



TECGREMED MEMBER CV

Family Name	RODRIGO-ILARRI
Name	JAVIER
Institution	UNIVERSITAT POLITÈCNICA DE VALÈNCIA (UPV)
Position	ASSOCIATE PROFESSOR
Mother Language	SPANISH
English (A1, A2, B1, B2, C1, C2)	C2

EDUCATION – WORK EXPERIENCE

Javier Rodrigo-Ilarri graduated as Civil engineer on 1997 on Universitat Politècnica de València (UPV). His doctoral thesis on flow modeling and mass transport in fractured media was awarded the UPV extraordinary doctorate prize in 2005.

Between 1998 and 1999 he held the position of Environmental Quality Engineer at the Waste and Pollution Service of the Department of the Environment of the Valencian Regional Administration. Since 2000 he is Associate Professor at the Hydraulic and Environmental Engineering Department of the UPV. In 2008, he was guest researcher at the Geothermal Group of the Center for Applied Geoscience of the Eberhard-Karls University of Tübingen (Germany), where he developed the application of geostatistical simulation techniques to surface geothermal problems. In 2012, he held the position of technical director of the Metropolitan Entity for Waste Treatment (EMTRE), being the highest technical manager of the management facilities (treatment, recovery and disposal) of urban solid waste in the metropolitan area of Valencia.

His main research lines focus on different fields of environmental engineering: groundwater pollution, environmental impact assessment, solid waste management and contaminated soils. In these areas, till January 2025 he has participated as a researcher in 46 research projects subsidized in public calls, 16 research contracts with companies and/or administrations, has published 57 research publications, and has presented 120 contributions to international conferences. He has supervised 5 doctoral theses and 88 Bachelor and Master Thesis.

Since its foundation in 2002, he is member of the Hydrogeology Research Group of the Institute of Water and Environmental Engineering (IIAMA-UPV). Since June 2021 he is Secretary and Deputy Director of the IIAMA. Since February 2025 he is the Head of the Hydraulic and Environmental Engineering Department of UPV.

PUBLICATIONS related the project topic

1. Salikova, Natalya S.; Kerimkulova, Almagul R.; Rodrigo-Ilarri, Javier; Alimova, Kulyash K.; Rodrigo-Clavero, María-Elena; Kapbassova, Gulzhanat A.. (2024) Sorption-Based Removal Techniques for Microplastic Contamination of Tap Water. *Water*, 1 (16), - . 10.3390/w16101363
2. Becerra-Quiroz, Ana-Paola; Rodríguez-Morón, Santiago-Andrés; Acevedo-Pabón, Paola-Andrea; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena. (2024) Evaluation of the Dark Fermentation Process as an Alternative for the Energy Valorization of the Organic Fraction of Municipal Solid Waste (OFMSW) for Bogotá, Colombia. *Applied Sciences*, 8 (14), - . 10.3390/app14083437
3. García-Villanueva, L.A.; Cuapio-Ortega, V.H.; Hernández-Paniagua, Y.H.; Fernández-Villagómez, G.; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena ... Banda-Santamaría, S.. (2024) Effects of

Glyphosate on the Environment and Human Health. *Nature, Environment and Pollution Technology*, 1 (23), 17 - 32. 10.46488/NEPT.2024.v23i01.002

4. Sánchez-González, Jesús-María; Rodrigo-Ilarri, Javier; Romero, Claudia P.; Rodrigo-Clavero, María-Elena. (2024) Environmental Sustainability Analysis of Land Use/Land Cover Change Using the WEI Index: Application to the Municipalities around the Doñana Area in Spain. *Sustainability*, 16 (224), - . 10.3390/su16104241
5. Salikova, Natalya S.; Rodrigo-Ilarri, Javier; Makeyeva, Lyudmila A.; Rodrigo-Clavero, María-Elena; Tleuova, Zhulduz O.; Makhmutova, Anar D.. (2024) Monitoring of Microplastics in Water and Sediment Samples of Lakes and Rivers of the Akmola Region (Kazakhstan). *Water*, 7 (16), - . 10.3390/w16071051
6. Sairov, Serik B. ; Serikbay, Nurgalym T.; Rodrigo-Ilarri, Javier; Abdrakhimov, Rustam G.; Rodrigo-Clavero, María-Elena. (2024) Climate-Driven Changes in Annual Flow Patterns: A Comprehensive Analysis of the Buktyrma River (Kazakhstan). *Water*, 8 (16), - . 10.3390/w16081114
7. Gómez-Rosales, Zully-Esmeralda; Rodrigo-Ilarri, Javier; Castilblanco-Moncada, Leidy-Juliana; Rodrigo-Clavero, María-Elena; Solano-Meza, Johanna-Karina; Orjuela-Yepes, David. (2023) Physical and Thermal Characterization of Achira (*Canna edulis* Ker) Fiber Obtained from Food Industry Waste in the Department of Cundinamarca, Colombia. *Applied Sciences*, 17 (13), - . 10.3390/app13179522
8. Kakabayev, Anuarbek A.; Yessenzholov, Baurzhan; Khussainov, Abilzhan; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Kyzdarbekova, Gulmira; Dankina, Gulzhan. (2023) The Impact of Climate Change on the Water Systems of the Yesil River Basin in Northern Kazakhstan. *Sustainability*, 22 (15), 1 - 19. 10.3390/su152215745
9. Duskayev, K.K.; Mussina, A.; Rodrigo-Ilarri, Javier; Zhanabayeva, Z.; Tursyngali, M.; Rodrigo-Clavero, María-Elena. (2023) Study of temporal changes in the hydrographic network of small mountain rivers in the Ile Alatau, Kazakhstan. *Hydrology Research* 1 - 12. 10.2166/nh.2023.305
10. Solano-Meza, Johanna; Orjuela Yepes, David; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena. (2023) Comparative Analysis of the Implementation of Support Vector Machines and Long Short-Term Memory Artificial Neural Networks in Municipal Solid Waste Management Models in Megacities. *International Journal of Environmental research and Public Health (Online)*, 5 (2), 1 - 21. 10.3390/ijerph20054256
11. Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Capilla Romá, José Esteban; Romero-Ballesteros, Luis. (2023) Environmental Assessment of Soil and Groundwater Pollution by BTEX Leaching in Valencia Region (Spain). *Water*, 15 (223), 1 - 19. 10.3390/w15183279
12. Gomez-Rosales, Zully Esmeralda; Solano-Meza, Johanna-Karina; Orjuela-Yepes, David; Felibert-Álvarez, David-Jesús; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena. (2023) Synthesis and Characterization of a Cassava Starch and Corn husk Mixture for Biofilm Production. *Chemical Engineering Transactions (Online)* (1)679 - 684. 10.3303/CET23100114
13. Salikova, Natalia S.; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Urazbayeva, Saltanat E.; Askarova, Aniza Zh.; Magzhanov, Kuandyk M.. (2023) Environmental Assessment of Microplastic Pollution Induced by Solid Waste Landfills in the Akmola Region (North Kazakhstan). *Water*, 16 (15), - . 10.3390/w15162889
14. Serikbay, Nurgalym T.; Tillakarim, Tursyn A.; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Duskayev, Kassym K.. (2023) Evaluation of Reservoir Inflows Using Semi-Distributed Hydrological Modeling Techniques: Application to the Esil and Moildy Rivers Catchments in Kazakhstan. *Water*, 16 (15), - . 10.3390/w15162967
15. Shulembayeva, Kyzzhibek; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Khussainov, Abilzhan; Kakabayev, Anuarbek ; Khussainova, Razya. (2023) Assessment of the Hydrophysical and Hydrochemical Characteristics of Lake Burabay (Akmola Region, North Kazakhstan). *Sustainability*, 15 (15), - . 10.3390/su151511788
16. Bagova, Z.; Turebekova, G.; Rodrigo-Ilarri, Javier; Kolesnikov, A.S.; Kozykeyeva, R.A.. (2023) Investigation of plumbum-containing slags and ways for their reclaiming. *Engineering Journal of Satbayev University*, 5 (145), 25 - 30. 10.51301/ejsu.2023.i5.04
17. Barmakova, Dinara B.; Rodrigo-Ilarri, Javier; Zavaley, Vyacheslav A.; Rodrigo-Clavero, María-Elena; Capilla Romá, José Esteban. (2022) Spatial Analysis of the Chemical Regime of Groundwater in the Karatal Irrigation Massif in South-Eastern Kazakhstan. *Water*, 3 (14), 1 - 18. 10.3390/w14030285
18. Vargas-Terranova, Camilo-A; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Parra-Saad, Alejandro. (2022) Implementing Circular Economy Techniques for the Optimal Management of Recyclable Solid Waste Using the M-GRCT Decision Support Model. *Applied Sciences*, 16 (12), 1 - 17. 10.3390/app12168072
19. Gomez Rosales, Zully; Solano, Johanna K.; Orjuela, David; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena. (2022) Synthesis and characterization of a cassava starch (*Manihot esculenta*) and dried

- coffee pulp mixture to produce biofilms. *Chemical Engineering Transactions (Online)* (92)439 - 444. 10.3303/CET2292074
20. Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Romero, Claudia P.; Suárez-Romero, Patricio. (2022) Do Solid Waste Landfills Really Affect Land Use Change? Answers Using the Weighted Environmental Index (WEI). *Remote Sensing*, 21 (14), 1 - 17. 10.3390/rs14215502
 21. Bayazitova, Zulfiya E.; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Kurmanbayeva, Aigul S.; Safronova, Natalya M.; Belgibayeva, Anargul S. ... Kakabayev, Anuarbek A.. (2022) Relevance of Environmental Surveys on the Design of a New Municipal Waste Management System on the City of Kokshetau (Kazakhstan). *Sustainability*, 21 (14), 1 - 16. 10.3390/su142114368
 22. Vargas Terranova, Camilo-A.; Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Rozo-Arango, Miguel A.. (2022) M-GRCT: A Dynamic Circular Economy Model for the Optimal Design of Waste Management Systems in Low-Income Municipalities. *International Journal of Environmental research and Public Health (Online)*, 5 (19), 1 - 25. 10.3390/ijerph19052681
 23. Pérez-Indoval, Ricardo; Rodrigo-Ilarri, Javier; Cassiraga, Eduardo Fabián; Rodrigo-Clavero, María-Elena. (2022) PWC-based evaluation of groundwater pesticide pollution in the Júcar River Basin. *Science of The Total Environment* (847)1 - 13. 10.1016/j.scitotenv.2022.157386
 24. Rodrigo-Ilarri, Javier; Vargas-Terranova, Camilo-A.; Rodrigo-Clavero, María-Elena; Bustos-Castro, Paula-A.. (2021) Advances on the Implementation of Circular Economy Techniques in Rural Areas in Colombia under a Sustainable Development Framework. *Sustainability*, 7 (13), 1 - 21. 10.3390/su13073816
 25. Cassiraga, Eduardo Fabián; Gómez-Hernández, J. Jaime; Berenguer, Marc; Sempere-Torres, Daniel; Rodrigo-Ilarri, Javier. (2021) Spatiotemporal Precipitation Estimation from Rain Gauges and Meteorological Radar Using Geostatistics. *Mathematical Geosciences*, 4 (53), 499 - 516. 10.1007/s11004-020-09882-1
 26. Pavlichenko, L.; Rysmagambetova, A.; Tanybayeva, A.; Solodova, E.; Rodrigo-Ilarri, Javier. (2021) Assessment of boron content changes in the surface water of the Ilek river valley (Aktobe, Kazakhstan). *News of National Academy of Sciences of the Republic of Kazakhstan. Series of chemistry and technology*, 449 (5-6), 53 - 60. 10.32014/2021.2518-1491.77
 27. Salikova, Natalya S.; Rodrigo-Ilarri, Javier; Alimova, Kulyash K.; Rodrigo-Clavero, María-Elena. (2021) Analysis of the Water Quality of the Ishim River within the Akmola Region (Kazakhstan) Using Hydrochemical Indicators. *Water*, 9 (13), 1 - 19. 10.3390/w13091243
 28. Bagova, Z.; Zhantasov, K.; Turebekova, G.; Sapargaliyeva, B.; Rodrigo-Ilarri, Javier. (2021) Analysis and prospective utilization of technogenic slag waste from a lead plant. *News of National Academy of Sciences of the Republic of Kazakhstan. Series of chemistry and technology*, 446 (2), 22 - 28. 10.32014/2021.2518-1491.22
 29. Pérez-Indoval, Ricardo; Rodrigo-Ilarri, Javier; Cassiraga, Eduardo Fabián; Rodrigo-Clavero, María-Elena. (2021) Numerical Modeling of Groundwater Pollution by Chlorpyrifos, Bromacil and Terbutylazine. Application to the Buñol-Cheste Aquifer (Spain). *International Journal of Environmental research and Public Health (Online)*, 7 (18), 1 - 21. 10.3390/ijerph18073511
 30. Bagova, Z.; Zhantasov, K.; Bektureeva, G.; Sapargaliyeva, B.; Rodrigo-Ilarri, Javier. (2021) The impact of lead-containing slag wastes on the life safety. *Reports of the National Academy of Sciences of the Republic of Kazakhstan*, 339 (5), 94 - 99. 10.32014/2021.2518-1483.83
 31. Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena. (2020) Mathematical Modeling of the Biogas Production in MSW Landfills. Impact of the Implementation of Organic Matter and Food Waste Selective Collection Systems. *Atmosphere*, 12 (11), 1 - 18. 10.3390/atmos11121306
 32. Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Cassiraga, Eduardo Fabián. (2020) BIOLEACH: A New Decision Support Model for the Real-Time Management of Municipal Solid Waste Bioreactor Landfills. *International Journal of Environmental research and Public Health (Online)*, 5 (17), 1 - 24. 10.3390/ijerph17051675
 33. Rodrigo-Ilarri, Javier; Romero, Claudia P.; Rodrigo-Clavero, María-Elena. (2020) Land Use/Land Cover Assessment over Time Using a New Weighted Environmental Index (WEI) Based on an Object-Oriented Model and GIS data. *Sustainability*, 24 (12), 1 - 22. 10.3390/su122410234
 34. Rodrigo-Ilarri, Javier; González-González, Lidibert; Rodrigo-Clavero, María-Elena; Cassiraga, Eduardo Fabián. (2020) Advances in implementing Strategic Environmental Assessment (SEA) techniques in Central America and the Caribbean. *Sustainability*, 1 (12), 1 - 17. 10.3390/su12104039
 35. Rodrigo-Ilarri, Javier; Rodrigo-Clavero, María-Elena; Cassiraga, Eduardo Fabián; Ballesteros-Almonacid, Leticia. (2020) Assessment of Groundwater Contamination by Terbutylazine Using Vadose Zone Numerical Models. Case Study of Valencia Province (Spain). *International Journal of Environmental research and Public Health (Online)*, 9 (17), 1 - 17. 10.3390/ijerph17093280
 36. Solano-Meza, Johanna; Rodrigo-Ilarri, Javier; Romero-Hernandez, Claudia Patricia; Rodrigo-Clavero, María-Elena. (2020) Analytical Methodology for the Identification of Critical Zones on the Generation

of Solid Waste in Large Urban Areas. International Journal of Environmental research and Public Health (Online), 4 (17), 1 - 14. 10.3390/ijerph17041196

37. Naukenova, A.; Sapargaliyeva, B.; Rodrigo-Ilarri, Javier; Shapalov, Sh.; Kerimbekova, Z.; Kenzhaliyeva, G.. (2019) Investigation of endothermic properties of industrial wastes. Reports of the National Academy of Sciences of the Republic of Kazakhstan, 325 (3), 19 - 26. 10.32014/2019.2518-1483.67
38. Shapalov, Sh.; Sapargaliyeva, B.; Naukenova, A.; Rodrigo-Ilarri, Javier. (2019) The definition of the fire-extinguishing efficiency of pulverized industrial waste. Reports of the National Academy of Sciences of the Republic of Kazakhstan, 325 (3), 43 - 50. 10.32014/2019.2518-1483.70
39. Sapargaliyeva, B.; Naukenova, A.; Shapalov, Sh.; Alipova, B.; Rodrigo-Ilarri, Javier. (2019) Environmental disposal of large-tonnage industrial waste for the production of fire extinguishing powders. Reports of the National Academy of Sciences of the Republic of Kazakhstan, 325 (3), 35 - 42. 10.32014/2019.2518-1483.69
40. Sapargaliyeva, Bayan; Naukenova, Aigul; Alipova, Bakhyt; Rodrigo-Ilarri, Javier. (2019) Flame Distribution and Attenuation in Narrow Channels Using Mathematical Software. Advances in Science, Technology and Engineering Systems Journal, 3 (4), 53 - 57. 10.25046/aj040308
41. Bagova, Z.; Zhantasov, K.; Bektureeva, G.; Naukenova, A.; Rodrigo-Ilarri, Javier. (2019) Environmental impact and human life at the construction and operation of new industrial objects. Industrial Technology and Engineering , 3 (1), 40 - 48.
42. Solano-Meza, Johanna; Orjuela Yepes, David; Rodrigo-Ilarri, Javier; Cassiraga, Eduardo Fabián. (2019) Predictive analysis of urban waste generation for the city of Bogota , Colombia, through the implementation of decision trees-based machine learning, support vector machines and artificial neural networks. Heliyon, 11 (5), - . 10.1016/j.heliyon.2019.e02810
43. Sapargaliyeva, B.; Naukenova, A.; Alipova, B.; Rodrigo-Ilarri, Javier; Shapalov, Sh.. (2018) THE ANALYSIS OF HEAT AND MASS PROPERTIES OF THE FIRE EXTINGUISHING POWDER IN EFFECTIVENESS CRITERIA. News of the National Academy of Sciences of the Republic of Kazakhstan. Series of geology and engineering sciences, 43 (3), 51 - 61.
44. Pavlichenko, L.M.; Rysmagambetova, A.A.; Rodrigo-Ilarri, Javier. (2018) The applicability assessment of technical solutions for a feasibility study on the purification of groundwater in the Ilek River Valley from Boron for the modern hydro chemical situation. Eurasian Journal of Ecology, 1 (54), 35 - 48.
45. J. E. Capilla; J.Rodrigo; J. J. Gómez-Hernández. (2003) Transporte de masa en medio fracturado: impacto del modelo estocástico de conductividad en las fracturas. Boletín Geológico y Minero, 3 (114), 279 - 286.
46. Rodrigo-Ilarri, Javier; Capilla Romá, José Esteban; Gómez-Hernández, J. Jaime. (2002) The impact of random function model assumption for the identification of hydraulic conductivity fields in fractured media: Gaussian and non-Gaussian approaches. Acta Universitatis Carolinae. Geologica (46)540 - 543.
47. Romero Gil, Inmaculada; Rodrigo-Ilarri, Javier; González del Rio Rams, Julio; Joan Pau Sierra; Rodilla, M; Agustín Sánchez-Arcilla Conejo ... Cesar Mosso. (2001) Description of nutrients seasonal behavior in Ebro river plume. WIT Transactions on Ecology and the Environment (5)231 - 239.
48. Capilla, J.; Rodrigo, Javier; Gomez-Hernández, J. J.. (1999) Simulation of non-gaussian transmissivity fields honoring piezometric data and integrating soft and secondary information.. Mathematical Geology, 7 (31), 907 - 927.
49. Capilla, J.; Rodrigo, J.; Gómez-Hernández, J. J.. (1998) Worth of Secondary Data Compared to piezometric data for the probabilistic assessment of Radionuclide Migration. Stochastic Hydrology and Hydraulics, 3 (12), 171 - 190.

INTERNATIONAL PROJECTS EXPERIENCE

1. **Rodrigo-Ilarri, Javier (I.P.);** Llobregat-Gomez, N.; Capilla Romá, José Esteban; Sánchez Ruiz, Luis Manuel. Huco Labs (101186024). (01/11/24 - 31/10/27). EU
2. **Rodrigo-Ilarri, Javier (I.P.);** Sánchez Ruiz, Luis Manuel; Capilla Romá, José Esteban; Llobregat-Gomez, N.. Land Management, Environment & Solid-Waste: Inside Education And Business In Central Asia (101129032). (01/01/24 - 31/12/26). EU
3. **Llobregat-Gomez, N. (I.P.);** Rodrigo-Ilarri, Javier; Sánchez Ruiz, Luis Manuel. Joint European Degree Label In Engineering - Toward a European Framework For Engineering Education (101114604). (01/04/23 - 30/04/24). EU

4. **Sánchez Ruiz, Luis Manuel (I.P.);** Rodrigo-Illarri, Javier; Llobregat-Gomez, N.; Capilla Romá, José Esteban. BOOSTING THE GREEN FUTURE VIA UNIVERSITY MICRO-CREDENTIALS B-Green-ED (2022-1-BG01-KA220-HED-00085821). (01/11/22 - 31/10/24). EU
5. **Llobregat-Gomez, N. (I.P.);** Rodrigo-Illarri, Javier; European Universities of Technology Alliance (101004040). (07/02/22 - 31/10/23). EU



PICTURE



FOTO

TECGREMED MEMBER CV

Family Name	Sánchez Ruiz
Name	Luis Manuel
Institution	Universitat Politècnica de València (UPV)
Position	
Mother Language	Spanish
English (A1, A2, B1, B2, C1, C2)	C2

EDUCATION – WORK EXPERIENCE

Graduate: MSC Mathematics Universidad de Valencia 1980

Post graduate: Phd Universidad de Valencia 1988. Visiting Prof at University of Florida 1992 (1 Feb-31 Aug) + 2-3 mo each year during 1993-99.

Full Professor at UPV since 2000

Chair:

Vice Dean, Head International Relations Office at Higher Technical School of Engineering Design 1989-91, and 2011-15

UPV Director for Programs with USA/Canada and Asia 2009-2011

UPV Director for Innovation and Research Programs 2015-2021

UPV Director for Latin America Affairs 2021-...

Board of Directors SEFI - European Society for Engineering Education SEFI - European Society for Engineering Education 2012-23

Vice President SEFI - European Society for Engineering Education SEFI - European Society for Engineering Education 2015-23

Executive Committee Member The International Federation of Engineering Education Societies IFEES 2017-19, and 2020-...

President The International Federation of Engineering Education Societies IFEES 2023-...

PUBLICATIONS related the project topic

1. M Edwards, LM Sánchez-Ruiz, C Sánchez-Díaz. Achieving competence-based curriculum in engineering education in Spain. Proceedings of the IEEE 97 (10), 1727-1736
2. L.M. Sánchez Ruiz, S. Moll-López, J.-A. Morano-Fernández and N. Llobregat-Gómez. B-Learning and Technology: Enablers for University Education Resilience. An Experience Case under COVID-19 in Spain. Sustainability 2021, 13(6), 3532. <https://doi.org/10.3390/su13063532> Section: Sustainable Education and Approaches,
3. L.M. Sánchez Ruiz, S. Moll-López, J.-A. Morano-Fernández and M.-D. Roselló. Dynamical Continuous Discrete assessment of competencies achievement: an approach to continuous assessment. Mathematics 2021, 9(17), 2082. <https://doi.org/10.3390/math9172082>. Section: Computational and Applied Mathematics, SI: Advanced Methods in Computational Mathematical Physics



TECGREMED MEMBER CV

Family Name	RODRIGO-CLAVERO
Name	MARÍA-ELENA
Institution	UNIVERSITAT POLITÈCNICA DE VALÈNCIA (UPV)
Position	ASSISTANT PROFESSOR
Mother Language	SPANISH
English (A1, A2, B1, B2, C1, C2)	B2

EDUCATION – WORK EXPERIENCE

María-Elena Rodrigo-Clavero graduated as Civil engineer on 2011 on Universitat Politècnica de València (UPV). In 2016 she obtained a Master's degree in Hydraulic and Environmental Engineering and in 2020 she completed her doctoral studies defending her doctoral thesis entitled "Joint evaluation of the production of leachate and biogas in urban solid waste landfills" which was qualified with summa cum laude.

Since 2015 she has been professor in the Department of Hydraulic Engineering and the Environment (DIHMA) of the UPV, teaching within the Hydraulic Engineering Knowledge Area, both in bachelor's and master's degrees. Since joining the DIHMA staff, she has directed 12 Master's Final Projects, 4 Final Degree Projects and 1 doctoral thesis. She is currently director of 3 doctoral theses.

Her work as a researcher is part of the Hydrogeology Group of the Institute of Water and Environmental Engineering (IIAMA) of which she has been a member since its incorporation in 2015. Her research has been directed towards issues related to Environmental Engineering, Soil and Groundwater Contamination, Solid Waste Management and Environmental Mathematical Modelling.

In these areas, she has participated as a researcher in research projects subsidized in public calls, research contracts with companies and/or administrations, has published 37 research publications, and has presented 50 contributions to international conferences.

A part of these publications is related to his doctoral thesis topic, whose most relevant contribution has been the conception, development, implementation and commissioning of BIOLEACH, a new mathematical model for the optimal management of bioreactor landfills that allows joint evaluation from the production of leachate and biogas in urban solid waste (MSW) landfills. This numerical model was registered as intellectual property at the UPV in November 2019 and has been used in research contracts.

PUBLICATIONS related the project topic

1. Salikova, Natalya S.; Lovinskaya, Anna V.; Kolumbayeva, Saule Zh.; Bektemissova, Ainash U.; Urazbayeva, Saltanat, E.; Rodrigo-Clavero, María-Elena; Rodrigo-Ilarri, Javier. (2024) Evaluation of Microplastic Toxicity in Drinking Water Using Different Test Systems. *Water*, 16, 3250. 10.3390/w16223250
2. Kulebayev, K.M.; Alimkulov, S.K.; Tursunova, A.T.; Makhmudova, L.K.; Talipova, E.K.; Sapparova, A.A. ...; Rodrigo-Clavero, María-Elena; Rodrigo-Ilarri, Javier. (2024) Assessing the Vulnerability of Lakes in Western Kazakhstan to Climate Change and Anthropogenic Stressors. *Water*, 224 (16), 1 - 25. 10.3390/w16243709