

Daniel Salcedo

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909 E Playa del Norte Dr, 85288 Tempe, Az.

EDUCATION

- Ph.D. Agricultural and Environmental Science** **Jul 2022**
Universidad Autónoma Agraria Antonio Narro, Torreón Coah. MX
- M.S. Environmental Studies and Sustainability** **Aug 2017**
Instituto Politécnico Nacional, Centro Interdisciplinario de Investigaciones y Estudios sobre Medio Ambiente y Desarrollo, México City, MX
- B.E. Mechatronics Engineering *In progress*** **Jan 2023**
Universidad Autónoma de la Laguna
- B.D. Business** **Aug 2009**
Universidad del Valle de México

CERTIFICATION/COURSES

- **Postdoctoral** on Soil application and evaluation of pyrolytic solid and condensate liquid sub products of the OFMSW, Universidad Autónoma Agraria Antonio Narro **Dic2024**
- On-Grid interconnected photovoltaic panels installation, Instituto Sueco Mexicano de Energía Renovable. **Sep 2017**
- Basic maintenances and operation of Perkin Elmer Chromatography and Mass Spectrometry units, Instituto Politécnico Nacional. **Mar 2017**
- Remote satellite image analysis and interpretation, IPN **Feb 2016**
- Statistical analysis, Instituto Politécnico Nacional **Aug 2016**

WORK EXPERIENCE

- Assistant Research Scientist** **Jan 04 – to date**
- Sustainable water security research and applied technologies for rural communities in Arizona. Arizona State University. 1151 S Forest Ave, Tempe, AZ, Biodesign Building B, 122.
- Wastewater treatment plant administration, monitoring, analysis. Treated water administration and quality control.** **May 2021 -Apr 2023**
- Research in low-cost treated wastewater odors and sludge management. Álamo Laguna S.A. de C.V. Fraccionamiento las Trojes y Rincón Las Trojes Antigua Carretera a San Pedro Km 3, Torreón Coah. HQ. Carretera Gómez Palacio – Cd. Juárez km 3 S/N Col. Leticia Herrera, CP 35016
- Local, State and Federal environmental regulations and norm compliance in municipal scale projects.** **Jan 2018 –Jan 2021**
- Municipal solid wastes (MSW) management project planner:
 - Research in MSW generation and management
 - Research in MSW characterization.

- Municipal slaughterhouse wastewater treatment.
- Municipal green waste generation and treatment.
- Municipal Compost facility.
- Municipal tires and pneumatics waste stream collection and disposal center.

R. Ayuntamiento de Torreón
Calle Allende 333 Col. Primero de Cobián Centro CP. 27000, Torreón, Coah.

Engineering Teacher UTT

Aug 2017 –Aug 2018

- Research
- Learning abilities
- Nomenclature

Universidad Tecnológica de Torreón (UTT)
Carr. Torreón - Matamoros S/N-Km 10, Ejido el Águila, CP 27400 Torreón, Coah.

Biogas quantitative analysis methods instructor.

May 2017 –Aug 2017

- OFMSW and leachate sampling, physicochemical analysis methods instructor.

Instituto Politécnico Nacional
Centro Interdisciplinario de Investigaciones en Estudios sobre Medio Ambiente y Desarrollo - CIEMAD
Calle 30 de Junio de 1520 s/n, La Laguna Ticoman, Gustavo A. Madero, CP 07340 Ciudad de México, CDMX

Pumping systems, installation, and maintenance

Jan 2005–Mar 2015

- System design, domestic and industrial equipment
- Dosification, extraction and injection
- Water purifier systems

JulServicios S.A. de C.V.
Av. Matamoros 126 pte col. Centro, CP 27000 Torreón, Coah.

SKILLS/PROFICIENCY

Professional

- Environmental regulation and norm compliance. Local, state, and federal.
- Statistical analysis
- Batch-scale thermophilic and mesophilic anaerobic digesters design and construction.
- High organic content wastewater treatment and applications.
- Compost facility management and logistics
- Inoculation and acclimatation of organic wastes
- Gas Chromatography and Mass spectrometry Perkin Elmer/Hewlett-Packard unit operation with Clarity software.
- Image analysis with remote perception software
- QGis ArcGis and LADSAT y SENTINEL images.
- 110v AC On-Grid photovoltaic panels installation.
- Organic waste management.

Personal

- Strong organizational & time managements
- Problem-solving
- Leadership & Teamwork
- Languages: Spanish and English

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Personal

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PUBLICATIONS

- Salcedo Serrano, D. A., Gállego Bravo, A. K., Gutiérrez Castillo, M.E., García-Mena, J., Tovar Gálvez, L. R. (2021). Digestate as inorganic fertilizer substitute on winter Triticale (x tritico-secale Wittm. ex A. Camus var “Rio Nazas”) crops as an approach to a sustainable food production in Mexico <https://era.ujat.mx/index.php/rera/article/view/3191/1581>. <https://doi.org/10.19136/era.a9n2.3191>.
- Gállego Bravo, A. K., Salcedo Serrano, D. A., López Jiménez G., Nirmalkar, K., Murugesan S., García-Mena, J., Gutiérrez Castillo M. E. and Tovar Gálvez L. R., (2019). Microbial Profile of the Leachate from Mexico City’s Bordo Poniente Composting Plant: An Inoculum to Digest Organic Waste. *Energies*, 12, 1–21. <https://doi.org/10.3390/en12122343>.
- Lee E. Voth-Gaeddert*, Douglas Momberg, Bongwiwe Nkambule, Daniel Salcedo Serrano, Peter Rohloff, Rihlat Said-Mohamed, Alastair van Heerden (2024). Co-Designing Information Interventions in Global Environmental Health and Engineering with Marginalized Communities. *ACS EST Water* 2024, 4, 4, 1251–1259. <https://doi.org/10.1021/acsestwater.4c00015>

OTHER RESEARCH PARTICIPATION

- 2020: Technical chief and author of the document “Sampling and composition of Municipal Solid Waste generated from the domestic stream in the City of Torreon in the state of Coahuila 2019-2020” http://www.torreon.gob.mx/medioambiente/pdf/Torreon_2019_2020.pdf Municipal Administration of Torreon 2018-2021 Torreon, Coah., MX.
- 2016: Study to analyze the transformation processes of waste generated in Mexico City. Centro Interdisciplinario de Investigaciones y Estudios sobre Medio Ambiente y Desarrollo, Instituto Politécnico Nacional, Mexico City, Mexico.