother** **English : Good** **French : Good**
Expertise and Analytical Techniques	Water analysis, Spectrophotometer, HPLC (High pressure liquid chromatography), GC (Gas Chromatography), RTQPCR, COD and BOD, COT, Alkalinity, VSS, TSS; carbohydrates, protein, TKN and phosphors determinations, BHP, PEP and PMP evaluation, bibliographic study, HYSYS and MATLAB. Inoculum preparation and microbial fermentation.