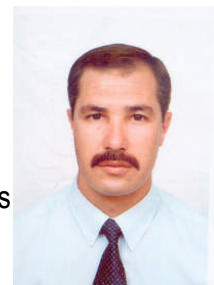


Prof. Dr. Ing. KERROUM DERBAL



Adresse 1 : National Polytechnic School of Constantine
 Department of process engineering
 Laboratory of Process engineering for sustainable development and health products
 (GPDDPS).
 Head of research group: waste, water and environment: treatment and valorization
 Ali Mendjli, 25000, Constantine- Algeria

Tel: +213 (0) 550 75 71 15
 E.mail: Derbal_kerroum@yahoo.fr

EDUCATION

National Polytechnic School of Constantine		
Department of Process Engineering		
	Professor , Environmental Engineering	July 2019
University of Constantine 3		
Faculty of Process Engineering Department of Environmental Engineering		
	HDR , Environmental Engineering Anaerobic digestion of solids waste	November 2013
Mentouri University , Constantine, Algeria. And Verona University Italy		
Faculty of Engineering Department of Industrial Chemistry		
	Ph.D. , Environmental Engineering Dissertation: Anaerobic digestion of solids waste mixed with sludge of wastewater treatment plant.	February 2009
Mentouri University , Constantine, Algeria.		
Faculty of Engineering Department of Industrial Chemistry		
	M.Sc. , Environmental Engineering Thesis: Development software for design of wastewater treatment plant under AutoCad	July 1999
Mentouri University , Constantine, Algeria.		
Faculty of Engineering Department of Industrial Chemistry		
	Engineer. , Environmental Engineering Project: Design of wastewater treatment plant with tertiary treatment	October 1996

EMPLOYMENT AND PROFESSIONAL EXPERIENCE

	<p>National Polytechnic School of Constantine, Department of Process Engineering, Constantine, Algeria.</p> <ul style="list-style-type: none"> • Full professor (July 2019 – present). • Associate professor (2014 – June 2019)
	<p>University of Constantine 3, Department of Environmental Engineering, Constantine, Algeria.</p> <ul style="list-style-type: none"> • Associate professor (February 2009-2014) • Assistant professor(July 2001- October 2009) • Part time lecturer(October 1996- June 2001)

TEACHING

<p>National Polytechnic School of Constantine Department of Process Engineering</p>	2014 - present
	<ul style="list-style-type: none"> • Water chemistry and treatment process, (2015-2019) • Wastewater treatment process, (2015-present) • Water treatment process, (2018-present) • Design of wastewater treatment process, (2016-2019) • Simulation of wastewater treatment process by GPS-X software (2016-present) • Membrane process (2019-present) • Sanitation networks and drinking water supply (2015-2018) • Inorganic chemistry (2014) • Heat transfer (2014)
<p>University, Constantine 3, Algeria, Faculty of Engineering Department of Industrial Chemistry</p>	2010 - 2014
	<ul style="list-style-type: none"> • Advanced water treatment process, (2010-2015) • Design of water treatment process, (2010-2011) • Design of wastewater treatment process, (2010-2013) • Water chemistry (LMD, graduation), (2008-2010) • Anaerobic digestion (LMD, graduation), (2008-2009) • Design with AutoCAD (LMD, graduation), (2008-2011) • Corrosion of metals (graduation), (2002-2006) • Industrial organic chemistry (graduation), (2002-2006) • Analytic chemistry (graduation), (2003-2004) • Water and wastewater treatment (graduation), (2000-2001) • Water chemistry (graduation), (2000-2001) • Water analysis (graduation), (2000-2001, 2002-2006) • Biochemistry (graduation) , (1999-2000)

Mentouri University , Constantine, Algeria, Institute of Climatic Engineering	1999 - 2000
<ul style="list-style-type: none"> • Water and wastewater treatment (graduation) 	
Mentouri University , Constantine, Algeria, Institute of Science and Technology	1996 -1998
<ul style="list-style-type: none"> • General chemistry (graduation) 	

AREAS OF INTEREST

Anaerobic environmental biotechnology, biomass and bio-energy, water chemistry, bio-coagulants, design of water and wastewater treatment process, wastewater engineering, pollution Prevention and treatment, Natural Treatment Systems, waste treatment, Modeling and simulation.

POSTE GRADUATE STUDENT SUPERVISION (PhD and Magister).

PhD student supervision

1. **BENALIA Abderrezzaq**, « Experimental study and modeling of coagulation flocculation process»
2. **MAHFOUF Esma**, « Production of bio-hydrogen by anaerobic digestion process»
3. **BOUAITA Reguia**, « Production of bio-energy from organic fraction of solid waste by anaerobic digestion process »
4. **SAYOUDSihem**, « Microbiological and physicochemical characterization of biomass and substrate during biogas production by anaerobic digestion process»
5. **BoucharebRaouf**, « water treatment by physic-chemical process: using natural bio-coagulant»

Magister student's supervision

1. **BENALIA Abderrezzaq** « Étude expérimentale et modélisation du processus de la coagulation floculation : Application aux eaux destinées à la consommation », **06/12/2015, university Constantine 3.**
2. **ABDELBAKI Ramdane** « Modélisation de la digestion anaérobie par voie sèche », **13/04/2017, University Constantine 3.**

GRADUATE STUDENT SUPERVISION

Students of Long Cycle (Engineer and Master 2)

1. Amrouci Zahra, Kebbati Aya, "Utilisation des bio-coagulants dans le traitement des eaux potables (Elimination des micro-organismes)", National Polytechnic School of Constantine, Algeria, **2020-2021. (Master).**
2. Amrouci Zahra, Kebbati Aya, "Utilisation des bio-coagulants dans le traitement des eaux potables (Elimination des métaux lourds)", National Polytechnic School of Constantine, Algeria, **2020-2021. (Engineer).**

3. BenchekhchoukhChahinez, Medadjelialmene, "Etude de la biodégradabilité des marcs de café en phase mésophile et thermophile ", National PolytechnicSchool of Constantine, Algeria, **2018-2019. (Master)**
4. BenchekhchoukhChahinez, Medadjelialmene, " Production du biogaz à partir des épiluchures d'oranges : effet de la température et de la composition", National PolytechnicSchool of Constantine, Algeria, **2018-2019. (Engineer)**
5. Menai Ahlem, Hangri, " Production de la bioénergie à partir des épiluchures de pomme de terre : effets des prétraitements par ultrason et oxydation par H₂O₂", National PolytechnicSchool of Constantine, Algeria, **2017-2018.(Master)**
6. Menai Ahlem, Hangri, " Etude expérimentale et modélisation de la co-digestion des épiluchures de pomme de terre mélangées avec déchets vert", National PolytechnicSchool of Constantine, Algeria, **2017-2018.(Engineer)**
7. Djagharsara, chaibdraawalid, " Application des coagulants naturels pour le traitement des eaux des eaux destinées à la consommation", National PolytechnicSchool of Constantine, Algeria, **2017-2018.(Master)**
8. Djagharsara, chaibdraawalid, " Traitement des rejets liquides pétroliers par bio-coagulation", National PolytechnicSchool of Constantine, Algeria, **2017-2018.(Engineer)**
9. ZekriHayet, BouaitaRokaya, "Energy efficiency of orange waste by anaerobic digestion in mesophilic phase: effect of pretreatments by ultrasound and H₂O₂", National Polytechnic School of Constantine, Algeria, **2016-2017.(Master)**
10. ZekriHayet, BouaitaRokaya, "Study of the anaerobic digestion of orange peel in thermophilic phase: Effects of ultrasound and H₂O₂ pretreatment", National Polytechnic School of Constantine, Algeria, **2016-2017. (Engineer)**
11. SehtaliBilel, CheddadIkram, "Use of Acorn as Bio-coagulant in water treatment" National Polytechnic School of Constantine, Algeria, **2016-2017.(Master)**
12. SehtaliBilel, CheddadIkram, "Physico-chemical treatments effect of Aloe Vera on water treatment by coagulation flocculation process" National Polytechnic School of Constantine, Algeria, **2016-2017.(Engineer).**
13. Boudechiche Z., "Modeling of bio-hydrogen production", Department of environmental engineering, university of Constantine 3, Algeria, **2012-2013. (Master)**
14. Djouel H., "Anaerobic digestion of dairy waste: effect of NaCl", Department of environmental engineering, university of Constantine 3, Algeria, **2012-2013. (Master)**
15. Korichi Nadia, Zerdazi Amira, "Study of biodegradability of Dairy waste", Department of industrial chemistry, Constantine, Algeria, **2011-2012.(Engineer)**
16. BrihiHouria, Boubechou Amina, "Experimental study of biodegradability of dairy waste: effect of NaCl", Department of industrial chemistry, Constantine, Algeria, **2011-2012.(Master)**
17. AouedOussama, Bouafia Sid Ali, "Modeling of anaerobic digestion process using a simple step", Department of industrial chemistry, Constantine, Algeria, **2011-2012.(Master)**
18. GuessoumHala, "Experimental study of biodegradability of agrowaste in mesophilic and thermophilic temperature", Department of industrial chemistry, Constantine, Algeria, **2010-2011. ((Engineer).**
19. GoutalMeriem, "Modeling anaerobic digestion of solids waste: effects of kinetics parameters", Department of industrial chemistry, Constantine, Algeria, **2009-2010.(Engineer).**
20. HaricheRamzi, "Modeling of simplified model for anaerobic digestion of solids waste", Department of industrial chemistry, Constantine, Algeria, **2008-2009. (Engineer).**

21. Grouche D., Othmani M. N., Sakri F., "Modeling of anaerobic digestion process in CSTR reactor without recycling", Department of industrial chemistry, Constantine, Algeria, **2004-2005. (Ingineer)**.
22. Rasi N., Boukhalfa S., Daoudi N., "water quality modeling in lac", Department of industrial chemistry, Constantine, Algeria, **2002-2003. (Ingineer)**.
23. Bounaas S., "Design of wastewater treatment plant", Department of industrial chemistry, Constantine, Algeria, **1999-2000. (Ingineer)**.

Students of Short Cycle "Diploma of Higher Education Applied"(D.E.U.A)

1. Training practices for (D.E.U.A) student, in the textile company, Constantine, Algeria, **2003-2004**.
2. Training practices for (D.E.U.A) student, in the company of production of milk and its derivatives (Auraulait), Constantine, Algeria, **2003-2004**.
3. Training practices for (D.E.U.A) student, in the company of assembly of heater for domestic use, Mila, Algeria, **2003-2004**.
4. Training practices for (D.E.U.A) student, in the Oil Company, Mila, Algeria, **2003-2004**.
5. Training practices for (D.E.U.A) student, in the company of assembly of heater for domestic use, Mila, Algeria, **2002-2003**.
6. Training practices for (D.E.U.A) student, in the textile company, Constantine, Algeria, **1999-2000**.
7. Training practices for (D.E.U.A) student, in the company of production of milk and its derivatives (Auraulait), Constantine, Algeria, **1999-2000**.
8. Training practices for (D.E.U.A) student, in the company of assembly of heater for domestic use, Mila, Algeria, 2003-2004.
9. Chetibi F., Tamene M., "determination of the various parameters influencing coagulation flocculation", in the water analysis laboratory, Constantine, Algeria, **1999-2000**.

ADMINISTRATIVE EXPERIENCE

- **Head of research group:** waste, water and environment: treatment and valorization: Laboratory of Process engineering for sustainable development and health products (GPDDPS), Ali Mendjli, 25000, Constantine, Algeria
- **President of scientific comity,** Department of process engineering, National polytechnic school of Constantine, Algeria, **2014- present**
- **Head of department,** Department of Environmental Engineering, faculty of engineering process, University Constantine 3, Algeria, **2012-2014**.
- **Associate head of department,** Department of industrial chemistry, faculty of engineering, Mentouri University, Constantine, Algeria, **2000-2001**.
- **Associate head of department,** Department of industrial chemistry, faculty of engineering, Mentouri University, Constantine, Algeria, **2002-2004**.

SHORT COURSES AND WORKSHOPS

- **Department of science and technologies, faculty of sciences, in cooperation with professor Franco Cecchi " study of anaerobic co-digestion process of solids waste and waste sludge in pilot and industrial case**, wastewater treatment plant of Treviso Italy, University of Verona, November 2006 to April 2008, (Italy).
- **Institute of Mechanical Process Engineering and Mechanics in cooperation with Prof. Dr. G. Kasper "Influence of Fibrous Filter's Sample Diameter onto Pressure Drop in a Test Ring"**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, November 2001 to July 2002, Karlsruhe, Germany.
- **German Language Course at the International Studies Centre in Heidelberg**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, May 2, to August 31, 2001, Heidelberg, Germany.
- **Training Course on Radio-analytical Methods at the Karlsruhe Research Centre**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, 10-28 September 2001, Karlsruhe, Germany.
- **DECHEMA-Seminars and Laboratory Courses in Frankfurt**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, October 22, to November 02, 2001, Frankfurt, Germany.
- **DECHEMA-Seminars and Laboratory Courses in Frankfurt**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, October 22, to November 02, 2001, Frankfurt, Germany.
- **Visits to Research Institutions and Industrial Companies**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, 2001, Germany.
- **Rhetoric and Presentation Techniques Course**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the KarlsruheUniversity, March 13, to 15, 2002, Karlsruhe, Germany.

RESEARCH PROJECT

INTERNATIONAL PROJECT

1. Head of bilateral project (Algeria-Italy), « Production of bio-energy from solids waste», for three years **(2016-2018)**

NATIONAL PROJECT

1. Head of researchproject (PRFU),Code (A16N01ES250120200002), «Amélioration de la production de la bioénergie à partir des déchets biodégradable»,for four years **(2020 -2023)**.
2. Head of research project (CNEPRU), (A16N01UN250320150001) « pre-treatment effect on the anaerobic digestion process», for four years **(2016-2019)**
3. Member in research project (CNEPRU), Code (J2501/01/04/05) « Anaerobic digestion of solid waste mixed with sludge obtained from wastewater treatment plant », for three years **(2005-2007)**
4. Member in research project (CNEPRU), Code (J01009220080170) « study of anaerobic reactor for the treatment of agro-waste», for three years **(2010-2012)**.
5. Member in research project (PNR), « treatment and valorization of dairy waste», **(2011-2013)**.

6. Member in research project (CNEPRU), « Experimental study of treatment and energetic valorization of tanning waste», (2011-2014).

LIST OF PUBLICATIONS AND COMMUNICATIONS

Publications

1. Raouf Bouchareb, **Derbal Kerroum**, Yacin Ozay, Niboucha Chahrazed, Bouti Meroua, Esma Mahfouf Bouchareb, Nadir Dizge "Application of nanotechnology in anaerobic digestion for biohydrogen production improvement from natural coagulation/flocculation sludge using metallic oxide nanoparticles", 10.1080/15567036.2022.2120931.
2. Amel Khalfaoui, Esma Mahfouf Bouchareb, **Kerroum Derbal**, Souheila Boukhaloua, Bouchra Chahbouni, Raouf Bouchareb "Uptake of Methyl Red dye from aqueous solution using activated carbons prepared from Moringa Oleifera shells", <https://doi.org/10.1016/j.clce.2022.100069>.
3. Esma Mahfouf Bouchareb, Derbal Kerroum, Rayenne bedri, Menas souha and Nadir Dizge, "Enhanced fermentative hydrogen production from potato waste by enzymatic pretreatment", <https://doi.org/10.1080/09593330.2022.2154171>
4. Bani Kheiredine, **Kerroum Derbal**, Karima Charbit, Maryem Amrani, "Biogas production by an anaerobic co-digestion process from olive mill waste: effect of ultrasonic pre-treatment", desalination and water treatment journal, vol. 246, 139-145, (2022).
5. Bouaita Rokaya, **Derbal Kerroum**, Antonio Panico, Floriana Iasimone, Ludovico Pontoni, Massimiliano Fabbicino, Francesco Pirozzi, « Methane production from anaerobic co-digestion of orange peel waste and organic fraction of municipal solid waste in batch and semi-continuous reactors», Biomass and Bioenergy (Elsevier), 160, 106421, (2022).
6. Benalia Abderrezzaq^{1,2}, **Derbal Kerroum**^{2,*}, Amel Khalfaoui¹, Antonio Pizzi³ and Ghouti Medjahdi⁴ "The Use of Aloe vera as Natural Coagulant in Algerian Drinking Water Treatment Plant", Journal of Renewable Materials, DOI: 10.32604/jrm.2022.017848, (2022).
7. Benalia Abderrezzaq, **Derbal Kerroum**, "Use of Aloe vera as an Organic Coagulant for Improving Drinking Water Quality", Water Journal, 13(15), 1-15, (2021).
8. Raouf Bouchareb, **Kerroum Derbal**, Benalia Abderrezzaq, « Optimization of active coagulant agent extraction method from Moringa Oleifera seeds for municipal wastewater treatment», Journal of water science and technology, (IWA), (2021).
9. Ouafa Achouri^a, Antonio Panico^{b,*}, Mossaab Bencheikh-Lehocine^a, Kerroum Derbal^c, Dayana Arias^d, Floriana Iasimone^e, Roberta Padulano^f, Meriem Bouteraa^a, Amel Rebahi^a, Francesco Pirozzi^g, « Role of H₂O₂ dosage on methane production from tannery wastewater: experimental and kinetic study », Journal of water process engineering (Elsevier), 43-102313, (2021).
10. A. Ouafa¹; P. Antonio²; BL. Mossaab¹; **D. Kerroum**³; R. Amel; and P. Francesco², « Alkaline pretreatment of Tannery Wastewater impact of biochemical potential tests: experimental study and kinetics modeling », Journal of biomass conversion and biorefinery (springer), 1-13, (2021).
11. Esma Mahfouf Bouchareb, **Derbal Kerroum**, Ezgi Bezirhan Arilan, Zelal Iski, Nadir Dizge, « Production of bio-hydrogen from bulgur processing industry wastewater», Energy sources, part a: recovery, utilization, and environmental effects (Taylor and francis), (2021).
12. Raouf Bouchareb, **Kerroum Derbal**, Yasin ozay, Zeynep Bilici, Nadir Dizge. « Combined natural/chemical coagulation and membrane filtration for wood processing wastewater treatment», Journal of water process engineering, vol. 27, (2020).
13. Bouaita Rokaya, **Derbal Kerroum**, Zekri Hayet, Antonio Panico, Achouri Wafa, Francesco Pirozzi, « Biogas production by an anaerobic digestion process from orange peel waste and its improvement by limonene leaching: Investigation of H₂O₂ pre-treatment effect», Energy sources, part a: recovery, utilization, and environmental effects (Taylor and francis), (2019).

14. Benalia Abderrezzaq, **Derbal Kerroum**, Use of Acorn leaves as natural coagulant in drinking water treatment plant, *Water Journal*, *Water* **2019**, 11, 57; doi:10.3390/w11010057.
15. R. Bouaita, **K. Derbal**, H. Zekri, Evaluation of ultrasonic pretreatment on anaerobic digestion of citrus orange peel waste for methane production , *Journal of New Technology and Materials* Volume 8, N° 3, Pages 76-81 (**2018**).
16. BenaliaAbderrezzaq, **DerbalKerroum**, Optimization of the Coagulation Process Used in a Water Treatment Plant Using the Response Surface Methodology (RSM), *Algerian Journal of Engineering Research*, <https://ajer.univ-constantine3.dz/wp-content/uploads/2018/08/AJER-03-05.pdf>.
17. BenaliaAbderrezzaq, **DerbalKerroum**, "Comparative study between Aluminium sulfate and Ferric Chloride", *Journal des doctorial*, <http://jdoc.sawis.org/wp-content/uploads/sites/12/2015/12/numero-01-JDOC-vf-4-9.pdf>.
18. O. Achouri¹; A. Panico²; M. Bencheikh-Lehocine¹; **K. Derbal**³; and F. Pirozzi² , « Effect of Chemical Coagulation Pretreatment on Anaerobic Digestion of Tannery Wastewater », *Journal of environmental engineering 'ASCE*. DOI: 10.1061/(ASCE)EE.1943-7870.0001235.
19. Bani.Kheiredine, **Kerroum Derbal**, Mossaab. Bencheikh-Lehocine, "Improved Anaerobic Digestion By A Thermal Pretreatment ", *Chemical Engineering transactions Journal*, Vol. 53, 518-524, (**2016**).
20. BenaliaAbderrezzaq, **DerbalKerroum**, "Comparative study between Aluminium sulfate and Ferric Chloride", *Journal des Doctoriales* N° 01, (**2015**)
21. Bani.Kheiredine, **Kerroum Derbal**, Mossaab. Bencheikh-Lehocine, "Effect of Inoculums to Substrate Ratio on Thermophilic Anaerobic Digestion of the Dairy Wastewater", *Chemical Engineering transactions Journal*, Vol. 37, 518-524, (**2014**).
22. Bani.Kheiredine, **Kerroum Derbal**, Mossaab. Bencheikh-Lehocine, "Effect of starting pH on the produced methane from dairy waste in thermophilic phase", *Chemical Engineering transactions Journal*, Vol. 38, 511-517, (**2014**)
23. **DerbalKerroum**, Bencheikh-lehocineMossaab, MeniaiAbdessalamHassen "Production of bio-energy from organic solid waste: effect of temperature and substrate composition", *Journal of Energy Research*, Vol. 38, (2), 270-276, (**2014**).
24. **DerbalKerroum**, Bencheikh-lehocineMossaab, MeniaiAbdessalamHassen "Study of biodegradability of organic fraction of municipal solid waste", *Journal of Energy Procedia*, Vol. 19, 239-248, (**2012**)
25. **DerbalKerroum**, Bencheikh-lehocineMossaab, MeniaiAbdessalamHassen "Pilot study of biogas production from organic solid waste in thermophilic phase", *Journal of Science Academy Transactions on Renewable Systems Engineering and Technology (SATRESET)*, Vol. 1, N° 3, September (**2011**).
26. **DerbalKerroum**, Bencheikh-lehocineMossaab, MeniaiAbdessalamHassen, "Use of ADM1 model to simulate the anaerobic digestion process used for sludge waste treatment in thermophilic conditions", *Turkish J. Eng. Env. Sci.*, 34, 121-129, (**2010**).
27. **K. Derbal**, M. Bencheikh-Lehocine, A-H. Meniai, D. Bolzonella, M. Zanette, C. Cavinato, "Application of IWA model to simulate the anaerobic co-digestion of organic solids waste mixed with sludge in thermophilic conditions", *Récents Progrès en Génie des Procédés*, Numéro 99, pp 392-1, 392-6, 2-910239-72-1, Ed. SFGP, Paris, France (**2009**).
28. **K. Derbal**, M. Bencheikh-Lehocine, F. Cecchi, A-H. Meniai, P. Pavan, "Application of IWA model to simulate the anaerobic co-digestion of organic solids waste mixed with sludge in mesophilic conditions", *Bioresource Technology journal*, 100, 1539-1543, (**2009**).
29. **K. Derbal**, M. Bencheikh-Lehocine, A-H. Meniai, A. Khalfaoui, "Effect of Starting pH on the Produced Methane from Dairy Wastewater in mesophilic Phase", *revue Science et Technologie section B de l'universitéMentouri de Constantine*, N° 27, Juin (**2008**).

Communications

1. Sayoud Siham, **Derbal Kerroum**, « Enhancement Of Energy Production Yield of Broad Bean by Using Spent Coffee Grounds As Co-Substrate Under Mesophilic Conditions», The First International Conference on Renewable Energy Advanced Technologies and Application(ICREATA'21) , 25-27Octobre**2021**, **Adrar, Algeria**
2. Sayoud Siham, **Derbal Kerroum**, « Energy production from anaerobic co-digestion of spent coffee grounds and activated sludge under mesophilic conditions », 1st international conference biodiversity in the service of biotechnologies,9-10 Mars **2020**, Mila, **Algeria**.
3. Benalia Abderrezzaq^{1,2}, **Derbal Kerroum**^{2,*},Amel Khalfaoui¹, «Amélioration du rendement de l'Aloe Vera comme coagulant utilisant le HCl comme activant chimique», 1st international conference biodiversity in the service of biotechnologies,9-10 Mars **2020**, Mila, **Algeria**.
4. Benalia Abderrezzaq, **Derbal Kerroum**, Khalfaoui amel, « Evaluation de la qualité des eaux potable après le traitement par Bio-coagulant », 4^{ème} congrès international de traitement des effluents liquides et préservation de l'environnement, 20-22 décembre, **2019**, Hammamet, Tunisia.
5. Benalia Abderrezzaq, **Derbal Kerroum**, Khalfaoui amel, « Traitement mécaniques, physiques et chimiques d'une plante algérienne pour leur utilisation comme coagulant organique », 4^{ème} congrès international de traitement des effluents liquides et préservation de l'environnement, 20-22 décembre, **2019**, Hammamet, Tunisia.
6. Benalia Abderrezzaq, **Derbal Kerroum**, « Dégradation de la matière organique utilisant d'Aloe Vera comme coagulant naturel», séminaire national sur les biotechnologies en Algérie : quelles biotechnologie pour un développement durable, 03-04 décembre, **2019**, Constantine, Algeria.
7. Benalia Abderrezzaq, **Derbal Kerroum**, « Comparative study between two natural coagulants: Aloe Vera and acorn », International conference on waste treatment and valorization, 26-27 November **2019**, Constantine, Algeria.
8. Bouaita Rokaya, **Derbal Kerroum**, Antonio Panico, Francesco Pirozzi, « Anaerobic Digestion of Orange Peel Waste: Preliminary Batch Results», International conference sustainable water treatment technologies and environment, November 26-27, **2019**, Constantine, Algeria.
9. Sayoud Siham, **Derbal Kerroum**, « Thermophilic anaerobic co-digestion of spent coffee grounds and broad bean in batch digester: Focusing on mixing ratios», International conference sustainable water treatment technologies and environment, November 26-27, **2019**, Constantine, Algeria.
10. Bouaita Rokaya, **Derbal Kerroum**, Antonio Panico, Francesco Pirozzi,, « Upgrading Biogas Production from Orange Peel Waste: Preliminary batch results », First international workshop on environmental engineering, November 16-17, **2019**, Setif, Algeria.
11. Sayoud Siham, **Derbal Kerroum**, « Effect of substrate to inoculum ratio on biogas production in anaerobic digestion », First international workshop on environmental engineering, November 16-17, **2019**, Setif, Algeria.
12. Sayoud Siham, **Derbal Kerroum**, « Effect of substrate to inoculum ratio on biogas production in anaerobic digestion », International conference sustainable water treatment technologies and environment, October 16-17, **2019**, Tipaza, Algeria.
13. Sayoud Siham, **Derbal Kerroum**, « Valorisation des déchets des café pour la production de l'énergie et la protection de l'environnement », Université Constantine 3, 19-20 juin 2019, Constantine, **Algeria**.
14. Benalia Abderrezzaq, **Derbal Kerroum**, Amélioration du processus d'extraction de l'agent de Coagulant (feuilles d'Acorn), 2^{ème} colloque maghrébin sur la chimie hétérocyclique, **2018**, Kairouan, Tunisia.
15. CheddadIkram, Sehtali Bilal, BenaliaAbderrezzaq, **DerbalKerroum**, "Utilisation des solvants chimiques pour l'amélioration de la qualité des eaux potable " 4^{ème} Journées du jeune chercheur « procédés innovants », 15-16 Mai**2017**, Constantine, Algérie.

16. Sehtali Bilal, Cheddad Ikram, Benalia Abderrezzaq, **Derbal Kerroum**, "Étude comparative entre coagulant organique et minérale dans le traitement des eaux potables" 4^{ème} Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
17. Bouaita Rokaya, Zekri Hayet, **Derbal Kerroum**, Achouri Wafa, Kheiredine Bani, "Production du biogaz à partir du traitement des épluchures d'oranges par digestion anaérobie en phase mésophile : effet du prétraitement par ultrason" 4^{ème} Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
18. Zekri Hayet, Bouaita Rokaia, **Derbal Kerroum**, Achouri Wafa, Kheiredine Bani, "Effet du prétraitement des épluchures d'oranges par pyroxyde d'hydrogène sur la production du biogaz par digestion anaérobie en phase mésophile" 4^{ème} Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
19. Mahfouf Esma, **Derbal Kerroum**, "Production du bio-hydrogène par fermentation anaérobie" 4^{ème} Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
20. Benalia Abderrezzaq, **Derbal Kerroum**, "Modélisation de la dose du coagulant : utilisation du logiciel MiniTab" 4^{ème} Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
21. Benalia Abderrezzaq, **Derbal Kerroum**, "Study of chemical activation of cactus: used as bio-coagulant for wastewater treatment". International conference on progress in applied science ICPAS'17, January 4-6, 2017, Istanbul, Turkey.
22. **Derbal Kerroum**, Kheiredine Bani, Bencheikh-Lehocine Mossaab, «Study of inhibiting effect of NaCl on the produced biogas from Algerian dairy waste in mesophilic conditions". International conference on progress in applied science ICPAS'17, January 4-6, 2017, Istanbul, Turkey.
23. Khalfaoui Amel, Meniai Abdeslem-Hassen, **Derbal Kerroum**, «Macroscopic study of the retention capacity of orange peel to the organic and inorganic pollutants in water". International conference on progress in applied science ICPAS'17, January 4-6, 2017, Istanbul, Turkey.
24. O. Achouri, A. Panico, M. Bencheikh-Lehocine, **K. Derbal**, F. Pirozzi, "Enhancing the bio-methane production from tannery wastewater by thermal pretreatments", Third International Conference on Energy, Materials, Applied Energetics and Pollution, October, 30-31, 2016, Constantine, Algeria.
25. M. Bouteraa, A. Panico, M. Bencheikh-Lehocine, **K. Derbal**, F. Pirozzi, "Biological denitrification of nitrate contaminated groundwater with a moving bed biofilm reactor", Third International Conference on Energy, Materials, Applied Energetics and Pollution, October, 30-31, 2016, Constantine, Algeria.
26. O. Achouri, A. Panico, M. Bencheikh-Lehocine, **K. Derbal**, F. Pirozzi, "Effect of pretreatment on anaerobic digestion of tannery wastewater", X Simposio Internazionale di Ingegneria Sanitaria Ambientale, June, 19-21, 2016, Rome, Italy.
27. B. Keireddine, **K. Derbal**, M. Bencheikh-Lehocine, "The Kinetic of Biogas Production Rate from Dairy Wastewater « Effect Inoculums to Substrate Ratio in Thermophilic Phase", International academic standards of blind peer review, July, 21-22, 2016, Istanbul, Turkey.
28. Benalia Abderrezzaq, **Derbal Kerroum**, "Élimination des différents polluants par procédé de coagulation floculation : utilisation d'un coagulant végétale (jus d'Aloe Vera).", 2^{ème} journée d'étude sur la fonderie et l'environnement "Séminaire international", 10-12 mai 2016, Annaba, Algeria.
29. Benalia Abderrezzaq, **Derbal Kerroum**, "Effet de la matière végétale sur la qualité de l'eau : application de la poudre d'Acorn". 3^{ème} journées du jeune chercheur, 8-9 Mai, 2016, Constantine, Algeria.
30. Benalia Abderrezzaq, **Derbal Kerroum**, "Valorisation et amélioration du rendement des coagulants naturels (feuilles d'Aloe Vera).", 2^{ème} séminaire national biologie et santé, 14-15 mars 2016, El Oued, Algeria.

31. BenaliaAbderrezzaq, **DerbalKerroum**, "Caractéristiques de la charge nutritive (azotée) et éléments bactériologiques pour évaluer la qualité de l'eau.", 2^{ème} séminaire national biologie et santé, 14-15 mars **2016**, ElOued, Algeria.
32. BenaliaAbderrezzaq, **DerbalKerroum**, "Application de Cactus traité par l'eau distillée sur la réduction de la turbidité et de la matière organique", 3^{ème} colloque International sur la géologie du Sahara, 09-10 décembre **2015**, Ouargla, Algeria.
33. BenaliaAbderrezzaq, **DerbalKerroum**, "Effet du biocoagulant (Cactus) sur la réduction de la turbidité et MES", 3^{ème} colloque International sur la géologie du Sahara, 09-10 décembre **2015**, Ouargla, Algeria.
34. BenaliaAbderrezzaq, **DerbalKerroum**, "Utilisation des bio-floculant (Jus de Cactus) pour le traitement des eaux destinées à la consommation", 1^{ère} Séminaire International de biologie bio-ressource et sécurité des aliments, 06-08 décembre **2015**, Bechar, Algeria.
35. BenaliaAbderrezzaq, **DerbalKerroum**, "Utilisation de Jus de Cactus Algérien comme coagulant naturel pour l'amélioration des paramètres d'eau usée: turbidité et MES", 1^{ère} Séminaire International de biologie bio-ressource et sécurité des aliments, 06-08 décembre **2015**, Bechar, Algeria.
36. BenaliaAbderrezzaq, **DerbalKerroum**, "Utilisation des bio-coagulants (poudre de Cactus) pour le traitement des eaux par coagulation floculation: réduction de la turbidité", Séminaire International des biotechnologies (SIBC), 19-21 octobre **2015**, Constantine, Algeria.
37. B.Keireddine, **K. Derbal**, M. Bencheikh-Lehocine. The Kinetic of Biogas Production Rate from dairy Wastewater in Batch Mode « Effect of Starting pH in mesophile phase ». 3rd International Conference Recent trends in Engineering and Technology (ICRET), September 2-3, **2015**, Istanbul, Turkey.
38. B.Keireddine, **K. Derbal**, M. Bencheikh-Lehocine. « Effect of Starting pH on the Produced Methane from Dairy Wastewater in mesophilic Phase » International Conference on Medical Genetics, Cellular & Molecular Biology, Pharmaceutical and Food Sciences (GCMBPF), June 5-6, **2015**, Istanbul, Turkey.
39. BenaliaAbderrezzaq, **DerbalKerroum**, " Utilisation des coagulants minéraux pour la réduction de la turbidité de l'eau par procédé physicochimique", Conférence nationale sur la science et technologies de l'environnement (CNSTE), Université de Skikda, 3-4 Juin **2015**, Skikda, Algeria.
40. BenaliaAbderrezzaq, **DerbalKerroum**, "Étude expérimentale et modélisations du processus de la coagulation floculation", 1^{ère} journées du jeune chercheur, 3-5 Mai, **2014**, Constantine, Algeria.
41. B. Keireddine, M. Bencheikh-Lehocine, **K. Derbal**, « Production Du Biogaz Par La Digestion Anaérobie Des Rejets Laitiers En Phase Mésophile » Second SOWAEUMED Workshop on Innovative Technologies for Solid Waste and Water Treatment (ITS2WAT), **2012**, Marrakech, Morocco.
42. B. Keireddine, M. Bencheikh-Lehocine, **K. Derbal**, « Effet De La Concentration Du Substrat Sur La Production Du Biogaz En Phase Thermophile », « LGCES » **juin 2012**, Université 20 Août 1955-Skikda Faculté de Technologie Laboratoire de Recherche de Génie Chimique et Environnement de Skikda, Skikda, Algérie.
43. **DerbalKerroum**, BrihiHouria, KheireddineBani, Bencheikh-LeHocineMossaab, Meniai AbdeselemHassene, "Study of inhibiting effect of NaCl on the biodegradability of dairy wastes", International Renewable Energy Congress, December 20-22, **2012**, Hammamet, Tunisia.
44. **DerbalKerroum**, GuessoumHala, Boumaza Amina, Bencheikh-LeHocineMossaab, Meniai AbdeselemHassen, "Experimental study of biodegradability of dairy waste in mesophilic conditions", International Renewable Energy Congress, December 20-22, **2012**, Hammamet, Tunisia.
45. **Derbal K.** Benmakhlouf N., Goutal A., Tabi M., Bencheikh-LeHocine M., Meniai A-H., "Modeling of Anaerobic Digestion Used for Biogas Production: Effects of Kinetics Parameter", Conference of Clean Energy Solutions for Sustainable, February 16-19, **2012**, Beirut, Lebanon.

46. **DerbalKerroum**, Bencheikh-LeHocineMossaab, MeniaiAbdesselemHassen, "Sensibility of bi-methane production to kinetics parameters constants in co-digestion process", Eurasia Waste Management Symposium, 14-16 November **2011**, Istanbul, Turkey.
47. **DerbalKerroum**, Bencheikh-LeHocineMossaab, MeniaiAbdesselemHassen, "Production of biogas from organic solid waste in thermophilic phase", Euromediterranean scientific congress on engineering (EMSCE2011), 19-20 may **2011**, Algeciras, Spain.
48. **DerbalKerroum**, Bencheikh-LeHocineMossaab, MeniaiAbdesselemHassen, "Use of IWA ADM1 Model to simulate anaerobic digestion of organic waste", Euromediterranean scientific congress on engineering (EMSCE2011), 19-20 may **2011**, Algeciras, Spain.
49. **DerbalKerroum**, Bencheikh-LeHocineMossaab, MeniaiAbdesselemHassen, "Production of biogas from solid waste: effect of temperature and substrate composition", Euromediterranean scientific congress on engineering, 19-20 may **2011**, Algeciras, Spain.
50. **DerbalKerroum**, Benmakhoulouf Nadjiba, Goutal Amina, Tabi Meriem, Bencheikh Le-hocineMossaab, MeniaiAbdessalam Hassen, "Modélisation de la digestion anaérobie : effets des constants cinétiques", V^{ème} congrès international sur les énergies renouvelable et l'environnement, November, 04-06, **2010**, Sousse, Tunisia.
51. **K. Derbal**, M. Bencheikh-Lehocine, A-H. Meniai, D. Bolzonella, M. Zanette, C. Cavinato, "Application of IWA model to simulate the anaerobic co-digestion of organic solids waste mixed with sludge in thermophilic conditions", Congrès SFGP, 14-16 Octobre **2009**, Marseille, France.
52. **K. Derbal**, M. Bencheikh Le-hocine, A-H. Meniai, D. Bolzonella, M. Zanette, C. Cavinato, "Production de biogaz à partir des déchets organiques municipaux à la phase thermophile", Congress on the Engineering of Renewable Energies, March, 19-21, **2009**, Hammamet, Tunisia.
53. **K. Derbal**, M. Bencheikh Le-hocine, A-H. Meniai, F. Cecchi, , D. Bolzonella, P. Pavan, M. Zanette, C. Cavinato, "Production of biogas from organics waste with waste activated sludge in mesophilic condition", Congress on the Engineering of Renewable Energies, March, 19-21, **2009**, Hammamet, Tunisia.
54. **K. Derbal**, M. Bencheikh-lehocine, A-H. Meniai, F. Cecchi, D. Bolzonella, M. Zanette, C. Cavinato, «Valorisation énergétique des boues de station d'épurations pour la protection de l'environnement», journée mondiale de l'environnement JME2009, 7-8 Juin **2009**, Skikda, Algérie.
55. **K. Derbal**, A. Khalfaoui, M. Bencheikh-Lehocine, A-H. Meniai, " Optimisation de l'élimination de la matière active au niveau de la station de traitement des eaux (usine de détergent chelghoum El Aïd, Algérie)", Congress on the Engineering of Renewable Energies, November, 06-08 **2006**, Hammamet, Tunisia.
56. **K. Derbal**, M. Bencheikh-Lehocine, A. Khalfaoui, A-H. Meniai, " Energetic valorization of biodegradable solid wastes", First Mediterranean Congress, Chemical Engineering for Environment, October, 04-06 2006, San Servolo Venice, Italy.
57. Khalfaoui A., Bencheikh-Lehocine M., Meniai A-H., **Derbal K.**, "Etude numérique de certains paramètres influençant la variation de la concentration de l'oxygène dissous et de la température dans une lagune naturelle", 7^{ème} Congrès National de la Société Algérienne de Chimie, 16-18 Mai **2006**, Oran, Algérie.
58. **K. Derbal**, A. Khalfaoui, M. Bencheikh-lehocine, A-H. Meniai, « Traitement biologique des déchets solides biodégradable pour la production de l'énergie et la protection de l'environnement », 3^{ème} colloque maghrébin de géophysique appliquée, 11-13 mai **2006**, Oujda, Maroc.
59. A. Khalfaoui, **K. Derbal**, M. Bencheikh-lehocine, A-H. Meniai, « Etude dynamique de certains paramètres influençant la variation de la concentration de l'oxygène dissous et de la

- température dans une lagune naturelle », 3^{ème} colloque maghrébin de géophysique appliquée, 11-13 mai **2006**, Oujda, Maroc.
60. **K. Derbal**, A. Khalfaoui, M. Bencheikh-Lehocine, A-H. Meniai, « Modélisation d'un procédé biologique de traitement des déchets solides pour la production de l'énergie et la protection de l'environnement », 3rd International Symposium on Hydrocarbons and Chemistry, 27-29 march**2006**, Ghardaia, Algérie.
 61. Khalfaoui A., **Derbal K.**, Chetibi F., Tamene M., BencheikhLehocine M., Meniai A-H., " Etude expérimentale des différents paramètres influençant la coagulation-floculation-sédimentation au niveau de la station de traitement des eaux « Oued El Euthmania », Constantine ", 3rd International Symposium on Hydrocarbons and Chemistry, 27-29 march**2006**, Ghardaia, Algérie.
 62. Khalfaoui A., **Derbal K.**, Chetibi F., Tamene M., BencheikhLehocine M., Meniai A-H., " Etude expérimentale des différents paramètres influençant la coagulation-floculation-sédimentation au niveau de la station de traitement des eaux « Oued El Euthmania », Constantine ", Séminaire National, 05-07 Décembre **2005**, Annaba, Algérie.
 63. **Derbal K.**, Outili N., Rasi N., Boukhalfa S., Daoudi N., Khalfaoui A., " Modélisation de la qualité de l'eau dans un lac ", le 1^{er} Séminaire International sur l'Environnement et ses Problèmes Connexes, 05-07 juin **2005**, Béjaia, Algérie.
 64. Khalfaoui A., BencheikhLehocine M., Meniai A-H., Derbal K., " Modélisation de la variation de la concentration de l'oxygène dissous et de la température dans un système d'épuration par lagunage ", le 1^{er} séminaire international sur l'environnement et ses problèmes connexes, 05-07 juin **2005**, Béjaia, Algérie.
 65. **Derbal K.**, Lehman M., cholmayer S., Kasper G., " l'Influence du diamètre d'un échantillon du filtre à fibre sur la chute de pression dans un anneau d'essai", 37^{ème} internationale séminaire sur la recherche et l'enseignement de génie chimique et chimie physique à l'université de karlsruhe, Juillet **2002**, Karlsruhe, Allemagne.
 66. **Derbal K.**, BencheikhLehocine M., Meniai A-H., " Développement d'un logiciel de dimensionnement de station de traitement des eaux usées sous AutoCad (StepCad2)", 4^{ème} journées scientifiques et techniques de Sonatrach, 16-19 Avril **2000**, Alger, Algérie.
 67. **Derbal K.**, BencheikhLehocine M., Meniai A-H., " Développement d'un logiciel de dimensionnement de station de traitement des eaux usées sous AutoCad (StepCad1)", 2^{ème} Journées scientifiques et techniques, 16-17 Novembre **1999**, Ouergla, Algérie.
 68. **Derbal K.**, BencheikhLehocine M., Meniai A-H., " Développement d'un logiciel de dimensionnement de station de traitement des eaux usées sous AutoCad (StepCad0)", Journées de l'eau, 5-6 Juin **1999**, Boumerdes, Algérie

CHAPTER IN BOOK

1. **Derbal K.**, Bencheikh-Lehocine M., Meniai A-H., "**Production of biogas from sludge and organic fraction of municipal solid waste**", Book: **Biogas**, ISBN 979-953-307-221-9, InTech. March **2012**.

LINGUISTICS KNOWLEDGE

- Arab the native language.
- French, write, read and speak (Good).
- German, write, read and speak (Middle).
- English, write, read and speak (Middle).
- Italian, (notions)

COMPUTERS KNOWLEDGE

- ADM1, Word, Excel, Origin, Autocad.14, AutoLisp (programming language), Works, Windows2000, PowerPoint, Fluent, Gambit, Fortran90, Matlab, GPS-X.