



AL MAGNIFICO RETTORE  
DELL'UNIVERSITA' DEGLI STUDI DI MILANO

COD. ID: 6812

Il sottoscritto chiede di essere ammesso a partecipare alla selezione pubblica, per titoli ed esami, per il conferimento di un assegno di ricerca presso il Dipartimento di Chimica dell'Università degli Studi di Milano

Responsabile scientifico: Prof.ssa Colombo Valentina

[Nome e cognome]

## CURRICULUM VITAE

### INFORMAZIONI PERSONALI

Cognome	El Barkaoui
Nome	Sofiane

### OCCUPAZIONE ATTUALE

Incarico	Struttura
Dottorando (stato finale)	Universtità degli studi di Firenze, Dipartimento di Chimica
Dottorando (stato finale)	Universtità degli studi di Cadi Ayyad di Marrakech (Marocco), Dipartimento di Biologia

### ISTRUZIONE E FORMAZIONE

Titolo	Corso di studi	Università	anno conseguimento titolo
Laurea Magistrale o equivalente			
Specializzazione			
Dottorato Di Ricerca	Ingegneria di processo e ambientale	Degli studi di Firenze e di Cadi Ayyad di Marrakech	In corso (stato finale)
Master	Master di ricerca in Chimica: Chimica dei Materiali Inorganici	Cadi Ayyad di Marrakech	2021
Diploma Di Specializzazione Medica			
Diploma Di Specializzazione Europea			
Altro			



## ISCRIZIONE AD ORDINI PROFESSIONALI

Data iscrizione	Ordine	Città

## LINGUE STRANIERE CONOSCIUTE

lingue	livello di conoscenza
Arabo	lingua madre
Inglese	Advanced
Francese	Advanced
Italiano	Intermedio

## PREMI, RICONOSCIMENTI E BORSE DI STUDIO

anno	Descrizione premio

## ATTIVITÀ DI FORMAZIONE O DI RICERCA

### descrizione dell'attività

During my Ph.D. entitled "Biochar-based constructed wetlands for wastewater treatment", I'm working on Wastewater treatment-based Vertical-Flow and Hybrid Constructed Wetlands (VF-CW and H-CW) Integrated Biochar, Preparation of porous materials such as biochar and Activated carbon, Implementation VF-CW and H-CW Integrated Biochar, and monitoring the removal of heavy metals, pharmaceutical, micro and macro-pollutants.

In the Master thesis project, I was working on Innovative Formulations of New Phosphate Glasses as Controlled-Release Fertilizers, Elaboration and Characterization of Phosphate Glass-Based Controlled-Release Fertilizers. Study of the effect of Mn/Fe Addition on the Physicochemical Properties and their Durability of Phosphate Glasses.

My current research I have four internships, I also have some of teaching experience in university, technical skills (Data analysis, Spectroscopy and Instrument, Qualitative and quantitative analysis, Synthesis and Characterization of Materials and Nanocomposites, Dimensioning and Implementation of Wastewater Treatment Systems, and Study of the Quality of Water and Wastewater), and courses and seminars.

Please you find more information and details in my CV.



## ATTIVITÀ PROGETTUALE

Anno	Progetto

## TITOLARITÀ DI BREVETTI

Brevetto

## CONGRESSI, CONVEGNI E SEMINARI

Data	Titolo	Sede
03 - 05 July 2024	The 8 <sup>th</sup> edition of International Conference, Chemistry for the Future (CFF).  - e-Poster communication: "Effect of pyrolysis temperatures on the properties of biochars derived from lignocellulosic biomass and their methylene blue adsorption behavior"	Pisa, Italy
15 - 18 May 2024	The 6 <sup>th</sup> Euro-Mediterranean Conference for Environmental Integration (EMCEI-24)  - Oral communication: "Efficiency of Biochar-Based Vertical Flow Constructed Wetland for Wastewater Treatment: Effects of Biochar Concentration on Removal Performance"	Marrakech, Morocco
14 - 15 December 2023	The 4 <sup>th</sup> Online International Conference "Strategies toward Green Deal Implementation Water, Raw Materials & Energy"  - Oral communication: "Potential of biochar-based column filtration systems for wastewater treatment: effects of biochar concentration"	Polish, Hybrid
15 - 16 November 2023	SMACUMED International Conference on "Water-Energy-Food-Ecosystem Nexus in the Mediterranean Region (WEFE 2023)  - Oral communication: "Optimizing Wastewater Treatment Using Biochar-Based Column Filtration System"	Marrakech, Morocco



02 - 03 November 2023	1 <sup>st</sup> International Conference on “Biomass Valorization for Sustainable Applications (BIOVASA2023)”  - Oral communication: “Characterization of biomass wastes and potential use of biochar synthesis for wastewater treatment”	Marrakech, Morocco
21 June 2023	7 <sup>th</sup> edition of CNEREE Doctoral Students' Day  - Recycling and Reuse of Waste as a Source of Biochar and Potential Application in Wastewater Treatment Wastewater Treatment”	Faculty of Sciences and Technic, University of Cadi Ayyad, Marrakech, Morocco
01 - 03 December 2022	International Congress on Climate Change on the theme: “Climate change: between risks, vulnerability and resilience of territories”  - Oral communication: “Efficiency of biochar in constructed wetland substrate to remove organic and inorganic pollutants from wastewater”	Marrakech - Morocco
11 - 23 July 2022	7 <sup>th</sup> International Summer School “WASTEWATER AND BIOSOLIDS MANAGEMENT”  - e-Poster communication: “Use of biochar for wastewater treatment”	Open Hellenic University, Patras - Greece

## PUBBLICAZIONI

<b>Libri</b>
[titolo, struttura, città, anno]
[titolo, struttura, città, anno]
[titolo, struttura, città, anno]
<b>Articoli su riviste</b>
“Acritical review on using biochar in constructed wetland substrate: characteristics, feedstock, configurations and pollutants removal mechanisms”, Ecological Engineering, 2023, Authors: <b>Sofiane EL BARKAOUI</b> , Laila MANDI, Faissal AZIZ, Massimo Del Bubba, Naaila OUZZANI. <a href="https://doi.org/10.1016/j.ecoleng.2023.106927">https://doi.org/10.1016/j.ecoleng.2023.106927</a> .
“Impact of MnO on the structural, physicochemical, and dissolution properties of phosphate-based glasses”, Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, 2023, Authors: <b>Sofiane El Barkaoui</b> , Abdelaziz El Abiad, Imane Anasser, Mohamed Amine Harech, Hakima Aouad, Mohamed Mesnaoui, and Tariq Labbilta. <a href="https://doi.org/10.13036/17533562.64.1.26">https://doi.org/10.13036/17533562.64.1.26</a>
“Dissolution behaviour of phosphate glasses with controlled release in an acidic environment”, Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, 2023, Authors: Nouredine El Binna, Tariq Labbilta, <b>Sofiane El Barkaoui</b> , Mohamed Elmasloumi, Khadija Elataoui,



Abdelaziz El Abaid, Hakima Aouad.
Submitted Article "Impact of iron oxide incorporation on the physicochemical properties of phosphate glasses", Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, Authors: Sofiane El Barkaoui, Tariq Labbitta, Mohamed Amine Harech, Imane Anasser, Nouredine Elbinna and Mohamed Mesnaoui.
Manuscript in Final state (2024): "Physicochemical and Thermal Characterization of Argan Residues for Biofuel and Biochar Production." Authors: Sofiane El Barkaoui, Naaila Ouazzani, Laila Mandi, John Zafeiropoulos, Ekavi A. Isari, Massimo Del Bubba, Ioannis K. Kalavrouziotis.
Manuscript in Final state (2024): " Optimizing wastewater treatment using biochar-based column filtration System." Authors: Sofiane El Barkaoui, Laila Mandi, Massimo Del Bubba, Naaila Ouazzani.
Manuscript in Final state (2024): "Comparison of adsorption behavior studies of methylene blue by biochars derived from lignocellulosic biomass produced at different pyrolytic temperatures." Authors: Sofiane El Barkaoui, Laila Mandi, Massimo Del Bubba, Naaila Ouazzani.
Manuscript in Final state (2024): " Efficiency of Different Biochar-based columns filter in Wastewater Treatment: Effects of Biochar Type and their Properties." Authors: Sofiane El Barkaoui, Laila Mandi, Massimo Del Bubba, Naaila Ouazzani.

<b>Atti di convegni</b>
The 8 <sup>th</sup> edition of International Conference, Chemistry for the Future (CFF) "Effect of pyrolysis temperatures on the properties of biochars derived from lignocellulosic biomass and their methylene blue adsorption behavior", S. EL BARKAOUI*, L. MANDI, M. DELL BUBBA, N. OUZZANI, Pisa, Italy, (03- 05 July 2024).
The 4 <sup>th</sup> Online International Conference "Strategies toward Green Deal Implementation Water, Raw Materials & Energy, "Potential of biochar-based column filtration systems for wastewater treatment: effects of biochar concentration", Sofiane El Barkaoui*, Massimo Del Bubba, Polish, (14 - 15 December 2023).
1 <sup>st</sup> International Conference on "Biomass Valorization for Sustainable Applications (BIOVASA2023)", "Characterization of biomass wastes and potential use of biochar synthesis for wastewater treatment", Sofiane EL BARKAOUI*, Laila MANDI, Houria RYAH, Massimo DEL BUBBA, Naaila OUZZANI, Marrakech, Morocco, (2-3 November 2023).
7th International Summer School at the Open Hellenic University "WASTEWATER AND BIOSOLIDS MANAGEMENT", e-Poster communication: "Use of biochar for wastewater treatment", Sofiane EL BARKAOUI*, Faissal AZIZ, Laila MANDI, and Naaila OUZZANI, Patras, Greece (July 11-23, 2022).

## ALTRE INFORMAZIONI


Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Il presente curriculum, non contiene dati sensibili e dati giudiziari di cui all'art. 4, comma 1, lettere d) ed e) del D.Lgs. 30.6.2003 n. 196.

RICORDIAMO che i curricula **SARANNO RESI PUBBLICI sul sito di Ateneo** e pertanto si prega di non inserire dati sensibili e personali. Il presente modello è già precostruito per soddisfare la necessità di pubblicazione senza dati sensibili.

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# UNIVERSITÀ DEGLI STUDI DI MILANO

Luogo e data: Firenze\_, 21/08/2024\_\_\_\_\_

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