

Hajar KIAI

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CURRENT POSITION

September 2016 – Present: Postdoctoral Fellow- Institute of Food Science Research (CIAL-CSIC), Madrid, Spain

EDUCATION

2015: PhD in Biochemistry and Separation processes, Faculty of Sciences and Technologies, Cadi Ayyad University, Marrakech –Morocco.

2009: Master in Biotechnology and Sustainable Development of Agro-resources, Faculty of Sciences and Technologies, Cadi Ayyad University, Marrakech –Morocco.

2007: Bachelor degree in Life Sciences – Faculty of Sciences Semlalia, Cadi Ayyad University, Marrakech – Morocco.

2004: High school diploma in Experimental Sciences, Cadi Ayyad High School, Marrakech – Morocco

RESEARCH STAYS & TRAININGS

January – July 2016: Postdoctoral Fellow- National Center for Energy Sciences and Nuclear Techniques, Rabat, Morocco

From October to December 2011: Research internship on Micellar Enhanced Ultrafiltration of table olive processing wastewaters using ionic surfactants. Karlsruhe Applied Sciences University, Karlsruhe-Germany.

From May to August 2011: Research internship on Direct Contact Membrane Distillation of table olive processing wastewaters using hollow fiber membranes prepared with different solvents. Faculty of Physical Sciences - University of Complutense, Madrid -Spain.

From May to July 2010: Research internship on Direct Contact Membrane Distillation of table olive processing wastewaters using commercial flat sheet membranes and Osmotic Membrane Distillation of olive mill wastewaters. Faculty of Physical Sciences - University of Complutense, Madrid -Spain

From August to September 2008: training at the laboratory of soil, water and plant analysis. Regional Office of Agricultural Development of Haouz, Marrakech- Morocco.

July 2007: training at the laboratory of Biotechnology and Plant Biology. Faculty of Sciences Semlalia, Marrakech- Morocco.

August 2006: training at the laboratory of Medical Microbiology. Avicenna Hospital, Marrakech- Morocco.

July 2006: training at the laboratory of Haematology and Blood Transfusion. Avicenna Hospital, Marrakech- Morocco.

SKILLS & TECHNIQUES

- Spectrophotometric analysis
- High-performance liquid chromatography- mass spectrometry
- Liquid and Solid Phase Extractions
- Pressurized Liquid Extraction
- Supercritique extraction
- Microbiology
- DNA extraction
- Polymerase chain reaction
- Electrophoresis
- DNA sequencing
- Cell culture

TEACHING EXPERIENCE

From February to June 2013: Tutorial for undergraduate students on Metabolism & Molecular Biology

From October to December 2013: Tutorial for undergraduate students on Structural Biochemistry

From September to December 2010: Tutorial for undergraduate students on orientation, organization and time management

PUBLICATIONS

❖ **PUBLISHED PAPERS :**

1. El-Abbassi, A., Saadaoui, N., **Kiai, H.**, Raiti, J., Hoinkis, J., Hafidi. 2017. Potential applications of olive mill wastewater as biopesticide for crops protection. Science of the Total Environment , 576: 10–21

2. Souilem, S., El-Abbassi, A., **Kiai, H.**, Hafidi, A., Sayadi, S., Galanakis, C.M. Olive oil production sector: environmental effects and sustainability challenges. In: Charis M. Galanakis, editors: Olive Mill Waste, Oxford: Academic Press; 2017, p. 1-28.
3. **Kiai, H.** & Hafidi, A. 2014. Chemical composition changes in four green olive cultivars during spontaneous fermentation. LWT - Food Science and Technology, 57: 663-670.
4. **Kiai, H.**, García-Payo, M. C., Hafidi, A., Khayet, M. 2014. Application of membrane distillation technology in the treatment of table olive wastewaters for phenolic compounds concentration and high quality water production. Chemical Engineering and Processing: Process Intensification, 86: 153-161.
5. El-Abbassi, A., **Kiai, H.**, Raiti, J., Hoinkis, J., Hafidi, A. 2014. Separation of natural monocyclic phenolic compounds in synthetic wastewaters using a cationic surfactant. Environmental Engineering and Management Journal. (Accepted)
6. El-Abbassi, A., **Kiai, H.**, Raiti, J., Hafidi, A. 2014. Cloud Point Extraction of Phenolic Compounds from Pretreated Olive Mill Wastewater. Journal of Environmental Chemical Engineering, 2: 1480-1486.
7. El-Abbassi, A., **Kiai, H.**, Hoinkis, J., Hafidi, A. 2014. Removal of phenolic compounds by micellar enhanced ultrafiltration using an anionic surfactant. Journal of Materials and Environmental Science, 5: 57-66.
8. El-Abbassi, A., **Kiai, H.**, Raiti, J., Hafidi, A. 2013. Application of ultrafiltration to the treatment of olive processing wastewaters. Journal of Cleaner Production, 65: 432-438.
9. El-Abbassi, A., Khayet, M., **Kiai, H.**, Hafidi, A., García-Payo, M. C. 2013. Treatment of crude olive mill wastewater by osmotic distillation and osmotic membrane distillation. Separation and Purification Technology, 104: 327–332.
10. El-Abbassi, A., **Kiai, H.**, Hafidi, A., García-Payo, M. C., Khayet, M. 2012. Treatment of olive mill wastewater by membrane distillation using polytetrafluoroethylene membranes. Separation and Purification Technology, 98: 55-61.
11. El-Abbassi, A., **Kiai, H.**, Hafidi, A., 2012. Phenolic profile and antioxidant activities of olive mill wastewater. Food Chemistry, 132: 406–412.

❖ **SUBMITTED PAPERS:**

1. **Kiai, H.**, Ait sidi brahim, M., Hafidi, A. Phenolic profile, antioxidant and antimicrobial activities of table olive brining wastewaters. Journal of Agricultural and Food chemistry
2. **Kiai, H.**, Raiti, J., Hafidi, A. Recovery of natural phenolic compounds from table olive brining wastewaters using non ionic surfactant. Water research
3. **Kiai, H.** & Hafidi, A. Chemical profiles of the olives and the brines from the Moroccan Picholine cultivar during spontaneous fermentation. Food chemistry
4. Belaqqiz, M., Tan, S.P., El-Abbassi, A., **Kiai, H.**, O'Donovan, O., McLoughlin, P., **2014.** Antioxidant and antimicrobial activities of olive processing wastewaters. Food and Chemical Toxicology

CONFERENCE PRESENTATIONS

1. **Kiai, H.**, Ait sidi brahim, M., Raiti, J., Hafidi, A. Antioxidant potential and antimicrobial activity of phenolic compounds isolated from table olive. Symposium International Olea 2014 Maroc. Novembre 11-14, 2014, Marrakech, Maroc.
2. Raiti, J., **Kiai, H.**, Hafidi, A. Evaluation de l'activité fongique des margines contre quelques phytopathogènes. Symposium International Olea 2014 Maroc. Novembre 11-14, 2014, Marrakech, Maroc.
3. **Kiai, H.** & Hafidi, A. Allelopathic potential of phenolic compounds isolated from table olive processing wastewater. 7th International Conference on Water resources in the Mediterranean Basin. October 8-11, 2014, Marrakech, Morocco.
4. Raiti, J., **Kiai, H.**, Hafidi, A., Mixed-micelles cloud point extraction of phenols compounds from table olive processing wastewaters using response surface methodology. 4^{ème} édition du congrès international: Eau, Déchets et Environnement. Décembre 18-20, 2014, Agadir, Maroc.
5. Makbal, R., **Kiai, H.**, Hafidi, A., Gadhi, C. 5^{ème} symposium international des plantes aromatiques et médicinales SIPAM 5 sous le thème de la phytochimie pour la phytothérapie. Novembre 14-16, 2013, Marrakech, Maroc.
6. **Kiai, H.**, El-Abbassi, A., Hafidi, A., García-Payo, M. C., Khayet, M. Recovery and Concentration of Polyphénols from Table Olive Processing Wastewaters by Direct Contact Membrane Distillation. Istanbul International Solid Waste, Water and Wastewater Congress. May 22-24, 2013, Istanbul, Turkey.
7. El-Abbassi, A., **Kiai, H.**, Raiti, J., Hafidi, A., García-Payo, M. C., Khayet, M.. Polyphenols Recovery from Pretreated Olive Mill Wastewaters Using Cloud Point Extraction Method. Istanbul International Solid Waste, Water And Wastewater Congress, May 22-24, 2013- Istanbul, Turkey.
8. Raiti, J., El-Abbassi, A., **Kiai, H.**, A., Hafidi, A., García-Payo, M. C., Khayet, M.. Mixed Micelles Cloud Point Extraction of Phenolic Compounds from Table Olive Wastewaters. Istanbul International Solid Waste, Water And Wastewater Congress, May 22-24, 2013- Istanbul, Turkey.
9. **Kiai, H.**, Hoinkis, J., El-Abbassi, A., Aresipathi, C., Hafidi, A., Micellar Enhanced Ultrafiltration for Phenolics Compounds Recovery from Olive table Wastewaters. 1st WATERBIOTECH International Conference. October 9-11, 2012, Cairo, Egypt.
10. El-Abbassi, A., **Kiai, H.**, Riati, J., Hafidi, A., Application of Ultrafiltration for Olive Processing Wastewaters Treatment. 1st WATERBIOTECH International Conference. October 9-11, 2012, Cairo, Egypt.
11. **Kiai, H.**, El-Abbassi, A., Raiti, J., Hafidi, A., Surfactant-based techniques for olive processing wastewaters treatment and valorization. SOWAEUMED International Workshop, Innovative Technologies for Solid Waste and Water Treatment. May 23-26, 2012, Marrakech, Morocco.

12. **Kiai, H.**, El-Abbassi, A., Hafidi, A., Treatment of olive processing wastewaters using micellar solubilization. The 1st Morocco-Japan Symposium on “Sustainable Society Through Advanced Sciences”. March 15-16, 2012, Marrakech, Morocco.
13. El-Abbassi, A., **Kiai, H.**, Hafidi, A., Antioxidant capacities of phenolic extracts from olive processing wastewaters. The 1st Morocco-Japan Symposium on “Sustainable Society Through Advanced Sciences”, Mars 15-16, 2012, Marrakech, Morocco.
14. El-Abbassi, A., **Kiai, H.**, Hafidi, A., Garcia-Payo, M.C., Khayet, M., Treatment of olive mill wastewater by osmotic distillation. 3^{ème} édition du Congrès International Eaux, Déchets et Environnement (EDE3). 21- 23 novembre 2011, Fès, Maroc.
15. El-Abbassi, A., **Kiai, H.**, Hafidi, A., Vélez-Agudelo, C., García-Payo, M.C., Khayet, M., Direct contact membrane distillation of Moroccan olive mill wastewater. International Workshop on Membrane Distillation and Related Technologies. October 9 - 12, 2011, Ravello, Italy.
16. El-Abbassi, A., **Kiai, H.**, Hafidi, A., Antioxidant capacities of phenolic extracts from residual resources. The 16th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region (MESEAP), September 24-27, 2011, Ioannina, Greece.
17. **Kiai, H.**, Hafidi, A., García-Payo, M.C., Khayet, M.. Membrane distillation for polyphénols concentration from table olive wastewaters. Network of Young Membranes 13. July 21-23, 2011, Enschede, Netherlands.
18. **Kiai, H.**, El-Abbassi, A., Hafidi, A., Comparative study on chemical changes in olives and brine during the fermentation of olives from Moroccan picholine. 3^{ème} édition du congrès international sur l’Amélioration de la Production Agricole (APA3). Mars, 17-18, 2011, Settat, Maroc.
19. El-Abbassi, A., **Kiai, H.**, Hafidi, A., Antioxidant and radical scavenging activity of bioactive compounds from agroindustrial by-products. 3^{ème} édition du congrès international sur l’Amélioration de la Production Agricole (APA3). 17-18 Mars 2011, Settat, Maroc.
20. El-Abbassi, A., **Kiai, H.**, Hafidi, A., García-Payo, M.C., Khayet, M., Treatment of olive mill wastewater by osmotic membrane distillation. Student Exchange Meeting 2011, Society of Chemical Engineers, University of Tsukuba, March 4, 2011, Tsukuba-Ibaraki, Japan.
21. El-Abbassi, A., **Kiai, H.**, Hafidi, A., Decolorization and detoxification of olive mill wastewater by ultrafiltration. The First International Seminar on Water, Energy and Environment -ISWEE11. March 01-03, 2011, Algiers, Algeria.
22. El-Abbassi, A., **Kiai, H.**, Hafidi, A., García-Payo, M.C., Khayet, M., Treatment of olive mill wastewater by osmotic membrane distillation. The First International Seminar on Water, Energy and Environment –ISWEE11- March 01-03, 2011 Algiers, Algeria.
23. **Kiai, H.**, El-Abbassi, A., Hafidi, A., Treatment of Olive Table Wastewaters by Ultrafiltration. The First International Seminar on Water, Energy and Environment – ISWEE11. March 01-03, 2011, Algiers, Algeria.

24. El-Abbassi, A., Hafidi, A., **Kiai, H.**, Khayet, M. Essalhi, M., García-Payo, M. C., Olive Mill Wastewater Treatment and Concentration by Membrane Distillation using polytetrafluoroethylene membranes. 5th International Conference on Thermal Engineering: Theory and Applications. May 10-14, 2010, Marrakech, Morocco.
25. **Kiai, H.**, Benkhalti, F., Bouamama, H. Activités allélopathique des feuilles de *Cistus salvifolius* L. Congrès international des plantes aromatiques et médicinales 2009. Ifrane, Maroc.
26. **Kiai, H.**, Benkhalti, F., H, Bouamama. Activité antioxydante des extraits de feuilles de *Cistus salvifolius* L. 4ème journées internationales d'études sur les lipides 2009. Casablanca, Maroc.

LANGUAGES

- **Arabic** : native level of competence
- **French** : advanced level of competence
- **English** : advanced level of competence
- **Spanish** : basic level of competence

REFERENCES

1-Prof. Alejandro Cifuentes
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