CURRICULUM VITAE

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POSITIONS

2015 - Professeur de l'Enseignement Supérieur, FST Fès, USMBA, Morocco

2004 – 2015 Professeur Habilitée, FST Fès, USMBA, Morocco

1998 – 2004 Professeur Assistant, FST Fès, USMBA, Morocco

1996 – 1998 Maitre-assistant, FST Fès, USMBA, Morocco

1996 (January) – 1996 (July) Post-Doc, INRA Dijon, France

DEGREES

PhD in Plant-Microorganisms interactions. University of Burgundy, Dijon France, December 1995

Habilitation Universitaire. FST Fès, USMBA, July 2004

PARTICIPATION IN RESEARCH PROJECTS

- Projet PRAD 10-04 : Gestion et valorisation de la strate arbustive ectotrophe pour la conservation et la productivité durable des subéraies
- Projet PRAD 13-04 : Impact du chrome sur les fonctionnalités biogéochimiques de sols agricoles irrigués de la plaine de Saiss (Maroc).
- Projet Maroco-Tunisien 10/MT/14 : *Coriaria myrtifolia* L. : répartition au Maghreb, symbiose fixatrice d'azote atmosphérique Frankia-Coriaria (nodulation et isolement de l'endophyte Frankia) et profil toxico-pharmacologique.
- Projet volubilis (2014-2016). Pile à combustible microbienne : une technologie en émergence pour le traitement des eaux usées et la génération d'électricité. Action Intégrée Franco-Marocaine.
- Projet PPR CNRST (2014-2017): Stations Innovantes pour le Traitement des effluents des Tanneries
- Programme R&D, Ministère de l'Energie, des Mines, de l'Eau et de l'Environnement (2015-2017), Procédé innovant pour le traitement des lixiviats de la décharge contrôlée de la ville de Fès
- Projet PPR CNRST (2015-2018): Contribution au traitement des effluents de dinanderies de la ville de Fès par un procédé physico-chimique et biologique
- Projet ERANET (2018-2022) : Agriculture effects on inland saline water bodies and on lake/laguna hydrological complexes (AQUASALT).
- Projet PRIMA ProSmallAgriMed (2020-2024) "Promoting soil fertility, yield and income in smallholder agriculture of semiarid and arid Mediterranean regions by management of beneficial soil microbiota, conservation agriculture and intercropping (ProSmallAgriMed);
- Projet PRIMA ASTER (2021-2024) "Agroecology-inspired Strategies and Tools to Enhance Resilience and ecosystem services in tomato crop (ASTER)".
- Projet PRIMA MEAWA (2023-2026) « Mitigation of Agricultural effects in Mediterranean soils and wetlands: bioremediation technologies, environmental and economic benefits (MEAWA) »

PUBLICATIONS

Book chapters

- Danouche M., El Arroussi H., El Ghachtouli N., (2021). Biodegradation of environmental pollutants by marine yeasts in Marine Organisms: A Solution to Environmental Pollution? – Uses in Bioremediation and in Biorefinery. *Environmental Challenges and Solutions*. Springer (ISSN: 2214-2827)
- Asri Meryem, Elabed Soumya, Ibnsouda Koraichi Saad, El Ghachtouli Naïma (2019). Biofilm-based systems for industrial wastewater treatment. In : Handbook of Environmental Materials Management, Chaudhery Mustansar Hussain (Ed). Springer.

- Nezha Tahri Joutey, Nabil Tirry, Wifak Bahafid, Hanane Sayel and Naïma El Ghachtouli (2018). Plant growth promoting bacteria in heavy metals bioremediation. In: Bioremediation: Advances in Research and Applications (M. Kuddus Editor). Nova Science Publishers, USA..
- Meryem Asri, Alae Elabed, Soumya Elabed, Saad Ibnsouda Koraichi, Naïma El Ghachtouli (2018). The Significance of Microbial Cell Surface Energy in Wastewater Bioremediation. In: Bioremediation: Advances in Research and Applications (M. Kuddus Editor). Nova Science Publishers, USA.
- Wifak Bahafid, Nezha Tahri Joutey, Meryem Asri, Tirry Nabil, Hanane Sayel and Naïma El Ghachtouli (2017) Yeast biomass: an alternative for bioremediation of heavy metals. Yeast - Industrial Applications. In : Yeast - Industrial Applications. ISBN 978-953-51-3599-9. Book edited by Antonio Morata. InTech. http://dx.doi.org/10.5772/intechopen.70559
- Nezha Tahri Joutey, Wifak Bahafid, Hanane Sayel and Naïma El Ghachtouli (2013). Biodegradation: Involved Microorganisms and Genetically Engineered Microorganisms. IN: Biodegradation - Life of Science, Rolando Chamy and Francisca Rosenkranz (Ed.), ISBN: 978-953-51-1154-2, InTech, DOI: 10.5772/56194.

Journal articles

- Yasmine Elouattassi, Mohamed Ferioun, Naima El Ghachtouli, Khalid Derraz, Fouad Rachidi. Agroecological concepts and alternatives to the problems of contemporary agriculture: Monoculture and chemical fertilization in the context of climate change. Journal of Agriculture and Environment for International Development - JAEID 2023, 114 (1): 31 – 47
- Yasmine Elouattassi, Mohamed Ferioun, Naïma El Ghachtouli, Khalid Derraz, Fouad Rachidi (2023). Enhancing onion growth and yield through agroecological practices: Organic fertilization and intercropping. Acta Ecologica Sinica. https://doi.org/10.1016/j.chnaes.2023.09.004
- Meryem Asri, Redouane Ouafi, Wifak Bahafid, Soumya Elabed, Saad Ibnsouda Koraichia, Filomena Costa, Teresa Tavares, Naïma El Ghachtouli (2023). Chromium removal by newly developed microbial consortia supported on wood husk. Desalination and Water Treatment. 289 (2023) 80–91
- Meryem Asria,b,*, Redouane Ouafic , Soumya Elabedc , Wifak Bahafida , Saad Ibnsouda Koraichia , Teresa Tavaresd, Naïma El Ghachtouli. Wickerhamomyces anomalus biofilm supported on wood husk and zeolite 13X for the treatment of chromium in aqueous solutions and a tannery effluent. Desalination and Water Treatment. 306 (2023) 39–50 September. doi: 10.5004/dwt.2023.29611
- S. Serbouti, A. Ettaqy, H. Boukcim, El Mderssa M., N. El Ghachtouli and Y. Abbas. “Forests and woodlands in Morocco: review of historical evolution, services, priorities for conservation measures and future research”. March 2023, International Forestry Review 25(1):121-145, DOI: 10.1505/146554823836838745.
- Ferioun, M., Srhiouar, N., Bouhraoua, S., El Ghachtouli, N., & Louahlia, S. (2023). Physiological and biochemical changes in Moroccan barley (*Hordeum vulgare* L.) cultivars submitted to drought stress. *Heliyon*, *9*(2). https://doi.org/10.1016/j.heliyon.2023.e13643
- Ferioun, M., Bouhraoua, S., Srhiouar, N., Tirry, N., Belahcen, D., Siang, T. C., Louahlia, S., & El Ghachtouli, N. (2023). Optimized drought tolerance in barley (*Hordeum vulgare* L.) using plant growth-promoting rhizobacteria (PGPR). *Biocatalysis and Agricultural Biotechnology*, 50, 102691. https://doi.org/10.1016/j.bcab.2023.102691
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- Hamza Bellouk, Mohamed Danouche, Imane El Mrabet, Karim Tanji, Fouad Khalil, Mostafa Nawdali, Naima El Ghachtouli, Hicham Zaitan. Remediation of the landfill leachate of Fez city (Morocco) by sono-photo-Fenton process: Cost and phytotoxicity assessment. Journal of Water Process Engineering, Volume 56, 2023, 104565, ISSN 2214-7144, https://doi.org/10.1016/j.jwpe.2023.104565.
- Raouan SE, Zouine N, Harchli EE, et al. The theoretical adhesion of Staphylococcus aureus and Pseudomonas aeruginosa as nosocomial pathogens on 3D printing filament materials. Folia Microbiologica. 2023 Aug;68(4):627-632. DOI: 10.1007/s12223-022-01028-6. PMID: 36807129.
- Naoual Zerrari, Naoual Rais, Naima El Ghachtouli, Aziza Kouchou, Mustapha Ijjaali (2023). Heavy Metals Effects on Agricultural Soil Enzyme Activities of Fez, Morocco. Journal of Ecological Engineering 2023, 24(5), 144–154
- S. Serbouti, Y. Abbas, M. Soussi, I. Alaoui, W. Squalli, H. Achiban, N. El Ghachtouli. Morphological Responses of *Cedrus atlantica, Pinus halepensis, and Tetraclinis articulata* in Different Pedoclimatic

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- Tirry, N., Ferioun, M., Laghmari, G., Kouchou, A., Bahafid, W., & El, B. (2022). Effect of co-immobilized tri-bacteria into alginate beads on growth and root mycorrhizal colonization potential of *Medicago sativa* plants. *Biointerface Research in Applied Chemistry*, *13*(5), 451. https://doi.org/10.33263/BRIAC135.451
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- M. Danouche, H. El Arroussi, N. El Ghachtouli1 (2022). Bioremoval of Acid Red 14 dye by *Wickerhamomyces anomalus* biomass: kinetic and thermodynamic study, characterization of physicochemical interactions, and statistical optimization of the biosorption process. Biomass Conversion and Biorefnery https://doi.org/10.1007/s13399-022-02711-x
- M. Danouche, N. El Ghachtouli, A. Aasfar, I. Bennis, H. El Arroussi (2022). Pb(II)-Phycoremediation Mechanism using Scenedesmus obliquus: Cells Physicochemical Properties and Metabolomic Profiling. Helyion, VOLUME 8, ISSUE 2, E08967, FEBRUARY 2022
- Sara Er-Rahmani, Badr Errabiti, Safae Er Raouan, Elhassan Elharchli, Amal Elaabedy, Soumya El Abed, Naima El Ghachtouli, Moulay Sadiki, Chorouk Zanane, Hassan Latrache, Saad Ibnsouda Koraichi (2022). Reduction of biofilm formation on 3D printing materials treated with essential oils major compounds. Industrial Crops and Products, Volume 182, August 2022, 114864
- Nouhaila Zouine, Safae Er Raouan, Elhassan Elharchli, Naima El Ghachtouli, Soumya El Abed, Moulay Sadiki, Saad IBN Souda Koraichi (2022). Theoretical and experimental investigations of *Staphylococcus aureus* and *Pseudomonas aeruginosa* adhesion on 3D printed resin. International Journal of Adhesion and Adhesives, Volume 118, https://doi.org/10.1016/j.ijadhadh.2022.103234.
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