

**Allegato alla domanda di partecipazione**  
**Curriculum formativo, didattico, scientifico e professionale del candidato**

**Dichiarazione sostitutiva di certificazioni**

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

**Dichiarazione sostitutiva dell'atto di notorietà**

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	D.R. n°976 del 24.06.2024
Informazioni aggiornate al	12/02/2025
Nome e Cognome	BEZZEKHAMI Mohammed Amin

**Esperienza professionale**

Periodo	Ente	Principali attività e responsabilità
2019-2021	Start of the teaching career at Department of Chemistry, Faculty of Exact Sciences and Computer Science, Abdelhamid Ibn Badis University, Mostaganem, Algeria	Practical Lab in Organic and Polymer Chemistry
2022-2024	Biology department- Faculty of Natural and Life Sciences, Abdelhamid Ibn Badis University, Mostaganem, Algeria. Medicine department- Faculty of Medicine, Abdelhamid Ibn Badis University, Mostaganem, Algeria.	Practical activities, directed in general and organic chemistry
2021	Start of the teaching career at Department of Chemistry, Faculty of Exact Sciences and Computer Science, Abdelhamid Ibn Badis University, Mostaganem, Algeria	Co-supervisor in theme: TRANSFORMATION OF CELLULOSE INTO CELLULOSE NANOCRYSTALLINE (CNCs) BY ACID CATALYSIS OF FIBERS FROM COTTON: CHARACTERIZATION AND CHEMICAL MODIFICATION
2022	Start of the teaching career at Department of Chemistry, Faculty of Exact Sciences and Computer Science, Abdelhamid Ibn Badis University, Mostaganem, Algeria	Co-supervisor in theme: Synthesis and chemical modification of Polycaprolactone

**Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)**

Data	Titolo / Principali tematiche	Ente
18/06/2023	PhD in Materials and Environmental Chemistry	University of Mostaganem, Algeria
08/07/2019	MSc in Applied Chemistry	University of Mostaganem, Algeria
15/06/2017	BSc in Fundamental Chemistry	University of Mostaganem, Algeria

**Pubblicazioni / Convegni**

1. Bessaha Fatiha et al, *Application of eco-friendly material as an inexpensive adsorbent for methyl violet dye removal: experimental, response surface methodology and statistical physics* accepted on November 2024 in the Journal of Dispersion Science and Technology.  
<https://doi.org/10.1080/01932691.2024.2432982>.

2. Hanane Aoudia, Amine Harrane, **Mohammed Amin Bezzekhami**, Lamia Bennabi, Radhouane Doucene, Somia Zaoui, and Stefano Bellucci. *Synthesis and characterization of amphiphilic PCL-PEG-PCL/Maghnitenanocomposites: a novel gel for antimicrobial and wound healing applications*. Accepted on October 2024 in the Journal of MACROMOLECULAR SCIENCE, PART A: PURE AND APPLIED CHEMISTRY <https://doi.org/10.1080/10601325.2024.2422388>.
3. **Mohammed Amin Bezzekhami**, Nacera Leila Belkhir, Somia Zaoui, Asma Nour El Houda Sid, Amina Mostefai, Amine Harrane. *Enhanced Antioxidant and Antibacterial Activity through Esterification of polycaprolactone with Oleic Acid Catalyzed by Maghnite-H<sup>+</sup>*. (Preprint) <https://doi.org/10.21203/rs.3.rs-3282261/v1>
4. Nacera Leila Belkhir, Amine Harrane, **Mohammed Amin Bezzekhami**, Mahmoud Belalia, Stefano Bellucci, Djahira Hamed. *Progress in Nanocomposites based on Starch Nanocrystal, Polycaprolactone and modified Clay: Synthesis, Characterization, Thermal and Antibacterial Properties*. accepted on 29 May 2024 in the Journal of Adhesion Science and Technology. <https://doi.org/10.1080/01694243.2024.2364818>.
5. **Mohammed Amin Bezzekhami**, Amine Harrane, Mohammed Ridha Belghit, Aicha Lazreg, Asma Nour El Houda Sid. *Facile Acid Hydrolysis of Cotton-Based Cellulose: Obtaining Cellulose Nanocrystals and Investigating Dispersion Their Properties via a Refractometric Method*. accepted on 30 March 2024 in the Journal of Macromolecular Science, Part B. <https://doi.org/10.1080/00222348.2024.2339586>
6. Asma Nour El Houda Sid, Benalia Kouini, **Mohammed Amin Bezzekhami**. *Improving the Environmental Sustainability through Efficient Recycling and Valorization of Polypropylene (PP)/Polyamide 66 (PA66)/Nanoclay Nanocomposite Blends with Recycled Polypropylene*. accepted on 07 March 2024 in the Journal of Macromolecular Science, Part B <https://doi.org/10.1080/00222348.2024.2330790>
7. Amina Mostefai, Mahmoud Belalia, Amine Harrane, Djahira Hamed, **Mohammed Amin Bezzekhami**, Louiza Belkacemi. *Hyperbranched polyglycidol grafted with rosin by a natural catalyst under ultrasound: Synthesis, characterization and antimicrobial activity*. Accepted on 16 February 2024 in the Journal of Bioactive and Compatible Polymers, <https://doi.org/10.1177/08839115241237258>
8. Nacera Leila Belkhir, **Mohammed Amin Bezzekhami**, Mahmoud Belalia, Amina Mostefai, Stefano Bellucci, Amine Harrane. *Manufacturing of Starch Nanocrystals Graft Polycaprolactone Catalyzed by Natural Clay: Synthesis, Characterizations, and Thermal and Antioxidant Properties*, accepted on 26 November 2023 in the Journal of Macromolecular Science, Part B <https://doi.org/10.1080/00222348.2023.2290319>
9. Asma Nour El Houda Sid, Benalia Kouin, **Mohammed Amin Bezzekhami** et al. *Optimization of Partially Hydrolyzed Polyacrylamide (HPAM) Utilized in Water-Based Mud While Drilling*, accepted on 27 March 2023 in the Journal of Processes. <https://doi.org/10.3390/pr11041133>
10. Asma Nour El Houda Sid, Hichem Tahraoui, Mohammed Kebir, **Mohammed Amin Bezzekhami** et al. *Comparative Investigation of the Effect of Eggshell Powder and Calcium Carbonate as Additives in Eco-Friendly Polymer Drilling Fluids*, accepted on 09 February 2023 in the Journal of Sustainability. <https://doi.org/10.3390/su15043375>
11. **Mohammed Amin Bezzekhami**, Mahmoud Belalia, Djahira Hamed, Mohamed Bououdina, Bendhiba Badredine Berfai, Amine Harrane. *Nanoarchitectonics of Starch Nanoparticles Rosin Catalyzed by Algerian Natural Montmorillonite (Maghnite-H<sup>+</sup>) for Enhanced Antimicrobial Activity*, accepted on 03 September 2022 in the Journal of Inorganic and Organometallic Polymers and Materials. <https://doi.org/10.1007/s10904-022-02490-y>
12. **Mohammed Amin Bezzekhami**, Amine Harrane, Mahmoud Belalia, Amina Mostefai, Nacera Leila Belkhir, M.Bououdina. *Green Synthesis of Starch Nanoparticles (SNPs) by Esterification with Rosin Acid Catalyzed by Maghnite-H<sup>+</sup> (Algerian Montmorillonite) with Enhanced Antioxidant Activity*, accepted 05 June 2022 in the Arabian Journal for Sciences and Engineering. <https://doi.org/10.1007/s13369-022-07033-8>

13. **Mohammed Amin Bezzekhami** , Nacera Leila Belkhir, Amine Harrane , Matteo La Pietra , Mohamed Bououdina , Stefano Bellucci, *Facile and Eco-Friendly Method of Starch Nanocrystals Esterified with Oleic Acid Using Natural Clay as a Catalyst: Synthesis, Box-Behnken Optimization, Characterization and Analysis of Thermal and Antioxidant Properties*. Accepted on 27 December in the International Journal of Biological Macromolecules.

<https://doi.org/10.1016/j.ijbiomac.2024.139295>

#### **Altre attività scientifiche**

- The 5th international conference on advanced engineering technologies with the paper entitled “ Preparation and characterisation of starch nanocrystal via acid hydrolysis”. Held on September 25-27, 2024 at Bayburt Universty in Bayburt, Türkiye
- International Conference on Engineering, Natural Sciences, and Technological Developments (ICENSTED 2024), ERDEK, TÜRKİYE on July 19-21, 2024.

Modification of Polycaprolactone through Grafting with an Aromatic Acid: Synthesis and Characterization.

- The Inaugural National Congress in Physical and Chemistry Sciences (INCPCS 2024), held on may, 07<sup>th</sup> 2024, Assia Djebbar Higher Normal School of Constantine, Algeria

Extraction and Characterization of Rosin Acid from Pine Trees: A comprehensive Study on Chemical, Physical, and Biological Properties.

- The Inaugural National Congress in Physical and Chemistry Sciences (INCPCS 2024), held on may, 07<sup>th</sup> 2024, Assia Djebbar Higher Normal School of Constantine, Algeria

Nano Clay and Its Composites: Innovating Food Packaging Solutions.

- 1<sup>st</sup> National webinar on green chemistry in environmental protection and sustainable development (WCVPEDD 23), organized on May 13, 2023 at Amar Telidji-Laghout University - Algeria.

Development of biodegradable polymers based on cellulose.

- 1<sup>st</sup> National Seminar of Process Engineering Sciences Applications and Innovations "SSGP'22" from December 14-15, 2022 at the University of Sciences and Technology Houari Boumediene Algiers, Algeria

Experimental investigation of the effect of the eggshell powder as an additive in drilling fluids.

- 22<sup>nd</sup> International Conference “Nanosciences and Nanotechnologies” at INFN Laboratori Nazionali di Frascati, Italy from December 13 to 14, 2022 in public.  
Nanoarchitectonics of Starch Nanoparticles Rosin Catalyzed by Algerian Natural Montmorillonite (Maghnite-H<sup>+</sup>) for Enhanced Antimicrobial Activity.

- 3<sup>rd</sup> International Conference on Engineering and Applied Natural Sciences on 20-23 July 2022, Konya, Turkey.  
Lipase catalyzed esterification of cellulose nano-crystals with lactic acid
- 2<sup>nd</sup> International Conference on Engineering and Applied Natural Sciences on 10-13 May in 2022 at Konya/Turkey.  
Synthesis and Application of Glycerol-grafted Nanocrystalline Starch.
- 2<sup>nd</sup> International Conference on Engineering and Applied Natural Sciences on 10-13 May in 2022 at Konya/Turkey.  
Manufacture of paint from a natural polymer.
- 2<sup>nd</sup> International Conference on Engineering and Applied Natural Sciences on 10-13 May in 2022 at Konya/Turkey.  
Extraction and application of a natural milk polymer.
- 1<sup>st</sup> International Conference on Applied Engineering and Natural Sciences on 1-3 November in 2021 at Konya/Turkey.  
TRANSFORMATION OF CELLULOSE INTO CELLULOSE NANOCRYSTALLINE (CNCs) BY ACID CATALYSIS OF FIBERS OF COTTON.
- 1<sup>st</sup> International Conference on Applied Engineering and Natural Sciences on 1-3 November in 2021 at Konya/Turkey.  
Dimerisation of  $\epsilon$ -caprolactone using montmorillonite clay as catalyst.
- National Chemical engineering study day on 03 June 2021 at Faculté des Sciences et de la Technologie Mostaganem/Algeria.  
Double modification of starch nanocrystals by cross-linking and esterification to improve their hydrophobicity.

#### **Ulteriori informazioni pertinenti Projects and Research Teams**

- Project (1 month) in collaboration with the group of Laboratori Nazionali di Frascati of the Istituto Nazionale di Fisica Nucleare in Frascati, Italy on "Nanostructures and environmental applications" in December 2022.
- Member of PRFU research project entitled: Synthesis and characterization of bio-active polymeric materials based on natural polymers since 2021.
- Research team member of the Laboratory *Structure, Elaboration et Application des Matériaux Moléculaires (S.E.A.2M.)*, University of Mostaganem, Algeria since 2019.

#### **Research proposal reviewer**

- ICE Publishing Green Materials (2023).
- BioResources (2024).
- Starch – Stärke (2024).
- ICE Publishing Bioinspired, Biomimetic and Nanobiomaterials (2024).

Luogo, data e firma