

## DERBAL KERROUM

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### EDUCATION

**Mentouri University**, Constantine, Algeria. And **Verona University** Italy

Faculty of Engineering

Department of Industrial Chemistry

**HDR**, Environmental Engineering

November 2013

**Ph.D.**, Environmental Engineering

February 2009

Dissertation: Anaerobic digestion of solids waste mixed with sludge of wastewater treatment plant.

**Mentouri University**, Constantine, Algeria.

Faculty of Engineering

Department of Industrial Chemistry

**M.Sc.**, Environmental Engineering

July 1999

Thesis: Development software of design for wastewater treatment plant under AutoCad.

**Mentouri University**, Constantine, Algeria.

Faculty of Engineering

Department of Industrial Chemistry

**Engineer.**, Environmental Engineering

October 1996

Project: Design of wastewater treatment plant with tertiary treatment.

### EMPLOYMENT AND PROFESSIONAL EXPERIENCE

**National Polytechnic School of Constantine**, Department of Process Engineering,  
Constantine, Algeria

► Associate professor (2014 – present)

**University of Constantine 3**, Department of Environmental Engineering, Constantine,  
Algeria.

Associate professor (February 2009 - 2014)

Reader (November 2003 - 2009)  
Permanent lecturer (July 2001- October 2003)  
Training lecturer (October 2000- June 2001)  
Contractual lecturer (Jan 2000 - September 2000)  
Assistant (October 1996- September 2000)

## TEACHING

### National Polytechnic School of Constantine

Department of Process Engineering

- Water chemistry and treatment process, **(2015-present)**
- Wastewater treatment process, **(2015-present)**
- Design of wastewater treatment process **(2016-present)**
- Simulation of wastewater treatment process by GPS-X software **(2016-present)**
- Inorganic chemistry **(2014)**
- Heat transfer **(2014)**
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**University**, Constantine 3, Algeria,

2010 - 2014

Faculty of Engineering

Department of Industrial Chemistry

- 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,

1999 - 2000

Institute of Climatic Engineering

- Water and wastewater treatment (graduation)

**Mentouri University**, Constantine, Algeria,

1996 -1998

Institute of Science and Technology

- General chemistry (graduation)

## AREAS OF INTEREST

Anaerobic Environmental Biotechnology, Biomass Energy, Wastewater Engineering, Pollution Prevention and treatment, Natural Treatment Systems, waste treatment, Modeling.

## POSTE GRADUATE STUDENT SUPERVISION (PhD and Magister)

- **BENALIA Abderrezzaq** « Experimental study and modeling of coagulation flocculation process »
- **ABDELBAKI Ramdane** « Modeling of dry anaerobic digestion process »
- **MAHFOUF Esma** « Production of bio-hydrogen by anaerobic digestion process »
- **ABABSA Abdelmadjid** « Coupling of physicochemical and biological process for wastewater treatment »
- **SAYOUD Sihem** « Microbiological and physicochemical characterization of biomass and substrate during biogas production by anaerobic digestion process »

## GRADUATE STUDENT SUPERVISION

### Students of Long Cycle (Engineer and Master 2)

- Zekri Hayet, Bouaita Rokaya, "production of biogas from orange peels: effect of pretreatment by H<sub>2</sub>O<sub>2</sub> and Ultrason", National Polytechnic School of Constantine, Algeria, **2016-2017**.
- Sehtali Bilel, Cheddad Ikram, "use of Alovera and Acornn as Biocoagulant in water treatment" National Polytechnic School of Constantine, Algeria, **2016-2017**.
- Boudechiche Z., "Modeling of bio-hydrogen production", Department of environmental engineering, university of Constantine 3, Algeria, **2012-2013**
- Djouel H., "Anaerobic digestion of dairy waste: effect of NaCl", Department of environmental engineering, university of Constantine 3, Algeria, **2012-2013**
- Korichi Nadia, Zerdazi Amira, "Study of biodegradability of Dairy waste", Department of industrial chemistry, Constantine, Algeria, **2011-2012**.
- Brihi Houria, Boubechou Amina, "Experimental study of biodegradability of dairy waste: effect of NaCl", Department of industrial chemistry, Constantine, Algeria, **2011-2012**.
- Aoued Oussama, Bouafia Sid Ali, "Modeling of anaerobic digestion process using a simple step", Department of industrial chemistry, Constantine, Algeria, **2011-2012**.
- Guessoum Hala, "Experimental study of biodegradability of agrowaste in mesophilic and thermophilic temperature", Department of industrial chemistry, Constantine, Algeria, **2010-2011**.
- Goutal Meriem, "Modeling anaerobic digestion of solids waste: effects of kinetics parameters", Department of industrial chemistry, Constantine, Algeria, **2009-2010**.
- Hariche Ramzi, "Modeling of simplified model for anaerobic digestion of solids waste", Department of industrial chemistry, Constantine, Algeria, **2008-2009**.
- 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**.
- Rasi N., Boukhalfa S., Daoudi N., "water quality modeling in lac", Department of industrial chemistry, Constantine, Algeria, **2002-2003**.

- Bounaas S., "Design of wastewater treatment plant", Department of industrial chemistry, Constantine, Algeria, **1999-2000**.

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

- Training practices for (D.E.U.A) student, in the textile company, Constantine, Algeria, 2003-2004.
- Training practices for (D.E.U.A) student, in the company of production of milk and its derivatives (Auraulait), Constantine, Algeria, 2003-2004.
- Training practices for (D.E.U.A) student, in the company of assembly of heater for domestic use, Mila, Algeria, 2003-2004.
- Training practices for (D.E.U.A) student, in the Oil Company, Mila, Algeria, 2003-2004.
- Training practices for (D.E.U.A) student, in the company of assembly of heater for domestic use, Mila, Algeria, 2002-2003.
- Training practices for (D.E.U.A) student, in the textile company, Constantine, Algeria, 1999-2000.
- Training practices for (D.E.U.A) student, in the company of production of milk and its derivatives (Auraulait), Constantine, Algeria, 1999-2000.
- Training practices for (D.E.U.A) student, in the company of assembly of heater for domestic use, Mila, Algeria, 2003-2004.
- 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 department**, Department of Environmental Engineering, faculty of engineering process, University Constantine 3, Algeria, 2012-present.
- **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 karlsruhe university, 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 karlsruhe university, May 2, to August 31, 2001, Heidelberg, Germany.

- **Training Course on Radioanalytical Methods at the Karlsruhe Research Centre**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the karlsruhe university, 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 karlsruhe university, 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 karlsruhe university, 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 karlsruhe university, 2001, Germany.
- **Rhetoric and Presentation Techniques Course**, 37th international seminar for research and teaching in chemical engineering and physical chemistry at the karlsruhe university, March 13, to 15, 2002, Karlsruhe, Germany.

## RESEARCH PROJECT

1. Head of research project (CNEPRU), « pre-treatment effect on the anaerobic digestion process», for four years **(2016-2019)**
2. Head of bilateral project (Algeria-Italy), « production of bio-energy from solids waste», for three years **(2016-2018)**
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. O. Achouri<sup>1</sup>; A. Panico<sup>2</sup>; M. Bencheikh-Lehocine<sup>1</sup>; **K. Derbal**<sup>3</sup>; and F. Pirozzi<sup>2</sup> , « Effect of Chemical Coagulation Pretreatment on Anaerobic Digestion of Tannery Wastewater », Journal of environmental engineering 'ASCE). DOI: [10.1061/\(ASCE\)EE.1943-7870.0001235](https://doi.org/10.1061/(ASCE)EE.1943-7870.0001235).
2. Bani.Kheiredine, **Kerroum Derbal**, Mossaab. Bencheikh-Lehocine, "Improved Anaerobic Digestion By A Thermal Pretreatment ", Chemical Engineering transactions Journal, Vol. 53, 518-524, **(2016)**.
3. Benalia Abderrezzaq, **Derbal Kerroum**, "Comparative study between Aluminium sulfate and Ferric Chloride", Journal des Doctoriales N° 01, **(2015)**
4. 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)**.

5. 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)
6. **Derbal Kerroum**, Bencheikh-lehocine Mossaab, Meniai Abdessalam Hassen "Production of bio-energy from organic solid waste: effect of temperature and substrate composition", Journal of Energy Research, Vol. 38, (2), 270-276, (2014)
7. **Derbal Kerroum**, Bencheikh-lehocine Mossaab, Meniai Abdessalam Hassen "Study of biodegradability of organic fraction of municipal solid waste", Journal of Energy Procedia, Vol. 19, 239-248, (2012)
8. **Derbal Kerroum**, Bencheikh-lehocine Mossaab, Meniai Abdessalam Hassen "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).
9. **Derbal Kerroum**, Bencheikh-lehocine Mossaab, Meniai Abdessalam Hassen, "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).
10. **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).
11. **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", Bioressource Technology journal, 100, 1539-1543, (2009).
12. **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'université Mentouri de Constantine, N° 27, Juin (2008).

## Communications

1. Cheddad Ikram, Sehtali Bilal, Benalia Abderrezzaq, **Derbal Kerroum**, " Utilisation des solvants chimiques pour l'amélioration de la qualité des eaux potable " 4<sup>ème</sup> Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
2. Sehtali Bilal, Cheddad Ikram, Benalia Abderrezzaq, **Derbal Kerroum**, " Étude comparative entre coagulant organique et minérale dans le traitement des eaux potable " 4<sup>ème</sup> Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
3. Bouaita Rokaia, Zekri Hayet, **Derbal Kerroum**, Achouri Wafa, Kheiredine Bani, " Production du biogaz à partir du traitement des épiluchures d'oranges par digestion anaérobie en phase mésophile : effet du prétraitement par ultrason " 4<sup>ème</sup> Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
4. Zekri Hayet, Bouaita Rokaia, **Derbal Kerroum**, Achouri Wafa, Kheiredine Bani, " Effet du prétraitement des épiluchures d'oranges par pyroxyle d'hydrogène sur la production du biogaz par digestion anaérobie en phase mésophile " 4<sup>ème</sup> Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
5. Mahfouf Esma, **Derbal Kerroum**, " Production du bio-hydrogène par fermentation anaérobie" 4<sup>ème</sup> Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie.
6. Benalia Abderrezzaq, **Derbal Kerroum**, " Modélisation de la dose du coagulant : utilisation du logiciel MiniTab " 4<sup>ème</sup> Journées du jeune chercheur « procédés innovants », 15-16 Mai 2017, Constantine, Algérie

7. 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.
8. **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.
9. 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
10. O. Achouri, A. Panico, M. Bencheikh-Lehocine, **K. Derbal**, F. Pirozzi , "Enhancing the biomethane production from tannery wastewater by thermal pretreatments", Third International Conference on Energy, Materials, Applied Energetics and Pollution, October, 30-31, **2016**, Constantine, Algeria.
11. 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
12. 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.
13. 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.
14. Benalia Abderrezzaq, **Derbal Kerroum**, " Elimination des différents polluants par procédé de coagulation floculation : utilisation d'un coagulant végétale (jus d'Aloe Vera).", 2<sup>ème</sup> journée d'étude sur la fonderie et l'environnement "Séminaire international", 10-12 mai **2016**, Annaba, Algeria.
15. Benalia Abderrezzaq, **Derbal Kerroum**, " Effet de la matière végétale sur la qualité de l'eau : application de la poudre d'Acorn". 3<sup>ème</sup> journées du jeune chercheur, 8-9 Mai, **2016**, Constantine, Algeria.
16. Benalia Abderrezzaq, **Derbal Kerroum**, " Valorisation et amélioration du rendement des coagulants naturels (feuilles d'Aloe Vera).", 2<sup>ème</sup> séminaire national biologie et santé, 14-15 mars **2016**, ElOued, Algeria.
17. Benalia Abderrezzaq, **Derbal Kerroum**, " Caractéristiques de la charge nutritive (azotée) et éléments bactériologiques pour évaluer la qualité de l'eau.", 2<sup>ème</sup> séminaire national biologie et santé, 14-15 mars **2016**, ElOued, Algeria.
18. Benalia Abderrezzaq, **Derbal Kerroum**, "Application de Cactus traité par l'eau distillée sur la réduction de la turbidité et de la matière organique", 3<sup>ème</sup> colloque International sur la géologie du Sahara, 09-10 décembre **2015**, Ouargla, Algeria.
19. Benalia Abderrezzaq, **Derbal Kerroum**, "Effet du biocoagulant (Cactus) sur la réduction de la turbidité et MES", 3<sup>ème</sup> colloque International sur la géologie du Sahara, 09-10 décembre **2015**, Ouargla, Algeria.
20. Benalia Abderrezzaq, **Derbal Kerroum**, "Utilisation des bio-floculant (Jus de Cactus) pour le traitement des eaux destinées à la consommation", 1<sup>ère</sup> Séminaire International de biologie bio-ressource et sécurité des aliments, 06-08 décembre **2015**, Bechar, Algeria.
21. Benalia Abderrezzaq, **Derbal Kerroum**, "Utilisation de Jus de Cactus Algérien comme coagulant naturel pour l'amélioration des paramètres d'eau usée: turbidité et MES", 1<sup>ère</sup> Séminaire International de biologie bio-ressource et sécurité des aliments, 06-08 décembre **2015**, Bechar, Algeria.

22. Benalia Abderrezzaq, **Derbal Kerroum**, "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.
23. 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.
24. 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.
25. Benalia Abderrezzaq, **Derbal Kerroum**, " 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.
26. Benalia Abderrezzaq, **Derbal Kerroum**, "Étude expérimentale et modélisations du processus de la coagulation floculation", 1<sup>ère</sup> journées du jeune chercheur, 3-5 Mai, **2014**, Constantine, Algeria.
27. Bani.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.
28. Bani.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.
29. **Derbal Kerroum**, Brihi Houria, Kheireddine Bani, Bencheikh-LeHocine Mossaab, Meniai Abdesselem Hassen, "Study of inhibiting effect of NaCl on the biodegradability of dairy wastes", International Renewable Energy Congress, December 20-22, **2012**, Hammamet, Tunisia.
30. **Derbal Kerroum**, Guessoum Hala, Boumaza Amina, Bencheikh-LeHocine Mossaab, Meniai Abdesselem Hassen, "Experimental study of biodegradability of dairy waste in mesophilic conditions", International Renewable Energy Congress, December 20-22, **2012**, Hammamet, Tunisia.
31. **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.
32. **Derbal Kerroum**, Bencheikh-LeHocine Mossaab, Meniai Abdesselem Hassen, "Sensibility of bio-methane production to kinetics parameters constants in co-digestion process", Eurasia Waste Management Symposium, 14-16 November **2011**, Istanbul, Turkey.
33. **Derbal Kerroum**, Bencheikh-LeHocine Mossaab, Meniai Abdesselem Hassen, "Production of biogas from organic solid waste in thermophilic phase", Euromediterranean scientific congress on engineering (EMSCE2011), 19-20 may **2011**, Algeciras, Spain.
34. **Derbal Kerroum**, Bencheikh-LeHocine Mossaab, Meniai Abdesselem Hassen, "Use of IWA ADM1 Model to simulate anaerobic digestion of organic waste", Euromediterranean scientific congress on engineering (EMSCE2011), 19-20 may **2011**, Algeciras, Spain.
35. **Derbal Kerroum**, Bencheikh-LeHocine Mossaab, Meniai Abdesselem Hassen, "Production of biogas from solid waste: effect of temperature and substrate composition", Euromediterranean scientific congress on engineering, 19-20 may **2011**, Algeciras, Spain.
36. **Derbal Kerroum**, Benmakhlouf Nadjiba, Goutal Amina, Tabi Meriem, Bencheikh Le-hocine Mossaab, Meniai Abdessalam Hassen, "Modélisation de la digestion anaérobie : effets des



- constants cinétiques”, V<sup>ème</sup> congrès international sur les énergies renouvelable et l’environnement, November, 04-06, **2010**, Sousse, Tunisia.
37. **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.
  38. **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.
  39. **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.
  40. **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.
  41. **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.
  42. **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.
  43. 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<sup>ème</sup> Congrès National de la Société Algérienne de Chimie, 16-18 Mai **2006**, Oran, Algérie.
  44. **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<sup>ème</sup> colloque maghrébin de géophysique appliquée, 11-13 mai **2006**, Oujda, Maroc.
  45. 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<sup>ème</sup> colloque maghrébin de géophysique appliquée, 11-13 mai **2006**, Oujda, Maroc.
  46. **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 », 3<sup>rd</sup> International Symposium on Hydrocarbons and Chemistry, 27-29 march **2006**, Ghardaia, Algérie.
  47. Khalfaoui A., **Derbal K.**, Chetibi F., Tamene M., Bencheikh Lehocine 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 ”, 3<sup>rd</sup> International Symposium on Hydrocarbons and Chemistry, 27-29 march **2006**, Ghardaia, Algérie.
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## 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,