



My Journey as a Woman in Engineering Geology So Far

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1. Breaking Ground in Engineering Geology

As an early-career Engineering Geologist, with only about two years' experience, I have had the privilege of working on different projects and with different professionals across the fields of Engineering Geology and Civil Engineering, which has enabled me to combine my passion for Geology and problem-solving. My journey has been more than just learning about the profession but has been shaped by challenges, opportunities, and a commitment to making an impact in an evolving field.

From the beginning, as some may already know, Engineering Geology wasn't my initial choice, but as I progressed, I became increasingly interested and am now passionate about it, appreciating its critical role in ensuring the safety and sustainability of our built environment. However, I quickly realized that I was part of a minority group in the field.

2. Physical Challenges in the Field and Laboratory

One of my earliest memories during my undergraduate industrial training at the Geotechnical laboratory of a construction company was being the only female in a team of engineers, constantly struggling to find my place among them and to prove myself. On several occasions, I was discouraged from participating in certain laboratory procedures, such as soil compaction and concrete mixes, because it was considered unsuitable for a woman to be involved in these activities; instead, I was encouraged to focus on tests with simpler procedures, including the Atterberg Limits test, particle size distribution, specific gravity, flakiness index, relative density, water absorption, bulk density, and other less physically demanding tests. And there were times I was also discouraged from going to the site for in-situ density testing or involving myself in any site-related work to avoid being overworked. This was good because I still had the opportunity to gain other geotechnical knowledge, and I appreciated it, but I still felt limited since I had not been able to experience some aspects of the work, and I believed that would make me an incomplete Geotechnical laboratory technician. As a result, I always requested inclusion when carrying out the tests and ensured my active participation when permitted to by taking measurements of soil and water samples and even mixing, until my perseverance moved one of my superiors to let me ram one mold during soil compaction testing for a subgrade soil using the BS Ordinary method. I eventually realized that the sample was never meant for actual analysis; it was only a test of my performance due to my persistence! I managed to complete the procedure, but it was tougher than



it seemed. Afterward, I had a headache and muscle aches, relieved that it wasn't the BS Heavy method for the base course.

This experience, however, did not deter me. I believed that if I kept trying, I would get better at it, and so I kept clamoring to take part in other procedures like the concrete mix and even in-situ density.

3. Bias, Perseverance, and Professional Growth

On one occasion, I accompanied my boss in search of a Borrow Pit, deep in a forest away from habitation. It was a bit unnerving, and I remember beginning to wish he had taken someone else with him instead. But at the end of the day, I enjoyed it and learned a lot.

After several experiences, I now understand why I was discouraged, not necessarily out of bias, but because it was quite a strenuous activity for a woman. Still, this wouldn't stop me. I rather handled my determination with this understanding and decided that I would find what works for me so that I could nevertheless provide a strong contribution. After some time, I learned how to balance my responsibilities while continuing to acquire new knowledge. First, I recognized the contributions of my male colleagues and engaged them in the field and laboratory, which was crucial to help me overcome some of the more physical challenges while still gaining knowledge and insight. I also learned and practiced more laboratory tests, which are vital to the profession, and became familiar with data entry, analysis, interpretation, and reporting. Although I adopted these methods for my own benefit, it did not change the way I was sometimes treated based on a lingering bias, especially when I encountered people who still doubt women's place in Engineering Geology. So far, I have dealt with it by proving their words and actions wrong through polite smiles, intelligent conversation, and active work.

4. Peer Support and Professional Inspiration

And finally, I have to admit that achieving this would not have been possible without the support and motivation from professionals before me. One of the people who inspired me and several other young ladies and me at the Nigerian Association for Engineering Geology and the Environment (NAEGE) Conference 2024 is Prof. Salome Waziri, the president of the Women in NAEGE. She said, "Believe you can thrive here, even though you're a woman. Learn, improve your skills, and you'll succeed." I have kept her words with me and often repeat them to myself whenever I feel down. I'm also grateful for the opportunity to work with a kind boss during my undergraduate training, Engr. Emeka Eze, who always gave me the chance to prove myself despite opposition, and to Engr. Babadiya Ebenezer of Mapref Gotechnical, for constantly fostering a level playing ground regardless of gender.



Figure 1 Author on-site for a pile load test with male colleagues.

5. Empowering Others and Hopes for the Future

As a woman in Engineering Geology, I've experienced my share of challenges that come with being in a male-dominated field, ones I believe many women can relate to. And I know there's more to face, as I'm only just beginning. Yet, my journey so far has taught me that with clarity of purpose, determination, resilience, persistence, and collective support, there is a promising future for women in Engineering Geology.

I believe that achieving balance as women in Engineering Geology comes from acknowledging the input of male colleagues, sharpening our skills, establishing strong networks, and, most importantly, never losing faith in ourselves because with these, success is inevitable. The future of Engineering Geology is brighter when every voice and talent, irrespective of gender, is given the chance to thrive.



Figure 2 Author on-site with female colleagues.

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