

OGOCHUKWU NWABUEZE OKOANI

(Previous Name: Ogochukwu Henrieta Nwabueze)

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DEGREES EARNED

- (In view): Ph.D. Engineering Education and Systems Design, Arizona State University, USA.
- 2023: Ph.D., Chemical Engineering, Nnamdi Azikiwe University, Awka, Nigeria.
- 2014: M.Eng, Chemical Engineering, Nnamdi Azikiwe University, Awka, Nigeria.
- 2007: B.Eng, Chemical Engineering, Enugu State University of Science and Technology, Enugu, Nigeria.

WORK EXPERIENCES

- **Fall 2025- Present:** Graduate Teaching Associate, EESD program, ASU.
- **Fall 2024- Summer 2025:** Graduate Research Associate, EESD program, ASU.
- **Summer 2025:** Graduate Student Assistant, EESD program, ASU
- **09/2010-Present:** Senior Lecturer, Chemical Engineering Department
Institute of Management and Technology (IMT), Enugu, Nigeria
- **1/2020-2/2023:** Head of Chemical Engineering Department
Institute of Management and Technology (IMT) Enugu, Nigeria.
- **5/2010-9/2010:** Julex Comprehensive Secondary School, Enugu, Nigeria
Chemistry, Biology, and Agricultural Science Teacher.
- **11/2008-10/2009:** National Youth Service Corp.
Omala Local Government Area, Kogi State, Nigeria
Chemistry and Biology Teacher at Science School Icheke-Ogane.
- **6/2006-12/2006:** Water Corporation, Enugu, Nigeria
6 Months Industrial Training.
Assistant Laboratory Scientist.

PROFESSIONAL MEMBERSHIP

- Member, Council for the Regulation of Engineering in Nigeria (**COREN**) (*R.40875*).
- Member, Nigerian Society of Chemical Engineers (**NSCHE**) (*GM 1482*).
- Member, Organization for Women in Science for the Developing World (**OWSD**) (ID: 7413)
- Member, American Society of Engineering Education (ASEE) (ID: 154227)
- Member, American Institute of Chemical Engineers (AIChE) (ID: 009905938680)

- Member, American Association for the Advancement of Science (AAAS) (ID: 60918960)

PUBLICATIONS:

Peer-Reviewed Journals

1. Eze, K.A., **Okoani, O. N.**, & Odo, B.A., (2025). Experimental study on the influence of animal bones on the fractionation of lead in contaminated soils. *International Journal of Emerging Trends in Engineering and Development*, 13(1): 17-31.
2. Ezekannagha, C.B., Onukwuli, O.D., **Nwabueze, O. H.**, & Nnanwube, I. (2024). A Heterogeneous Base Catalyst from Hybrid Banana-and-Plantain Peels in *Papaya* Seed Oil (*Carica papaya*) Methyl-Ester Synthesis. *Chemistry Africa* 7, 1935–1950. <https://doi.org/10.1007/s42250-024-00884-8>
3. **Nwabueze, O. H.**, & P. K. Igbokwe, P.K. (2023). Synthesis and characterization of Amine Impregnated Zeolite from Enugu Clay for CO₂ Adsorption. *International Journal of Advanced Research and Innovative Ideas in Education*, 9(3): 2560-2568.
4. Okoro, S. E., & **Nwabueze, O. H.** (2021). Comparative Analysis and Regenerative Studies of Alkaline Modified Groundnut Shell as Adsorbent for the Removal of Oil Layer from Polluted Water. *Journal of Engineering Research and Reports*, 20 (1):76-86. <https://doi.org/10.9734/jerr/2021/v20i117251>.
5. Okoye, J.O., Echegi, U.C., & **Nwabueze O. H.** (2021). Corrosion Inhibition of Mild Steel in Acid Environment using *Telfairia Occidentalis* Leaves Extract. *American Journal of Applied Sciences and Engineering*, 2(6): 1-10.
6. Chiaha, P. N., **Nwabueze, O. H.**, Ezekannagha, C.B., & Okenwa, C.J. (2017). Kinetic Studies on Oil Sorption Using Acetylated Sugarcane Bagasse and Groundnut Husk, *International Journal of Multidisciplinary Sciences and Engineering*, 8(6):16-21.
7. Iloamuzor, F.E., Ude, C. N., Ezekannagha, C.B., & **Nwabueze, O. H.** (2017). Performance evaluation of Moringa oleifera seed powder in surface water treatment and its coagulation kinetics, *International Journal of Multidisciplinary Research and Development*, 4(1): 36-41.
8. Abalu, B. N., & **Nwabueze, O. H.** (2017). Quadratic Model for Reduction of Alcohol Content of Palm Wine”. *The International Journal of Engineering and Science*, 6(12):18-17.
9. **Nwabueze, O.H.**, Ezekannagha, C.B., Chiaha, P.N., & Okoani, O.E., (2016). Leaching of Trace Elements in Enugu Coal: Effects of Acid Concentration. *International Journal of Advanced Engineering, Management and Science*, 2(10): 1693-1696.
10. **Nwabueze O. H.**, Chiaha, P.N., Ezekannagha, C. B., & Okoani, O.E. (2016). Acetylation of Corn Cobs Using Iodine Catalysts for Oil Spills Remediation. *The International Journal of Engineering and Science*, 5(9): 53-59.

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11. Ezekannagha, C. B., **Nwabueze O. H.**, & Eket, J.A. (2016). Empirical Models and Rheology of Some Basic Properties of Lard Biodiesel and Their Blends with Diesel Fuel. *Journal of Emerging Trends in Engineering and Applied Sciences*, 7(3): 149-160.
12. **Nwabueze O. H.**, Igbokwe, P. K., Amalu, E. U. & Okoro, S.E. (2015). A Study on the Equilibrium and Kinetics of Oil Spills clean up using Acetylated Corn Cobs. *International Journal of Environmental Sciences*, 5(6): 1106-1114. <https://doi.org/10.6088/ijes.2014050100104>.

Conference Papers

1. Ahandani, M.D., Njeck P., & **Okoani, O. N.** (June 2025). Examining the Effect of Social, Cultural, and Political Factors on the Wellness of International Students in Engineering Doctoral Programs: A Collaborative Inquiry. In the *2025 ASEE Annual Conference and Exposition*.
2. **Nwabueze, O. H.**, & Igbokwe, P. K. (2022). Kinetics Studies on Carbon Dioxide Capture using Zeolite Prepared from Enugu Clay”. In the proceedings of the 2022 Faculty of Engineering International Conference (FEIC) of the Nnamdi Azikiwe University, Awka, Nigeria, 522-530.
3. Obasi, B.M., Amalu, E. U., & **Nwabueze, O.H.** (2014). Effect of Organic Load on Aquatic Biodiversity in Oji River Water, Enugu State, Nigeria. In the proceedings of the *Chemical Society of Nigeria (CSN)*, Akwa Ibom 2014 Conference.
4. Amalu, E. U., Obasi, B.M., & **Nwabueze, O.H.** (2014). Determination of Heavy Metals in Well Water of Onuasata Area of Enugu State. In the proceedings of the *Chemical Society of Nigeria (CSN)*, Akwa Ibom 2014 Conference.

Thesis and Dissertation

1. **Nwabueze, O.H.** (2023). “Post Combustion Carbon dioxide capture using Amine-Impregnated Zeolite”, Ph.D. dissertation, Chemical Engineering Department, Nnamdi Azikiwe University, Awka, Nigeria.
2. **Nwabueze, O.H.** (2014). “Acetylation of Corn Cobs using Iodine Catalyst, for Oil Spills Remediation”, Master's degree thesis, Chemical Engineering Department, Nnamdi Azikiwe University, Awka, Nigeria.
3. **Nwabueze, O.H.** (2007). “Trace Element Composition of Nigerian Coal: Effect of Acid Concentration”, bachelor's degree thesis, Chemical Engineering Department, Enugu State, University of Science and Technology, Enugu, Nigeria.

In-Progress Work

1. **Cultural Motivations Informing West African International Doctoral Students' Decisions to Study STEM Programs in the U.S.**
 - **Authors:** Ogochukwu N. Okoani, Jennifer M. Bekki & Malle R. Schilling
 - **Status:** Accepted for presentation at the 2026 ASEE conference
2. **Work in Progress: Exploring Stakeholder Perspectives in Rural STEM Workforce Development**
 - **Authors:** Whitney Hansberry, Ogochukwu N. Okoani, & Malle R. Schilling
 - **Status:** Accepted for presentation at the 2026 ASEE conference
3. **Cultural Motivations Informing West African International Doctoral Students' Decisions to Study STEM Programs and Expectations while Transitioning into the United States.**
 - **Authors:** Ogochukwu N. Okoani & Jennifer M. Bekki
 - **Status:** Ongoing data collection and analysis.
 - **Publication Venue:** Paper to be published in the Journal of International Students.
4. **The Influence of Rural Identities on Undergraduate Students' Engineering Identity Development**
 - **Authors:** Ogochukwu N. Okoani, Malle R. Schilling & Whitney Hansberry
 - **Status:** Participants have been recruited, and data collection is ongoing.
 - **Publication Venue:** Paper to be published in the Journal of Engineering Education.
5. **“I think he thought I was lazy, but I didn't want to go into his office and say, ‘I'm taking birth control’ [and it made me depressed]: Unpacking the Impact of Personal Challenges on Academic Persistence among White Women and Women of Color in STEM Doctoral Programs**
 - **Authors:** Jennifer Bekki, Madison Natarajan, Kerrie Wilkins-Yel, Kairys Grasty, Ogochukwu Okoani, Shivani Sakri, Aisha Farra, Aashika Anantharaman, Amanda Arnold, Bianca Bernstein, Ashley Randall.
 - **Status:** Manuscript is being finalized for publication.
 - **Publication Venue:** Paper to be published in the CBE-Life Sciences Education journal.

GRANTS OBTAINED

- Arizona State University's Travel Grant for Individual Professional Development, offered through the Graduate Student Government during Summer 2025 - Fund: \$950
- Arizona State University's Ira A. Fulton Fellowship for doctoral students – valued at \$71,500 per year for four years.
- PI, Petroleum Trust Development Fund (PTDF) Scholarship grant for local Ph.D. Program in Nigeria (2017) – Fund: ₦900,000.00.

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- Co-PI (with Abalu B.N), “Quadratic Model for Reduction of Alcohol Content of Palm Wine” TETFUND Sponsored Institute-Based Research- (2016), with a budget of ₦2,000,000.00, Oct. 2016- Sept. 2017.
- Co-PI (with Okoro, S. E.), “Comparative Analysis and Regenerative Studies of Alkaline Modified Groundnut Shell as Adsorbent for the removal of Oil Layer from Polluted Water”, TETFUND Sponsored Institute-Based Research- (2019), with a budget of ₦1,968,105.00, Jan. –Dec. 2020.

Submitted Grant Proposal

- Paul P. Fidler Research Grant offered by the National Resource Center for the First-Year Experience and Students in Transition. Award amount: \$10,000. July 2025.
- The Alliance for Hispanics Serving Research Universities (HSRU) Seed Grant. Award amount: \$5000, August 2025.

UNDERGRADUATE STUDENTS’ RESEARCH PROJECTS SUPERVISION

Name of students	Research Topic	Year of Graduation
1. Chidiebere Juliet Agu 2. Irene E. Mbatugosi 3. Darlinton N. Otike	Comparative Analysis of the Effect of Different Solvents on the Yield of Oil from Avocado Pear Seed	2024
4. Sunday Abuchi Ejelue 5. Jennifer A. Anyaoku 6. Johnpaul Ozukor	Acid Hydrolysis of Cellulose from Corn Cobs.	2024
7. Okezie Elias Odinko 8. Okechukwu R. Obisi 9. Stephen Mbaeze	Comparative Analysis of the Removal of Heavy Metals in Water using Organic (Groundnut Hulls) and Inorganic (Alumina) Adsorbents.	2024
10. Emmanuel Edeh 11. Chukwuma Egbo 12. Stephen Ossai	Production and Characterization of Zeolite from Coal Fly Ash.	2023

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13. Perpetua Ezianya 14. Chioma Nweke 15. Favour Keremu	Production and Characterization of Zeolite from Sugarcane Bagasse-Based Activated Carbon.	2023
16. Moses Onwe 17. Justice Nze 18. Kingsley Ekwueme	Synthesis and Characterization of Zeolite from Paper Sludge using Alkaline Hydrothermal Process.	2023
19. Ruth Ejim 20. Vitalis Umeayo 21. Modesta Chime	Adsorption of Trace Metals in Industrial Wastewater using Activated Carbon Produced from Coconut Shell, 2022.	2022
22. Anthony Ofem 23. Genesis Ukpabio 24. Chidimma Nwata	Production and Characterization of Biodiesel from Animal Fat.	2022
25. Nnaneme Mkpaju 26. Chinaza Elobuike 27. Solomon Amuji	Oil Spills Remediation using Natural Adsorbents.	2022
28. Ifeanyi Augustine 29. Kosarachi Nwafor 30. Loveth Madubueze	Preparation and Analysis of Zeolite-Y using Corn Cobs as a Silica Source.	2021
31. Uzoamaka Odenigbo 32. Martin Owuu 33. Ndidiamaka Nwokolo	Preparation and Analysis of Zeolite-Y using Rice Husks as a Silica Source.	2021
34. Mary Cynthia Ndu 35. Obumnaeme Nwatu 36. Chika Eze	Production and Analysis of Amine-Impregnated Zeolite from Kaolin.	2021
37. Chiamaka Ogbu 38. Chisom Ogbungwu	Corrosion Inhibition of Mild Steel in an Acidic Environment.	2020
39. Sarah Anioma 40. Ogechukwu Nwosu	Kinetics Study on the Hydrolysis of Cellulose from Sawdust.	2020
41. Uchenna Ezi: 42. Chinenye Ugwu	Manufacture of Ceiling Board using Local Raw Materials.	2020

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43. John Nwachukwu 44. Mabel Ezeoha	Comparative Analysis of Coal and Coconut-Based Activated Carbon.	2020
45. Ugochukwu Okwenna 46. Anthony Onah	Extraction of Oil from Breadfruit.	2019
47. Philip Ukeagu 48. Darlington Edeh	Removal of Spilled Oil in Water Using Agricultural Waste Product.	2019
49. Daniel Enekwa 50. Eze Erugo	Analysis and Treatment of Effluent Water from an Industry.	2019
51. Vivian Defokwu 52. Rosemary Nwaoguala	Recycling of Waste Plastic (Polyethylene Terephthalate (PET)) by Glycolysis .	2018
53. Prince Okereke 54. Richard Anyanwu	Recycling of Waste Plastic (Polyethylene Terephthalate (PET)) by Hydrolysis .	2018

PROFESSIONAL ACTIVITIES AND SERVICE

Reviewer Activities

- Reviewer, TETFUND proposals for Research grant/funding - IMT Research and Development Unit, 2020-2024.
- Reviewer for the Frontiers in Education (FIE) Conference, 2025.
- Reviewer for the American Educational Research Association (AERA) Open Journal, 2025.

Volunteering

- Volunteer Mentor, International Research Student Mentorship Program (IRSM), Stella Maris Polytechnic University – Catholic Archdiocese of Monrovia Monrovia, Liberia, **2026**.
- Speaker/Panelist on “Find an On-Campus Position (TA/RA/GSA/Grader)” organized by the International Students and Scholars Centre, Arizona State University, **Fall 2025**.
- Speaker/Panelist on “Being a Ph.D. Student”, organized by the International Students and Scholars Centre, Arizona State University, **Fall 2024**.
- 2019 United Nations World Environment Day Volunteer.

Departmental Level Leadership

Ogochukwu Okoani

- Head, Department of Chemical Engineering, IMT, Enugu, Nigeria (Jan. 2020 – Feb. 2023).
- Project Coordinator, Department of Chemical Engineering, 2017/2018, 2018/ 2019, and 2022/2023 academic years.
- Final year student’s advisor- 2022/2023 and 2023/2024 academic years.

Institution Committee Membership

- Member, IMT Academic Board, January 2020 – February 2023
- Member, IMT Research and Development Unit, November 2020 - July, 2024
- Secretary, IMT Committee on Research and Development Unit, January - July 2024

COURSES TAUGHT

- ChE 221: Material Science
- ChE 310: Polymer Science and Technology
- ChE 215: Corrosion Science
- Che 307: Heat Transfer II
- ChE 410: Chemical Engineering Entrepreneurship
- ChE 405: Unit Operations (V) (Gas absorption)
- ChE 402: Unit Operations (VI) (Separation)

PROFESSIONAL/ PERSONAL DEVELOPMENT ACTIVITIES

S/N	ORGANIZERS	COURSE TITLE	PERIOD
1	NSF Edu Core Research (ECR) Hub	Professional development for Emerging Education Researchers (PEER) Field School	Currently ongoing (July 7 th – July 11 th , 2025)
2	ASU Graduate College	Center for the Integration of Research, Teaching, and Learning (CIRTL) Associate Program	May 19 th – July 1 st 2025
3	ASU’s Academic Support Network	Success in Graduate Writing Camp	June 9 th – 13 th 2025
4	CITI program	IRB- Social and Behavioural Science Research	June, 2024
5	Digital Bridge Institute	Advanced Digital Appreciation Programme for Tertiary Institutions	April 25 th – 29 th , 2022.

		Statistical Package for Social Sciences	
6	Centre for Ethics and Self Value Orientation (CESVO)	Train-the-Trainers Ethical Conduct/Leadership Retreat.	Sept. 28 th – 29 th 2021
7	ICDL Africa	ICDL Programme Training under the sponsorship of TETFUND	May 25 th – 29 th 2020
8	IMT Enugu, Nigeria	IMT Basic ICT Skill Staff Training	Feb. 12 th – 16 th 2018
9	Gloxina Computer Academy	Application of Aspen HYSYS Software in Chemical Plant Design/ HSE Training	June 26 th – 28 th 2014
10	Network for Applied Systems Analysis and Optimization (NASAO)	National workshop on MATLAB/SCILAB for Scientific and Engineering Analyses	June 19 th -21 st 2013

HONOURS AND AWARDS

- Certificate of Appreciation awarded by the International Students and Scholars Centre at Arizona State University during the Fall 2024 semester.
- Doctoral Degree Congratulatory Award by Nnamdi Azikiwe University, Awka, 2023.
- Award of Honour, 2022, Chemical Engineering departmental Fellowship (CEDF), IMT, Enugu, Nigeria.
- World Environment Day Hero, 2019, UN Environment.
- Excellent Leadership Merit Award, 2015, National Union of Nkanu Students (NUNS), IMT chapter.
- Merit Award in recognition of excellent support, 2014, Nigerian Society of Chemical Engineers (NSCHE), IMT Students' Chapter.
- Youngest Lecturer of the year 2011, Nigerian Society of Chemical Engineers (NSCHE), IMT Students' Chapter.
- Best Female Corp member, National Youth Service Corp (NYSC) Batch C, 2008/2009, Omala L.G.A. of Kogi State, Nigeria.