

CURRICULUM VITAE

Hamid KADDAMI

Name and Family name:	Hamid KADDAMI
Birth Date	November 12th, 1968
Affiliation:	IMED – Lab, Cadi Ayyad University - Faculty of Sciences and Techniques of Marrakech
Title:	PhD, Full Professor
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- +90 scientific papers, 6 book chapter,
 - (Co)direction of 40 Master degree, 15 PhD (defended)
 - H-index : 32 (Scopus), 34 (Google Scholar),
Scopus Author ID: 6602994486,
ORCID : <https://orcid.org/0000-0002-9511-614X>.
 - PI of many financed projects (APRD, PHC, AUF, NSF, PICS, CORUS, HASSN II Academy of Sciences and Technologies, PROTARS, Morocco-Tunisia Bilateral projects, Swedish council of Research, State department of USA)
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➤ **FIELDS OF INTEREST:**

- Polymer chemistry and physics.
 - Advanced Functional, Sustainable Polymers and Fibers: design, synthesis, processing and investigation.
 - Bioproducts, Biopolymers and Biomaterials.
 - Composites and nanocomposites.
 - Hydrogels and aerogels.
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➤ **EDUCATION AND ACADEMIC CAREER**

Since July 2003. Full Professor – Cadi Ayyad University of Marrakech
July 1999- July 2003. Habilitated Professor – Cadi Ayyad University of Marrakech
Septembre 1996 – July 1999. Assistant Professor – Cadi Ayyad University of Marrakech Research Assistant
June 1995 – June 1996. Post-Doc Position at Institute of New Materials, Saabruken – Germany
Mai 1995. PHD from INSA of Lyon – France
June 1992. DEA degree of Claude Bernard University of Lyon (France)

➤ **OTHER PROFESSIONAL APPOINTMENTS**

Jan 2024 – Jan-2025. Associate Editor for Industrial Crops and Products (Elsevier)
June 2021- June 2023. Deputy Director in charge of Pedagogical Affairs at the School of Commerce and Management of Marrakech (ENCG de Marrakech) - Cadi Ayyad University,
June 2015- now. Associate Professor at UQAT- Canada
December 2008- December 2010. Head of the Chemistry Department of the Faculty of Sciences and Techniques of Marrakech - Cadi Ayyad University,
December 2003- December 2005. Head of Education program (Maitrise) : Synthesis and Processing of

polymers,

December 1998 - December 2001 and December 2004 - December 2007. Member of the Management Committee of the Chemistry Department of the Faculty of Sciences and Techniques of Marrakech - Cadi Ayyad University,

2006. Member of the commission for the implementation of Master degree program engineering education program "Material engineering",

2005. Member of the commission for the implementation of engineering education program "Functional Material",

➤ **AWARDS, DISTINCTION :**

- Fullbright Grant for visiting professor, 2013 – Penn State University – USA (Three months June - August),
- Visiting Professor, 2007, University of Quebec in Abitibi – Temiscamingue, Canada.
- Visiting Professor, 2006, IMP, INSA-Lyon, France (Three months: Mai - July),
- Price of Innovation, Research – Development and Technology (INNOV' ACT), 4th edition 2005, organized by the association R & D – Morocco,
- Yamada Foundation Grant for Visiting Professors, 2002 – Tohoku University at Sendai, Japan (four months April - July),
- Price for best doctoral thesis from Cadi Ayyad University 2009. PhD Thesis of Abdelkader Bendahou.
- Price for best doctorat thesis from Cadi Ayyad University 2015. PhD Thesis of Karima Ben Hamou.

➤ **PROJECT GRANTS AND FUNDING (ONGOING PROJECTS):**

Funding Agency	Project acronym or reference	Budget		Role	Consortium
		Total	Shared		
APRD Multimédia CNRST/OCP (2022-2025)	Bio- Super-absorbants à base de nanocelluloses pour application en agriculture : régulation du stress hydrique				UCA-INRAE-UM6P
	BIOSAP	1 800 000,00 MAD	3 200 670,00 MAD	Coordinator / PI	
APRD Multimédia CNRST/OCP (2022-2025)	Matériaux Composites Innovants à structure multi-échelles et à base de renforts bio-sourcés – Relation Procédé/structure/propriétés				UCA – UIZ – INSA Lyon- ENSA agadir- UQAT
	MCI-SMB	1 300 000,00 MAD	3 200 670,00 MAD	Co-PI	
H2020 - LEAP-RE (The Long-term Europe Africa Partnership on Renewable Energy) (2022-2025)	Integration of photonic conversion layers based on photo emissive nanostructured materials for improving sunlight harvesting ability of solar cells				5 countries : France, Roumania, Morocco, Algeria, Egypt
	NANOsolarcells	70 000,00 EURO	1.000.000,00 EURO	Scientific Partner	

➤ **STUDENTS & POST-DOCS SUPERVISION OR CO-SUPERVISION:**

Last name and first name of the Master's student	Diploma in preparation or obtained	Start date (month and year)	End date (month and year)	Title of the research project
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<i>Abdelkader BENDAHOU</i>	<i>PhD</i>	<i>Sept 2005</i>	<i>Juin 2009</i>	<i>“New nanocomposite materials based on cellulose nanofibers and polymer : Structure-properties relationship”</i>
<i>Adil SBIAI</i>	<i>PhD</i>	<i>Sept 2005</i>	<i>Mai 2011</i>	<i>‘Epoxy matrix based composite materials loaded with date palm fibers: effect of TEMPO oxidation of the fibers’</i>
<i>Sanjay KALIDINDI</i>	<i>PhD</i>	<i>Jan 2007</i>	<i>Mai 2012</i>	<i>“ Electrical field alignment of cellulose based polymer nanocomposites”</i>
<i>Dounia BENDAHOU</i>	<i>PhD</i>	<i>Jan 2012</i>	<i>Mars 2015</i>	<i>“New nanoporous and biohybrid materials based on cellulosic and/or mineral nanoparticles : Structure/properties relationship”</i>
<i>Karima BENHAMOU</i>	<i>PhD</i>	<i>Jan 2011</i>	<i>Octobre 2015</i>	<i>“ Extraction of cellulose nanofibrils with controlled structures and properties: characterization, rheological properties and applications</i>
<i>Intan Juliana Binti Shamsudin</i>	<i>PhD</i>	<i>Jan 2013</i>	<i>Janvier 2016</i>	<i>“Investigation on the Effect of Imidazolium Ionic Liquids in Biopolymer Electrolytes for Application in Electrochemical Devices”</i>
<i>Hussein Bin Hanibah</i>	<i>PhD</i>	<i>Jan 2013</i>	<i>Mars 2016</i>	<i>“Salt-Polymer-Solvent Ternary Electrolyte System : Salt solubility and Ion Mobility of LiClO₄ in Polymer Solution</i>
<i>Amal KADIMI</i>	<i>PhD</i>	<i>Jan 2011</i>	<i>Novembre 2016</i>	<i>“ Elaboration and characterization of new nanocomposites based on cellulosic nanoreinforcements and fluorinated copolymers containing cyano derivatives with dielectric properties»</i>
<i>Abdelghani HAJLANE</i>	<i>PhD</i>	<i>Jan 2011</i>	<i>Février 2017</i>	<i>“Hierarchical cellulosic reinforcement for composites: enhanced resistance to moisture and compatibility with polymers”</i>
<i>Meriem LATIFI</i>	<i>PhD</i>	<i>Jan 2015</i>	<i>Janvier 2020</i>	<i>“ Modified chitin based membranes for high performances secondary battery application”</i>
<i>El Idrissi Nouaaman</i>	<i>PhD</i>	<i>Jan 2019</i>	<i>Dec 2023</i>	<i>“ New cobalt-based catalysts supported on nanocellulose aerogels / Structure-property relationship “</i>
<i>Aitbella Hicham</i>	<i>PhD</i>	<i>Jan 2021</i>		<i>“ Hybrid catalysts supported on nanocelluloses with controlled structure and functionality Relationship Structure / Catalytic activity“</i>
<i>Yassine Boussif</i>	<i>PhD</i>	<i>Jan 2022</i>		<i>“Investigation of new super-absorbent materials based on nanocelluloses and biopolymers”</i>
<i>Noumane Elouakassi</i>	<i>PhD</i>	<i>Jan 2023</i>		<i>“ Fluorescent organic coatings for photovoltaic cells: Synthesis and physico-chemical characterization”</i>
<i>Mohamed Bezbiz</i>	<i>PhD</i>	<i>Jan 2023</i>		<i>“ Optimization of aerogel production: innovative drying and architecture control”</i>
<i>Youssef Chaab</i>	<i>PhD</i>	<i>Jan 2023</i>		<i>“ New composite materials based on natural fibers from Biomass waste for</i>

Samir Errahali	PhD	Jan 2023	thermal insulation”
Meriem Latifi	Post-Doc	Jan 2024	“ Bio-Super-absorbents based on nanocelluloses for application in agriculture: Evaluation of performance on soil and hydroponic crops” “Investigation of new super-absorbent materials based on celluloses and pectins”

➤ COMMISSIONS OF TRUST:

○ PROJECTS EVALUATION:

- Agence Nationale de la Recherche ANR (French National Agency for Research) – 2019 and 2021,
- Agence Universitaire de la Francophonie – AUF (Agence Universitaire de la Francophonie), since 2005,

○ EXPERT:

- Expert for GTZ - PGPE program ("environmental management and protection" program) in collaboration with the Moroccan Federation of Plastics Industries. Project: "setting up a national system for the management of plastic materials and waste and a national technical reference center for the recycling and recovery of plastic waste", 2017.
- Expert for the Wilaya of Marrakech "Environmental Impact Studies Unit" for the evaluation of business creation projects in the field of the plastics industry, since 2014.

○ RECRUITMENT:

- Chairman of Recruitment Commission for an Assistant Professor (EST Essaouira-UCA)-2018,
- Member of the recruitment commission for the Director of the Center of Doctoral Studies (UCA)–2018,
- Member of the Recruitment Commission for the Dean of the FSSM–2019,
- Member of Recruitment Commission for an Assistant Professor (Faculty of sciences Semlalia - Cadi Ayyad University)-2019,
- Member of Recruitment Commission for an Assistant Professor (UM6P)-2020,
- Member of Recruitment Commission for an Assistant Professor (UM6P)-2023,
- Member of Recruitment Commission for an Associate Professor (UM6P)-2024,

○ EXAMINER DUTIES: PHD AND HABILITATION THESIS EVALUATION

- Member and President of jury of more than 30 doctoral thesis and habilitation thesis from 2000 to 2023 in Morocco and in abroad.

➤ EDITORIAL DUTIES

- Associate Editor, Industrial Crops and Products (Impact Factor: 6,5) – since 2020.
- Member of Editorial Board of Industrial Crops and Products since 2015.
- Guest Editor Activities:
 - Industrial Crops and Products. Edited by Hamid Kaddami and Abdellah Ajji. Volume 72, Pages 1-230, 2015. Special issue derived from International Conference on Bio-based Materials and Composites.
 - Special issue of the Journal of Renewable Materials, Edited by Hamid Kaddami and Alain Dufresne Volume 2, Issue 4, 1 December 2014. DOI: 10.7569/JRM.2014.634125 (Kaddami, H., Dufresne, A.; Editorial (2014) Journal of Renewable Materials, 2 (4), pp. 247-248).
 - Special issue of the Journal of Renewable Materials, December 2018 Edited by Hamid Kaddami and Bernard Cathala, Volume 6, Issue 3, 1 April 2018, DOI: 10.7569/JRM.2018.634113 (Kaddami, H., Cathala, B.; Editorial (2018) Journal of Renewable Materials, 6 (3), pp. 217-218).
 - Special issue of the Journal of Renewable Materials, December 2020 Edited by Hamid Kaddami, Sami Boufi and Alain Dufresne, http://www.techscience.com/jrm/special_detail/bmc.

➤ REVIEWING DUTIES

- **American Chemical Society:** Biomacromolecules, Macromolecules, ACS-Applied Materials and Interfaces.

- **Elsevier:** Carbohydrate Polymers, European Polymer Journal, Composites Science & Technology, Polymer Degradation and Stability, Reactive and Functional Polymers, Industrial Crops and Products,
 - **Wiley-VCH:** J. Applied Polymer Science, Macromolecular Rapid Communications, J. Polymer Science A & B, Polymer Inter., Macromolecular Materials & Engineering
 - **Springer:** Cellulose, Polymer Bulletin.
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➤ SCIENTIFIC OUPUTS:

EDITED BOOKS:

- THERMOFORMING MODELING AND SIMULATION: A MULTIPHYSICS APPROACH, Editors : Fouad Erchiqui, Hassan Khawaja, Hami Kaddami & M Moatamedi. Publisher: Elsevier. Mai 2024.

AUTHORED BOOKS:

- EXTRACTION DE NANOFIBRILLES DE CELLULOSE A STRUCTURES CONTROLEES, Karima Benhamou, Hamid Kaddami & Alain Dufresne, Editions Universitaires Européennes. ISBN : 978-3-639-48399-4, 253 pages (2016)

BOOK CHAPTERS (LAST FIVE YEARS):

- Nanocellulose from Date Palm: Production, Properties and Applications. Karima Ben Hamou, Fouad Erchiqui, Youssef Habibi & Hamid Kaddami. Chapter 4, in : Annual Plant: Sources of Fibres, Nanocellulose and Cellulosic Derivatives. Edited by Ramzi Khiari et al. (Eds) (Book Subtitle : Composites sci. and technol). ISBN:978-981-99-2472-1. Publisher: Springer Nature 2023.

PUBLICATIONS (LAST FIVE YEARS):

- Corneliu S. Stan, Noumane Elouakassi, Cristina Albu, Ania O. Conchi, Adina Coroaba, Laura E. Ursu, Marcel Popa, Hamid Kaddami and Abdemaji Almaggoussi ; Photoluminescence of Argan-Waste-Derived Carbon Nanodots Embedded in Polymer Matrices (2024) Nanomaterials, 14, 83. <https://doi.org/10.3390/nano14010083>
- Ben Hamou, K., Kaddami, H., Elisabete, F., Erchiqui, F.; Synergistic association of wood /hemp fibers reinforcements on mechanical, physical and thermal properties of polypropylene-based hybrid composites (2023) Industrial Crops and Products, 192, art. no. 116052.
- Helaili, S., Bouajila, S., Kaddami, H., Chafra, M.; Turbine Blade Made of Natural Fiber Composite Structural and Vibrational Behavior (2023) Lecture Notes in Mechanical Engineering, pp. 743-749.
- El Idrissi, N., Belachemi, L., Merle, N., Zinck, P., Kaddami, H.; Comprehensive preparation and catalytic activities of Co/TEMPO-cellulose nanocomposites: A promising green catalyst (2022) Carbohydrate Polymers, 295, art. no. 119765.
- Hammami, I., Sales, A.M.J., Benhamou, K., Arous, M., Costa, L.C., da Cruz, J.A., Kaddami, H.; Dielectric response and molecular dynamics of nanocomposites based on TEMPO-oxidized cellulose nanofibrils and polyvinyl acetate (2022) Thermal Science and Engineering Progress, 34, art. no. 101428.
- Latifi, M., Ahmad, A., Hassan, N.H., Ben youcef, H., Kaddami, H.; Towards the application of carboxymethyl chitin/ionic liquid blend as polymer electrolyte membrane for aqueous batteries (2021) Carbohydrate Polymers, 273, art. no. 118542.
- Kaddami, H., Hafs, O., Assimi, T.E.L., Boulafrrouh, L., Ablouh, E.-H., Mansori, M., Banouni, H., Bouzit, S., Erchiqui, F., Benmoussa, K., Arrakhiz, F.-E.; Implementation and characterization of a laminate hybrid composite based on palm tree and glass fibers (2021) Polymers, 13 (19), art. no. 3444.

- Sofyane, A., Ben Ayed, E., Lahcini, M., Khouloud, M., Kaddami, H., Ameduri, B., Boufi, S., Raihane, M.; Waterborne butyl methacrylate (co)polymers prepared by pickering emulsion polymerization: Insight of their use as coating materials for slow release-fertilizers (2021) *European Polymer Journal*, 156, art. no. 110598.
- Ouled Ltaief, A., Ghorbel, N., Benhamou, K., Arous, M., Kaddami, H., Kallel, A.; Impact of cellulose nanocrystals reinforcement on molecular dynamics and dielectric properties of PCL-based polyurethane (2021) *Polymer Composites*, 42 (6), pp. 2737-2750.
- Fouad, E., Baatti, A., Hamou, K.B., Kaddami, H., Souli, M., Imad, A.; Investigation on the thermoforming of pmsq-hdpe for the manufacture of a naca profile of small dimensions (2021) *Polymers*, 13 (10), art. no. 1622.
- Erchiqui, F., Annasabi, Z., Kaddami, H., Ben Hamou, K., Ngoma, G.-D.; Effect of the cooling temperature of a PET sheet on the crystallinity and mould removal time for thermoforming applications (2021) *Canadian Journal of Chemical Engineering*, 99 (3), pp. 695-707.
- Erchiqui, F., Zaafrane, K., Baatti, A., Kaddami, H., Imad, A.; Reliability of free inflation and dynamic mechanics tests on the prediction of the behavior of the polymethylsilsesquioxane-high-density polyethylene nanocomposite for thermoforming applications (2020) *Polymers*, 12 (11), art. no. 2753, pp. 1-16.
- Erchiqui, F., Kaddami, H., Dituba-Ngoma, G., Slaoui-Hasnaoui, F.; Comparative study of the use of infrared and microwave heating modes for the thermoforming of wood-plastic composite sheets (2020) *International Journal of Heat and Mass Transfer*, 158, art. no. 119996.
- Idrissi, N.E.L., Mouden, A.E.L., Kaddami, H., Belachemi, L.; Novel biohybrid aerogel composites based on cellulosic and cobalt metallic nanoparticles: Efficient and recyclable catalysts for green reduction reactions (2020) *IOP Conference Series: Materials Science and Engineering*, 827 (1), art. no. 012007.
- Erchiqui, F., Kaddami, H., Slaoui-Hasnaoui, F., Koubaa, A.; 3D finite element enthalpy method for analysis of phytosanitary treatment of wood by microwave (2020) *European Journal of Wood and Wood Products*, 78 (3), pp. 577-591.
- Hammami, I., Benhamou, K., Hammami, H., SoretoTeixeira, S., Arous, M., Kaddami, H., Graça, M.P.F., Costa, L.C.; Electrical, morphology and structural properties of biodegradable nanocomposite polyvinyl-acetate/cellulose nanocrystals (2020) *Materials Chemistry and Physics*, 240, art. no. 122182.
- Latifi, M., Ahmad, A., Hassan, N.H., Ben Youcef, H., Kaddami, H.; Carboxymethyl chitin doped 1-butyl-3-methylimidazolium chloride based solid polymer electrolyte (2020) *Materials Today: Proceedings*, 36, pp. 16-21.
- Sofyane, A., Ablouh, E., Lahcini, M., Elmeziene, A., Khouloud, M., Kaddami, H., Raihane, M.; Slow-release fertilizers based on starch acetate / glycerol / polyvinyl alcohol biocomposites for sustained nutrient release (2020) *Materials Today: Proceedings*, 36, pp. 74-81.
- Arrakhiz, F.Z., Ben Hamou, K., Erchiqui, F., Hammiche, D., Kaddami, H.; Development and characterization of hybrid composite laminate based on luffa and glass fibers (2020) *Materials Today: Proceedings*, 36, pp. 22-28.
- Hamou, K.B., Kadimi, A., Meri, R.M., Gaidukov, S., Kaddami, H., Raihane, M., Lahcini, M., Erchiqui, F.; Synergistic effect of halloysite nanotube and nanocellulose on thermal and mechanical properties of poly (Ethylmethacrylate-co-acrylonitrile) bionanocomposites (2020) *Journal of Renewable Materials*, 8 (3), pp. 301-317.
- Sadik, Z., Ablouh, E., Sadik, M., Benmoussa, K., Idrissi-Saba, H., Kaddami, H., Arrakhiz, F.Z.; Use of 2D image analysis method for measurement of short fibers orientation in polymer composites (2020) *Engineering Solid Mechanics*, 8 (3), pp. 233-244.
- Latifi, M., Ahmad, A., Kaddami, H., Hassan, N.H., Dieden, R., Habibi, Y.; Chemical modification and processing of chitin for sustainable production of biobased electrolytes (2020) *Polymers*, 12 (1), art. no. 207.

- Kadimi, A., Kaddami, H., Ounaies, Z., Habibi, Y., Dieden, R., Ameduri, B., Raihane, M.; Preparation and dielectric properties of poly(acrylonitrile-co-2,2,2-trifluoroethyl methacrylate) materials via radical emulsion copolymerization (2019) Polymer Chemistry, 10 (40), pp. 5507-5521.