

DATOS DE IDENTIFICACIÓN Y CONTACTO

APELLIDOS: SOLERA DEL RIO

NOMBRE: ROSARIO

TELÉFONO DE CONTACTO: EXT.6995

CORREO ELECTRÓNICO:
rosario.solera@uca.es

CATEGORÍA LABORAL:

Catedrática de Universidad

FORMACIÓN
ACADÉMICA

Lda en Ciencias Biológicas; Doctora Ingeniera Química

INSTITUCIÓN Universidad de Cádiz

EXPERIENCIA DOCENTE

FECHA DE ANTIGÜEDAD EN LA INSTITUCIÓN: 27 años

TITULACIONES EN LAS QUE HA IMPARTIDO
DOCENCIA EN LA UCA: Ingeniería Técnica Industrial
especialidad en Química industrial,
Ingeniería en Obras Públicas, especialidad en
Construcciones Civiles.
Ingeniería Industrial. Licenciaturas: Química,
Ciencias del Mar, Ciencias
Ambientales, Enología. Grado en Ciencias
Ambientales. Máster: Gestión
Integral del Agua; Agroalimentación; Viticultura en
Climas Cálidos

Nº DE QUINQUENIOS: 5

ACREDITACIÓN POR AGENCIAS DE CALIDAD:-
ANECA

EXPERIENCIA INVESTIGADORA

LÍNEAS DE INVESTIGACIÓN:

Grupo Tecnología del Medio Ambiente (TEP-181). Tratamiento biológico de aguas residuales de alta carga orgánica, de residuos y lodos

RESULTADOS RELEVANTES: (Proyectos de investigación, publicaciones, aportaciones en congresos, etc.)

Proyectos (2014-2019)

“Coproducción de hidrógeno y metano mediante codigestión anaerobia de biosólidos y vinazas de vino”. Ministerio de Economía y Competitividad. Retos de la Sociedad. CTM2015-64810-R 2016-2020. €166.000,00- Montserrat Perez Garcia and Rosario Solera del Rio.

“REcovery and REcycling of nutrients TURNing wasteWATER into added-value products for a circular economy in agriculture”- Water2Return”. EUROPEAN COMMISSION.H2020-IND-CE-2016-17/H2020-CIRC-2016. 2017-2020. 7.129.123 €. UCA: Montserrat Perez Garcia and Rosario Solera del Rio. Número de investigadores/as: 2 Fecha de inicio: 17/01/2017 Duración del proyecto: 1095 días.

“Comprehensive valorization of solid urban waste and byproducts of biofuel production”. MINECO.PLAN NACIONAL DE I+D+i CTM2012-35654). 2012-2015.166.000,00 €. Diego Sales and Rosario Solera del Río.

Publicaciones (2014-2019)

1. AUTHORS: Montañez, R.; Solera, R.; Perez, M.

TITLE: Performance of up-flow anaerobic fixed bed reactor of the treatment of sugar beet pulplixiviation in a thermophilic range.

PAPER/BOOKBioresource Technology 154 (2014) 305-312.

2. AUTHORS: Rivero, M.; Solera, R.; Perez, M.

TITLE: Anaerobic mesophilic co-digestion of sewage sludge with glycerol: Enhanced biohydrogen production

PAPER/BOOKInternational Journal of Hydrogen Energy , (2014) Vol. 39, Issue 6, 2481-2488

3. AUTHORS: Montañez, R.; Solera, R.; Perez, M.

TITLE: Anaerobic mesophilic co-digestion of sewage sludge and sugar beet pulp lixiviation in batch reactors: Effect of pH control

PAPER/BOOK: Chem. Eng. Journal. 255 (2014) 492-499

4. AUTHORS: Montañez, R.; Solera, R.; Perez, M.

TITLE: Anaerobic co-digestion of sewage sludge and sugar beet pulp lixiviation in batch reactors: Effect of temperature.

PAPER/BOOKBioresource Technology olume 180 (2015), Pages 177-184

5. AUTHORS: Zahedi, S.; Solera, R.; Micolucci, F.; Cavinato, C.; Bolzonella, D.

TITLE: Changes in microbial community during hydrogen and methane production in two-stage thermophilic anaerobic co-digestion process from biowaste

PAPER/BOOKWaste Managment. 49 (2016) 40-46

6. AUTHORS: S. Zahedi, R. Solera, J.L. García-Morales, D. Sales.

TITLE: Effect of the addition of glycerol on hydrogen production from industrial municipal solid waste

PAPER/BOOKFuel, 180 (2016) 343-347

7. AUTHORS: Rocío Montañés Alonso, Rosario Solera del Río, Montserrat Pérez García.

TITLE: Thermophilic and mesophilic temperature phase anaerobic co-digestion (TPAcD) compared with single-stage co-digestion of sewage sludge and sugar beet pulp lixiviation

PAPER/BOOKBiomass & Bioenergy, 93 (2016) 107-115

8. AUTHORS: Hajer Ennouri, Baligh Miladi, Soraya Zahedi, Luis Alberto Fernández Güelfo Rosario Solera, Moktar Hamdi, Hassib Bouallagui.

TITLE: Effect of thermal pretreatment on the biogas production and microbial communities balance during anaerobic digestion of urban and industrial waste activated sludge
PAPER/BOOK: *Bioresource Technology*, 214 (2016) 184-191.

9. AUTHORS: S. Zahedi, D. Sales, J.L. García-Morales, R. Solera.

TITLE: Bioenergy generation from municipal solid waste and glycerin
PAPER/BOOK: *Energy fuels*, 31 (2017) 9550-9556

10. AUTHORS: S. Zahedi, R. Solera, J.L. García-Morales, H. Ennouri, D. Sales

TITLE: Evaluation of the effect of glycerol supplementation on the anaerobic digestion of real municipal solid waste in batch mode
PAPER/BOOK: *Fuel*, 193 (2017) 15-21

11. AUTHORS: S. Zahedi, M. Rivero, R. Solera, M. Pérez

TITLE: Seeking to enhance the bioenergy of municipal sludge: Effect of alkali pre-treatment and soluble organic matter supplementation
PAPER/BOOK: *Waste Management*, 68 (2017) 398-404

12. AUTHORS: S. Zahedi, D. Sales, J.L. García-Morales, R. Solera.

TITLE: Obtaining green energy from dry-thermophilic anaerobic co-digestion of municipal solid waste and biodiesel waste
PAPER/BOOK: *Biosystem Engineering*, 170 (2018) 108-116

13. AUTHORS: S. Zahedi, M. Rivero, R. Solera, M. Pérez

TITLE: Mesophilic anaerobic co-digestion of sewage sludge with glycerine: effect of solid retention time
PAPER/BOOK: *Fuel* 215 (2018) 285-289.

14. AUTHORS: S. Zahedi, S.O. Dahunsi, M. Pérez, R. Solera.

TITLE: Assessment of Chemical Inhibitor Addition to Improve the Gas Production from Biowaste
PAPER/BOOK: *Waste and Biomass Valorization*, Volume 10 (5), (2019) 1091-1099.

15. AUTHORS: C. Agabo-García, M. Pérez, B. Rodríguez-Morgado, J. Parrado, R. Solera.

TITLE: Biomethane production improvement by enzymatic pre-treatments and enhancers of sewage sludge anaerobic digestion
PAPER/BOOK: *Fuel* 255 (2019) 115713.

16. AUTHORS: M. Tena, M. Pérez, R. Solera

TITLE: Effects of several inocula on the biochemical hydrogen potential of sludge-vinasse co-digestion
PAPER/BOOK: *Fuel* 285 (2019) 116180.

17. C. Agabo-García, V. Morales, M. Perez, R. Solera, IMPROVEMENT OF BIOMETHANE POTENTIAL OF SEWAGE SLUDGE ANAEROBIC CO-DIGESTION BY ADDITION OF "SHERRY-WINE" DISTILLERY WASTEWATER, *Journal of Cleaner Production*. DOI: <https://doi.org/10.1016/j.jclepro.2019.119667>

N° DE SEXENIOS: 3 (31-12-2014)

ORCID

0000-0003-4476-5120

INFORMACIÓN ADICIONAL

CONTRATOS

Technical follow-up and scientific advice on the operation of the slurry treatment facilities of the company GUASCOR SEVICIOS in Hornillos de Eresma and Turégano (Castilla y León), Altorricón (Aragón), Alcarrás, Santa María de Corco and Masies de Voltregá (Catalonia). 01/04 / 2007- 01/04/2008.

Valuation of waste from the Jerez region by thermophilic anaerobic digestion. Institute of Promotion and Development of the City of Jerez. City Council of Jerez. 2007-2008.

Diagnosis of the situation of the refrigeration circuit of the ctlb regarding fouling by macrofouling Los Barrios Thermal Power Plant. ENDESA. 2007-2008.

Energy recovery of olive processing by-products: optimization of the joint biomethanization process with WWTP sludge Duration: 15/07/14 a 15/09/2015

Amount: 43752.31 +IVA€. Number of researchers: 8 Principal Investigator: Prof. Dr. D. José Luis García Morales

PATENTES

Researcher (p.o. of signature): Montero Cordón, B .; Solera del Río, R .; García-Morales, J.L Romero García, L.I .; Sales Márquez, D.

TITLE: Procedure for conditioning high-solids samples for quantification

APPLICATION NO .: P200600276

CREACIÓN DE EMPRESA DE BASE TECNOLÓGICA

DENOMINATION / SOCIAL REASON: BIOVALORA, S.L. NIF / CIF B72140866

CONSTITUTION DATE: 04/23/2009

ADDRESS: AVDA. ILLUSTRATION, EDIF. ASTARTÉ, Nº 6 - PLANT 3, 11011-CÁDIZ

INCENTIVES GRANTED: CAMPUS INCENTIVE

INNOVATION AND DEVELOPMENT AGENCY OF ANDALUCÍA IDEA- INNOVATION, SCIENCE AND ENTERPRISE COUNSELING. PARTICIPATORY LOAN OF € 142,405.80.

PREMIOS

Premio a la transferencia tecnológica (PTT) (3)

II Call for ideas and Projects of a Technology-Based or Cultural / Creative Company atrÉBT! ® (2008 Edition). PARTICIPANT: GRUPO PROMOTOR DE LA EBT BIOVALORA, S.L. ENTITY: Vice-Rector for Research, Technological Development and Innovation - O.T.R.I. from the University of Cádiz and Andalusia Innovation and Development Agency (IDEA).

Premio CÁTEDRA FUNDACIÓN CEPESA 2019

PARTICIPACIÓN EN SOCIEDADES Y REDES DE INVESTIGACIÓN

- Member of the European Federation of Biotechnology (Section of Environmental Biotechnology): 2002-NEWS
 - Member of the Spanish Society of Microbiology (SEM): 2006-present
 - Member of the Spanish Composting Network (REC): 2008-present
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