

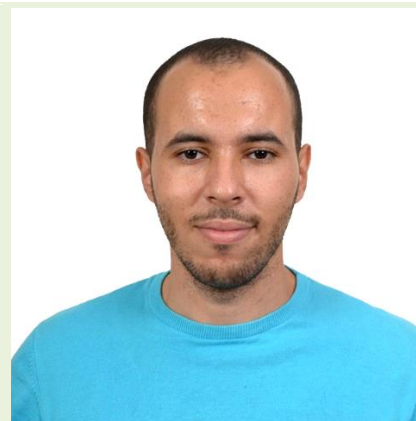
Curriculum Vitae

HACHEMAOUI Mohammed

Associate Professor
29years, Born 02/07/1993
ORAN ALGERIA

Personale adresse

CITE 1180 LGO BT 51 C N07
MARAVAL ORAN ALGERIA
Phone : +213792652250
+213662725804
E-mail : mohamedb.f@live.fr



➤ **Education and University Title:**

- Jun 2021: Doctorate degree in Materials Chemistry at University of Oran 1 Ahmed Ben Bella.
- June 2017: Master degree in Materials Chemistry applied to catalysis and health at University of Oran 1 Ahmed Ben Bella
- June 2015: Bachelor degree in General Chemistry at University of Oran 1 Ahmed Ben Bella

➤ **Professional experiences**

- 2022-nowdays associate professor of Materials Chemistry at Ahmed ZABANA University RELIZAN
- 2020-2021 Assistant teacher of Materials Chemistry at University Oran1 Ahmed Ben Bella.
- 2019-2020 Assistant teacher of General Chemistry at University Oran1 Ahmed Ben Bella.
- 2019-2020 Guest researchers in collaboration with the ERASMUS+ Program at Department of Chemical Engineering, Faculty of Sciences, Cantoblanco Campus, Autonomous University of Madrid, E-28049 Madrid, Spain.
- 2018-2019 Assistant teacher of General Chemistry at University Oran1 Ahmed Ben Bella.
- 2017-2018 Assistant teacher of General Chemistry at University Oran1 Ahmed Ben Bella.
- 2018 Laboratory Assistant Quality Control at GROS (Sugar Refinery), control Quality of water
- 2017-Pharmacy salesman at IBS School
- 2014- Computer maintenance at Selman Institute
- 2018-Eco-entrepreneuriat of Switch Med
- 2019-vocational training in Renewable Energy (Solar-Thermal and photovoltaic)
- 2021-Electronic devises maintenance and programming

➤ **Scientific Expertise:**

Publications:

- **M. Hachemaoui**, C.B. Molina, C. Belver, J. Bedia, A. Mokhtar, R. Hamacha, B. Boukoussa, Metal-loaded mesoporous mcm-41 for the catalytic wet peroxide oxidation (Cwpo) of acetaminophen, *Catalysts*. 11 (2021). <https://doi.org/10.3390/catal11020219>.
- **M.Hachemaoui**, A. Mokhtar, A. Mekki, F. Zaoui, S. Abdelkrim, S. Hacini, B. Boukoussa, Composites beads based on Fe₃O₄@MCM-41 and calcium alginate for enhanced catalytic reduction of organic dyes, *Int. J. Biol. Macromol.* 164 (2020) 468–479. <https://doi.org/10.1016/j.ijbiomac.2020.07.128>.
- **M. Hachemaoui**, B. Boukoussa, A. Mokhtar, A. Mekki, M. Beldjilali, M. Benaissa, F. Zaoui, A. Hakiki, W. Chaibi, M. Sassi, R. Hamacha, Dyes adsorption, antifungal and antibacterial properties of metal loaded mesoporous silica: Effect of metal and calcination treatment, *Mater. Chem. Phys.* 256 (2020) 123704. <https://doi.org/10.1016/j.matchemphys.2020.123704>
- **M. Hachemaoui**, B. Boukoussa, I. Ismail, A. Mokhtar, I. Taha, J. Iqbal, S. Hacini, A. Bengueddach, R. Hamacha, CuNPs-loaded amines-functionalized-SBA-15 as effective catalysts for catalytic reduction of cationic and anionic dyes, *Colloids Surfaces A Physicochem. Eng. Asp.* 623 (2021) 126729. <https://doi.org/10.1016/j.colsurfa.2021.126729>.
- **M. Hachemaoui**, A. Mokhtar, I. Ismail, M. Walid, Microporous and Mesoporous Materials M (M : Cu , Co , Cr or Fe) nanoparticles-loaded metal-organic framework MIL- 101 (Cr) material by sonication process : Catalytic activity and antibacterial properties, (2021). <https://doi.org/10.1016/j.micromeso.2021.111244>
- **M. Hachemaoui**, A. Mokhtar, S. Abdelkrim, R. Ouargli-Saker, F. Zaoui, R. Hamacha, H. Habib Zahmani, S. Hacini, A. Bengueddach, B. Boukoussa, Improved Catalytic Activity of Composite Beads Calcium Alginate@MIL-101@Fe₃O₄ Towards Reduction Toxic Organic Dyes, *J. Polym. Environ.* (2021) 1–14. <https://doi.org/10.1007/s10924-021-02177-4>
- F. Habeche, **M. Hachemaoui**, A. Mokhtar, K. Chikh, F. Benali, A. Mekki, F. Zaoui, Z. Cherifi, B. Boukoussa, Recent Advances on the Preparation and Catalytic Applications of Metal Complexes Supported-Mesoporous Silica MCM-41 (Review), *J. Inorg. Organomet. Polym. Mater.* 30 (2020). <https://doi.org/10.1007/s10904-020-01689-1>.

- A. Mekki, A. Mokhtar, **M. Hachemaoui**, M. Beldjilali, M.F.M. fethia Meliani, H.H.H.H. Zahmani, S. Hacini, B. Boukoussa, Fe and Ni nanoparticles-loaded zeolites as effective catalysts for catalytic reduction of organic pollutants, *Microporous Mesoporous Mater.* 310 (2021) 110597. <https://doi.org/10.1016/j.micromeso.2020.110597>.
- A. Mokhtar, S. Abdelkrim, **M. Hachemaoui**, M. Adjdir, M. Zahraoui, B. Boukoussa, Layered silicate magadiite and its composites for pollutants removal and antimicrobial properties: A review, *Appl. Clay Sci.* 198 (2020). <https://doi.org/10.1016/j.clay.2020.105823>.
- F. Zaoui, F.Z. Sebba, M. Liras, H. Sebti, **M. Hachemaoui**, A. Mokhtar, M. Beldjilali, B. Bounaceur, B. Boukoussa, Ultrasonic preparation of a new composite poly(GMA)@Ru/TiO₂@Fe₃O₄: Application in the catalytic reduction of organic pollutants, *Mater. Chem. Phys.* 260 (2021) 124146. <https://doi.org/10.1016/j.matchemphys.2020.124146>.
- A. Mekki, A. Benmaati, A. Mokhtar, **M. Hachemaoui**, F. Zaoui, H. Habib Zahmani, M. Sassi, S. Hacini, B. Boukoussa, Michael Addition of 1,3-Dicarbonyl Derivatives in the Presence of Zeolite Y as an Heterogeneous Catalyst, *J. Inorg. Organomet. Polym. Mater.* 30 (2020) 2323–2334. <https://doi.org/10.1007/s10904-019-01424-5>
- N. Benhadria, **M. Hachemaoui**, F. Zaoui, A. Mokhtar, S. Boukreris, T. Attar, L. Belarbi, B. Boukoussa, Catalytic Reduction of Methylene Blue Dye by Copper Oxide Nanoparticles, *J. Clust. Sci.* 0 (2021) 1–12. <https://doi.org/10.1007/s10876-020-01950-0>
- B. Boukoussa, A. Mokhtar, A. El Guerdaoui, **M. Hachemaoui**, H. Ouachtak, S. Abdelkrim, A.A. Addi, S. Babou, B. Boudina, A. Bengueddach, R. Hamacha, Adsorption behavior of cationic dye on mesoporous silica SBA-15 carried by calcium alginate beads: Experimental and molecular dynamics study, *J. Mol. Liq.* 333 (2021) 115976. <https://doi.org/10.1016/j.molliq.2021.115976>
- Z. Medjdoubi, **M. Hachemaoui**, B. Boukoussa, A. Hakiki, A. Bengueddach, R. Hamacha, Adsorption behavior of Janus Green B dye on Algerian diatomite, *Mater. Res. Express.* 6 (2019) 085544. <https://doi.org/10.1088/2053-1591/ab2732>
- Fadila Benali; Bouhadjar Boukoussa; Ismail Issam; Adel Mokhtar; Jibrán Iqbal Mohammed Hachemaoui; Fatima Habeche; Zakaria cherifi; Salih Hacini; Shashikant P. Patole; Mohamed Abboud
Assessment of AgNPs@Cu@Alginate Composite for Efficient Water Treatment: Effect of the Content of Cu(II) Crosslinking Agent. <https://doi.org/10.1007/s10924-023-02841-x>

- Farouk Zaoui, Bouchra Elhadj Daouadji, Mohammed Beldjilali, Mohammed Hachemaoui, Fatima Zohra Sebba, Adel Mokhtar, Bouhadjar Boukoussa
Classical and ultrasonic preparation of new dendrimer–Copper nanocomposites:
Application in the catalytic reduction, antioxidant, and antimicrobial activities
<https://doi.org/10.1002/aoc.7099>

- Fatima Habeche, Bouhadjar Boukoussa, Ismail Issam, Adel Mokhtar, Xinnan Lu, Jibril Iqbal, Fadila Benali, Salih Hacini, Mohammed Hachemaoui, Mohamed Abboud
Synthesis and application of metal nanoparticles-loaded mesoporous silica toward the reduction of organic pollutants in a simple and binary system
<https://doi.org/10.1016/j.inoche.2023.110572>

- Adel Mokhtar, Soumia Abdelkrim, Bouhadjar Boukoussa, Mohammed Hachemaoui, Amal Djelad, Mohammed Sassi, Mohamed Abboud
Elimination of toxic azo dye using a calcium alginate beads impregnated with NiO/activated carbon: Preparation, characterization and RSM optimization
<https://doi.org/10.1016/j.ijbiomac.2023.123582>

- Fatima Habeche, Bouhadjar Boukoussa, Ismail Issam, Adel Mokhtar, Xinnan Lu, Jibril Iqbal, Salih Hacini, Mohammed Hachemaoui, Abdelkader Bengueddach & Rachida Hamacha
Catalytic reduction of organic pollutants, antibacterial and antifungal activities of AgNPs@CuO nanoparticles–loaded mesoporous silica
<https://doi.org/10.1007/s11356-022-24317-6>

- **Communications:**

- 17-October 2018 Communication poster in Environmental and Industrial Risks (CRIE 2018) Skikda (ALGERIA) , Communication poster entitled. **Adsorption of a cationic dye (green Janus) by diatomite.**

- 23-October 2018 Communication poster International seminar in industrial and applied mathematics (ISIEAM 2018) skikda (ALGERIA) entitled **CO₂ capture by adsorption over mesoporous mordenite zeolite molecular sieves**

- 09-december -2018 Communication poster International “**Adsorption Behavior of Carbon Dioxide on New Nanocomposite CuO/PPB: effect of CuO content**”

- HACHEMAOUI Mohammed; BOUKOUSSA Bouhadjar; BNESAFI Boumedien; HAKIKI Aboubakar; HAMACHA Rachida 12-14 November 2019, Mesoporous silica supported amine and amine-copper complex for CO₂ adsorption: Detailed reaction mechanism of

hydrophilic character and CO₂ retention 4th international symposium on materials and Sustainable Development (IMDD 2019) Boumerdes ALGERIA

- ZAOUI Farouk; HACHEMAOUI Mohammed; MEKKI Amel; SEBTI Houari; BOUKOUSSA Bouhadjar ; SEBA Fatima zohra , **catalytic behavior of a new nanocomposite towards the reduction of organic pollutants** 16-20 May 2021, 2nd international symposium on materials chemistry (ISYMC 2021) Boumerdes ALGERIA
- HACHEMAOUI Mohammed; ZAOUI Farouk; MEKKI Amel; MOKHTAR Adel; BENSAFI Boumedien; ABDELKRIM Soumia; BKOUSSA Bouhadjar, **Composites beads based on Fe₃O₄@MCM-41 and calcium alginate for enhanced catalytic reduction of organic dyes** 16-20 May 2021 2nd international symposium on materials chemistry (ISYMC 2021) Boumerdes ALGERIA.
- HACHEMAOUI Mohammed; ZAOUI Farouk; MEKKI Amel; MOKHTAR Adel; BENSAFI Boumedien; ABDELKRIM Soumia; BKOUSSA Bouhadjar, **Dyes adsorption, antifungal and antibacterial properties of metal loaded mesoporous silica: Effect of metal and calcination treatment** 16-20 May 2021 2nd international symposium on materials chemistry (ISYMC 2021) Boumerdes ALGERIA.
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- **Mastered equipment:**
Spectrophotometer (UV-Vis), FTIR, Adsorption-desorption nitrogen, thermo gravimetry analysis High pressure liquid chromatography and DRX
- **Hobbies:**
Electronic device diagnostics, new appliance innovation
- **Scientific skill**
Mesoporous materials (MCM-41, MCM-48, SBA-15, SBA-16) , Zeolites (Omega, ZSM-5, Y,...), Metal Organic Frameworks MOFs (MIL-101, MIL-53,...) activated carbon, clays, composites (clay/polymers, clay/silica, clay/metal oxide,...), nanoparticles, polymers, catalysis, adsorption, separation.
- **Own links**
- <https://scholar.google.com/citations?user=0NQRHEsAAAAJ&hl=fr>
- <https://www.researchgate.net/profile/Mohammed-Hachemaoui-2/publications>
- <https://orcid.org/my-orcid?orcid=0000-0001-6008-9826>