



UNIVERSIDAD AUTÓNOMA DEL  
ESTADO DE MORELOS



**Dr. Hugo  
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**Dr. Hugo Albeiro Saldarriaga Noreña**

**Formación académica**

Doctorado en Ciencias Químicas

**Distinciones  
SNI nivel 2  
Perfil deseable**

**Publicaciones de los últimos tres años**

**Artículos**

1. Ronderos-Lara, J. G., **Saldarriaga-Noreña, H.**, Murillo-Tovar, M. A., Mugica-Álvarez, V., Montoya-Balbás, I. J., López-Martínez, V. G., López-Velázquez, K., & Sola-Pérez, E. (2025). Effect of Organic Matter Content in Water and Sediments on the Recovery of Estrogenic Compounds Extracted by Solid-Phase Extraction and Ultrasound-Assisted Extraction. *Journal of Analytical Chemistry*, 80(4), 634–646. <https://doi.org/10.1134/S1061934825700066>
2. López-Márquez, R., **Saldarriaga-Noreña, H.**, Morera-Boado, C., Cobarrubias-Escamilla, D. L., Tolentino-Rojas, A., & García-Betancourt, M. L. (2025). Removal of polycyclic aromatic hydrocarbons from water by sugarcane bagasse: explanation of the possible adsorption mechanism by theoretical calculations. *International Journal of Phytoremediation*, 1–13. <https://doi.org/10.1080/15226514.2025.2530025>
3. Márquez, R.-A. L., **Saldarriaga-Noreña, H.**, Betancourt, M. L. G., Rodríguez-Solís, A., Morera-Boado, C., Albañil-Sánchez, L., Kesarla, M. K., & Murillo-Tovar, M. A. (2025). Adsorptive removal of carbamazepine and paracetamol using sugarcane bagasse-derived activated carbon: Experimental optimization and mechanistic insights. *Separation and*



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Purification

Technology,

135377. <https://doi.org/10.1016/j.seppur.2025.135377>

4. Hernández-Maravilla, S., Castrejón-Godínez, M. L., Tovar-Sánchez, E., **Saldarriaga-Noreña, H. A.**, Rodríguez, A., Rosas-Ramírez, M. E., & Mussali-Galante, P. (2025). Metal Biomonitoring Through Arboreal Species in Riparian Ecosystems: Pithecellobium dulce as a Bioindicator Species. *Plants*, 14(1), 118. <https://doi.org/10.3390/plants14010118>
5. Ronderos-Lara, J. G., Millán-Vázquez, F., Murillo-Tovar, M. A., **Saldarriaga-Noreña, H. A.**, Valle-Hernández, B. L., López-Velázquez, K., & Mugica-Álvarez, V.\*(2025). Atmospheric Estrogenic Semi-Volatile Compounds and PAH in PM2.5 in Mexico City. *Atmosphere*, 16(2), 178. <https://doi.org/10.3390/atmos16020178>
6. Morales-Olivares, M. I., Castrejón-Godínez, M. L., Mussali-Galante, P., Tovar-Sánchez, E., **Saldarriaga-Noreña, H. A.**, & Rodríguez, A. (2025). Characterization of Glyphosate Resistance and Degradation Profile of *Caballeronia zhejiangensis* CEIB S4-3 and Genes Involved in Its Degradation. *Microorganisms*, 13(3), 651. <https://doi.org/10.3390/microorganisms13030651>
7. Román-Abarca, M. E., Kar, T., Casales-Díaz, M., Ramos-Hernández, J. J., Godavarthi, S., Bogireddy, N. K. R., **Saldarriaga Noreña, H. A.**, & Kesarla, M. K. (2025). Effective photocatalytic chromium (VI) detoxification with metal-free heterojunction based on g-C3N5 and ZIF-8 carbon under visible light. *Environmental Research*, 275, 121424. <https://doi.org/10.1016/j.envres.2025.121424>
8. Aguilar Marin, J. L., Cisneros Villalobos, L., Vera-Dimas, J. G., Sánchez Jaime, J., **Saldarriaga-Noreña, H. A.**, & Herrera Gutiérrez, H. (2025). Mitigation of Magnetic Field Levels in Bipolar Transmission Lines of 500 and 600 kV in HVDC. *Energies*, 18(18), 5022. <https://doi.org/10.3390/en18185022>
9. Chávez-Almazán, L. A., **Saldarriaga-Noreña, H. A.**, Garibo-Ruiz, D., & Arcos-Cuevas, M. C. (2025). Inhibition of butyrylcholinesterase in a population exposed to insecticides during a campaign against *Aedes*



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- aegypti. Transactions of The Royal Society of Tropical Medicine and Hygiene. <https://doi.org/10.1093/trstmh/traf108>
10. Marcos Rosas-Ramírez, Efraín Tovar-Sánchez, Alexis Rodríguez, María Luisa Castrejón-Godínez, **Hugo Albeiro Saldarriaga-Noreña**, Luz Bretón-Deval and Patricia Mussali-Galante\*(2025). Potencial de fitorremediación de metales pesados mediante biocarbón y plantas de acumulación: un enfoque sostenible hacia entornos más limpios. Plants. <https://doi.org/10.3390/plants14223470>
  11. BustosRivera-Bahena, G., Ramírez-Arteaga, A. M., **Saldarriaga-Noreña, H. A.**, Larios-Gálvez, A. K., González-Rodríguez, J. G., Romero-Aguilar, M., & Sesenes, R. L. (2024). Hexane extract of Persea schiedeana Ness as green corrosion inhibitor for the brass immersed in 0.5 M HCl. Scientific Reports, 14(1), 6512. <https://doi.org/10.1038/s41598-024-56793-w>
  12. López-Velázquez, K., Ronderos-Lara, J. G., **Saldarriaga-Noreña, H. A.**, Murillo-Tovar, M. A., Villanueva-Rodríguez, M., Guzmán-Mar, J. L., Hoil-Canul, E. R., & Cabellos-Quiroz, J. L. (2025). Endocrine-disrupting compounds in urban rivers of the southern border of Mexico: Occurrence and ecological risk assessment. Emerging Contaminants, 11(1), 100456. <https://doi.org/10.1016/j.emcon.2024.100456>
  13. Ojeda-Castillo, V., Murillo-Tovar, M. A., Hernández-Mena, L., **Saldarriaga-Noreña, H.**, Vargas-Amado, M. E., Herrera-López, E. J., & Díaz, J. (2024). Tropospheric NO<sub>2</sub>: Anthropogenic Influence, Global Trends, Satellite Data, and Machine Learning Application. Remote Sensing, 17(1), 49. <https://doi.org/10.3390/rs17010049>
  14. Carmona-Hernandez, A., Barrada-Serrano, M. C., **Saldarriaga-Noreña, H. A.**, López-Sesenes, R., González-Rodríguez, J. G., Mejía-Sánchez, E., Ramírez-Cano, J. A., Orozco-Cruz, R., & Galván-Martínez, R. (2024). Insight into the Corrosion Inhibition Performance of Pistia stratiotes Leaf Extract as a Novel Eco-Friendly Corrosion Inhibitor for Mild Steel in 1 M HCl Solution. Molecules, 29(22), 5243. <https://doi.org/10.3390/molecules29225243>
  15. Cobarrubias-Escamilla, D. L., **Saldarriaga-Noreña, H. A.**, Vergara-Sánchez, J., Murillo-Tovar, M. A., & Moeller-Chávez, G. E. (2024).



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Removal of ibuprofen, naproxen and 17- $\beta$ -estradiol in water using *L. octovalvis* constructed wetlands. *International Journal of Phytoremediation*, 1–

10. <https://doi.org/10.1080/15226514.2024.2400619>

16. Díaz-Soto, J. A., Mussali-Galante, P., Castrejón-Godínez, M. L., **Saldarriaga-Noreña, H. A.**, Tovar-Sánchez, E., & Rodríguez, A. \*(2024). Glyphosate resistance and biodegradation by *Burkholderia cenocepacia* CEIB S5-2. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-024-33772-2>

17. BustosRivera-Bahena, G., Ramírez-Arteaga, A. M., **Saldarriaga-Noreña, H. A.**, Larios-Gálvez, A. K., González-Rodríguez, J. G., Romero-Aguilar, M., & Sesenes, R. L. (2024). Hexane extract of *Persea schiedeana* Ness as green corrosion inhibitor for the brass immersed in 0.5 M HCl. *Scientific Reports*, 14(1), 6512. DOI: [10.1038/s41598-024-56793-w](https://doi.org/10.1038/s41598-024-56793-w)

18. Brito-Hernández, A., **Saldarriaga-Noreña, H.\*.**, Rosales-Rivera, M., García-Betancourt, M.-L., Murillo-Tovar, M. A., Romero-Aguilar, M., Mugica-Alvarez, V., Díaz-Torres, J. de J., & Figueroa-Lara, J. de J. (2024). Risk Estimation of Heavy Metals Associated with PM2.5 in the Urban Area of Cuernavaca, México. *Atmosphere*, 15(4), 409. DOI: [10.3390/atmos15040409](https://doi.org/10.3390/atmos15040409)

19. Gomez, A., Rodríguez Albarrán, M. J., Vergara Sanchez, J., Torres, C., Osorio, D., Martínez, H., **Saldarriaga, H.**, & Reyes, P. G\*. (2024). Physical–Chemical Assessment of Azo Dye Basic Violet I (BVI) Discoloration Using the Corona Plasma in Batch and Flow Systems. *ACS Omega*. DOI: [10.1021/acsomega.3c07559](https://doi.org/10.1021/acsomega.3c07559)

20. Osorio-Aguilar, D.-M., **Saldarriaga-Noreña, H.-A.**, Murillo-Tovar, M.-A., Vergara-Sánchez, J., Ramírez-Aparicio, J., Magallón-Cacho, L., & García-Betancourt, M.-L\*. (2023). Adsorption and Photocatalytic Degradation of Methylene Blue in Carbon Nanotubes: A Review with Bibliometric Analysis. *Catalysts*, 13(12), 1480. DOI: [10.3390/catal13121480](https://doi.org/10.3390/catal13121480)

21. Chávez-Almazán, L. A\*, **Saldarriaga-Noreña, H. A.**, Díaz-González, L., Garibo-Ruiz, D., & Waliszewski, S. M. (2023). Relationship Between



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DDT Concentrations with Multiparity and Breastfeeding History. Bulletin of Environmental Contamination and Toxicology, 111(3), 27. DOI: [10.1007/s00128-023-03785-7](https://doi.org/10.1007/s00128-023-03785-7)

22. Rosas-Sánchez, J., **Saldarriaga-Noreña, H.\***, Chávez-Almazán, L. A., Murillo-Tovar, M. A., Ramírez-Bustos, I. I., León-Hernández, V. A., Reyes, P. G., Vergara-Sánchez, J., & Fernández-Herrera, E. (2023). Occurrence of pesticide residues in fig crops (*Ficus carica* L.), in Morelos, Mexico. *Revista Internacional de Contaminación Ambiental*, 39, 215–227. DOI: [10.20937/RICA.54711](https://doi.org/10.20937/RICA.54711)

23. Muñoz-Hernández, J. A., **Saldarriaga-Noreña, H.\***, Reyes-Romero, P. G., Murillo-Tovar, M. A., & Vergara-Sánchez, J. (2023). Development of electrooxidation cells with recovered carbon, for its possible application in the removal of 17-a-estradiol from water. *DESALINATION AND WATER TREATMENT*, 287, 224–232. DOI: [10.5004/dwt.2023.29386](https://doi.org/10.5004/dwt.2023.29386)

#### Direcciones de tesis de los últimos tres años

##### Concluidas

1. Rebecca Alejandra López Márquez (Doctorado, Director)
2. María Esperanza Román Abarca (Maestría, Director)
3. Diana Laura Flores Bautista (Licenciatura, Director)
4. Mayté Méndez Quevedo (Licenciatura, Director)
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8. Monserrat Paredes Medina (Maestría, Director)
9. Alejandro Muñoz Hernández (Doctorado, Director)

##### En proceso

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