

## CURRICULUM VITAE

### Juan Antonio López Ramírez

Professor

Department of Environmental Engineering, University of Cadiz, UCA. Spain

CASEM, Polig. Rio San Pedro s/n. Puerto Real, Cádiz, Spain.

Tel: 34 956 016 157, E-mail: [juanantonio.lopez@uca.es](mailto:juanantonio.lopez@uca.es)

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#### Education

- Ph.D. Chemical Engineering, 1998.  
University of Cádiz, Spain
- B.Sc. Chemistry, 1986  
University of Cádiz, Spain

#### Professional Experiences

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| 1997-1999    | Professor (through Partial-Time Lecturer, Assistant Professor),<br>Department of Chemical Engineering, Food Technology and<br>Environmental Engineering, University of Cadiz, Spain. |
| 1999-2003    | Professor (through Full-Time Lecturer, Assistant Professor),<br>Department of Chemical Engineering, Food Technology and<br>Environmental Engineering, University of Cadiz, Spain.    |
| 2003-2010    | Professor (through Full-Time Associate Professor), Department<br>of Chemical Engineering, Food Technology and Environmental<br>Engineering, University of Cadiz, Spain.              |
| 2010-present | Professor (through Full-Time Associate Professor), Department<br>of Environmental Engineering, University of Cadiz, Spain.   |

#### Research Interests & Expertise

- Wastewater reuse
- Membrane technology for wastewater reclamation and drinking water treatment.
- Desalination with renewable energies.

#### Courses Development and Teaching in UCA

- Water Treatment
- Waste Treatment
- Air Treatment
- Environmental Management.

#### Guidance Experiences

- Graduates: 4 PhDs and 6 Masters Thesis
- Present Students: 5 PhD and 1 Master Students

#### Current Active Areas (Projects) of Research

##### International Projects

- Fouling resistant ceramic honeycomb nanofilters for efficient water treatment: CeraWater. FP7-NMP-2011-SMALL-5. European Union. 7<sup>th</sup> Framework Program. 2012-2015.

- Integral conception of the WTP of the XXI century. Development of technologies for the treatment and resources recovery from wastewater. CONSOLIDER. European Union. 2007-2012.

### **National Projects**

- Assessment of drinking water treatment using nanofiltration and renewable energies. Andalusian Water Agency. Regional Government of Environment. 2008-2012
- Reclaimed wastewater reuse with non-conventional technologies. Government of Innovation, Science and Company. 2010-2013.
- Study of different configurations (hollow fiber and flat sheet membranes) in MBR technology. MP Medioambiente. S.L. 2009-2012.
- Application of strategies to reduce the amount of residual sludges in purification biological systems. Regional Government of Innovation, Science and Company. 2010-2013.

### **Previous Active Areas (Projects) of Research**

- Remediation of contaminated soils by PCB's using integrated treatments: advanced chemical desorption-oxidation. Spanish Ministry of Education and Science. 2000-2004.
- Optimization of antifouling treatment in cooling waters of Andalusian Power Plants. Regional Government of Innovation, Science and Company. 2000-2004.
- Study and control of formed biofouling into titanium pipes. Application to "Los Barrios" Power Plant Condenser. Spanish Ministry of Education and Science. 2004-2008.
- Reclaimed wastewater reuse as an alternative resource: quality criteria, technical efficiency and social and economical profitability. Spanish Ministry of Education and Science. 2003-2004.
- Study of reverse osmosis use for organic control matter in surface waters for human consumption. Regional Government of Innovation, Science and Company. 2003-2004.
- Study of fouling and biofouling mechanisms on reverse osmosis membranes in urban wastewater reclamation. Regional Government of Innovation, Science and Company. 2002-2006.
- Study of fouling mechanisms on reverse osmosis membranes in seawater desalination. Regional Government of Innovation, Science and Company. 2006-2010.

### **Committee for International Symposium**

- Scientific Committee Member of 8th IWA Conference on Wastewater Reclamation and Reuse, Barcelona, 2011. Spain.
- 2nd International Conference on Golf and Environment. Málaga. Spain. 2003
- 3rd International Conference on Golf and Environment. Almería. Spain. 2006
- 4th International Conference on Golf and Environment. Marbella. Spain. 2008
- 5th International Conference on Golf and Environment. Malaga. Spain. 2009
- The International Conferences Celebrating 55 Years of Higher Education and 40 Years of Technical Higher Education Into "Vasile Alecsandri" University Of Bacau. 2016
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### **International and National Publications.**

Nieves Garcia-Vaquero Marín; Juan Antonio López Ramírez. Influence of organic fouling and operating conditions on nanofiltration membranes to reduce phenol concentration in natural

waters. *Water Science & Technology: Water Supply*. 11 - 4, pp. 473 - 480. 2011.

Chon, Kangmin ; Sarp-sarp, Sarper; Lee-lee, Sungyun ; Lopez-ramirez, Juan Antonio; Cho, Jaeweon. Evaluation of a membrane bioreactor and nanofiltration for municipal wastewater reclamation: trace contaminant control and fouling mitigation. *Desalination*. 211 - 1-3 ,pp. 128 - 134. 2011.

José María Quiroga Alonso; Juan Antonio López Ramírez; Santiago Gutierrez Ruiz; Mohamed Hassani Zerrouk. Estudio de la precipitación de sulfato y carbonato cálcico sobre membranas de ósmosis inversa en agua de mar. *Tecnoambiente*. 40 - 45. 2009.

José María Quiroga Alonso; Juan Antonio López Ramírez; Santiago Gutierrez Ruiz; Mohamed Hassani Zerrouk. Estudio de ensuciamiento de membranas de ósmosis Inversa por coloides. Estudio de la interacción de la superficie de las membranas y las partículas coloidales. *Tecnología del agua*. pp. 32 - 41. 2009.

Juan Antonio López Ramírez; Nieves Garcia-Vaquero Marín. Proyecto ETAP-ERN: evaluación del tratamiento del agua potable mediante energía renovable y nanofiltración. *Tecnología del agua*. pp. 50 - 53. 2009.

José María Quiroga Alonso; Juan Antonio López Ramírez; Santiago Gutierrez Ruiz; Mohamed Hassani Zerrouk. Estudio del ensuciamiento de membranas de ósmosis Inversa por coloides. *Industria Farmacéutica*. 151, pp. 104 - 114. 2009.

Juan Antonio López Ramírez. Aguas regeneradas y campos de golf: un binomio Compatible y sostenible. *Revista Española de Greenkeepers*. 27, pp. 18 - 24. 2008.

Juan Antonio López Ramírez; María Dolores Coello Oviedo; José María Quiroga Alonso. Comparative studies of reverse osmosis membranes for wastewater reclamation. *Desalination* 191 - 1-3, pp. 137 - 147. 2006.

Mohamed Hassani Zerrouk; José María Quiroga Alonso; Juan Antonio López Ramírez. Optimización de secuencias de lavado de membrana de ósmosis inversa. *Tecnología del agua*. 259, pp. 36 - 47. 2005.

María Dolores Coello Oviedo; Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Influence of linear alkylbenzene sulphonates (LAS) on microbial activity of activated sludge. *Chem. Biochem. Eng.* q.18 - 4, pp. 409 - 415. 2004.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Influencia del nivel de pretratamiento de un efluente secundario sobre las membranas de una unidad de ósmosis inversa. Calidad del permeado y costes del proceso. *Ing. agua*. 11 - 1, pp. 53 - 64. 2004.

Juan Antonio López Ramírez; José María Quiroga Alonso; Manuel Carrasco Vega. Primera planta piloto española para la reutilización del agua residual urbana mediante osmosis inversa. *Guía de buenas prácticas*. pp. 102 - 106. 2004.

Juan Antonio López Ramírez; Manuel Carrasco Vega; José María Quiroga Alonso; Tania Forster Carneiro. Planta piloto para la reutilización de efluentes secundarios mediante ósmosis inversa. *Hidropres*. 43, pp. 22 - 25. 2004.

Manuel Carrasco Vega; Juan Antonio López Ramírez; Javier Benavente González; Francisco López Aguayo; Diego Sales Márquez. Assessment of urban and industrial contamination levels in the bay of Cadiz, SW Spain. *Mar. Pollut. Bull.* 46 - 3, pp. 335 - 345. 2003.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Pre-treatment optimisation studies for secondary effluent reclamation with reverse osmosis. *Water Res.* 37 - 5, pp. 1177 - 1184. 2003.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso; Takashi Asano. Aspectos básicos de la aplicación de la ósmosis inversa a la reutilización potable indirecta. *Tecnología del agua.* 23 - 233, pp. 58 - 65. 2003.

José Francisco Casanueva González; Jezabel Sánchez Oneto; José Luis García Morales; Txomin Casanueva Robles; Juan Antonio López Ramírez; Juan Ramon Portela Miguelez; Enrique Nebot Sanz; Diego Sales Márquez. Portable pilot plant for evaluating marine biofouling growth and control in heat exchangers-condensers. *Water sci. technol.* 47 - 5, pp. 99 - 104. 2003.

María Dolores Coello Oviedo; Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Evolution of an activated sludge system under starvation conditions. *Chem. Eng. J.* 94 - 2, pp. 139 - 146. 2003.

María Dolores Coello Oviedo; Jesús Barragán Sánchez; Juan Antonio López Ramírez; José María Quiroga Alonso. Análisis respirométrico de la toxicidad de residuos. *Tecnoambiente.* 129, pp. 9 - 12. 2003.

María Dolores Coello Oviedo; Juan Antonio López Ramírez; Rosa Rodríguez Cano; Diego Sales Márquez; José María Quiroga Alonso. Utilization of enzymatic measurements for the control of microbial activity in an activated sludge system. *chemical industry and environment.* pp. - - - . 2003.

María Dolores Coello Oviedo; Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Control of rbc system by activity microbial Measurement. *Chemical Industry and Environment.* pp. 157 - 163. 2003.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Comparison studies of feedwater pre-treatment in a reverse osmosis pilot Plant. *Desalination.* 144 - 1-3 , pp. 347 - 352. 2002.

Juan Antonio López Ramírez; Manuel Carrasco Vega; Diego Sales Márquez; José María Quiroga Alonso. Comparación del funcionamiento de membranas de ósmosis inversa de poliamida aromática y acetato de celulosa en la regeneración de efluentes secundarios. *Tecnología del agua.* 22 - 227, pp. 32 - 40. 2002.

Juan Antonio López Ramírez. Aguas residuales regeneradas, campos de golf y desarrollo sostenible. *Tecnoambiente.* 12 - 121, pp. 25 - 31. 2002.

Juan Antonio López Ramírez; José María Quiroga Alonso; Diego Sales Márquez; Asano, Takashi. Indirect potable reuse and reverse osmosis: challenging the course to "new water". *Water* 21. pp. 56 - 59. 2002.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Optimización de tratamientos físico-químicos. *Ensayos de laboratorio. Ing. Quím.* 32 - 365, pp. 151 - 156. 2000.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Uso de la ósmosis inversa para la regeneración de aguas residuales urbanas. *Optimización del tratamiento. Ing. Agua.* 7 - 2, pp. 147 - 154. 2000.

Juan Antonio López Ramírez; Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso; José María Quiroga Alonso. Regeneración de aguas residuales urbanas con tecnologías de membranas. *Ibérica.* pp. 296 - 299. 1999.

Juan Antonio López Ramírez; Diego Sales Márquez; José María Quiroga Alonso. Regeneración de aguas residuales urbanas en una planta piloto mediante tratamientos terciarios. Tecnología del agua. 193, pp. 93 - 101. 1999.