

## **PERSONAL STATEMENT**

The human society will continue to evolve in a way that no one can have absolute grasp of its dynamics as to be able to proffer solutions to all its problems. This dynamic nature of human society accounts for multi-variant challenges each society encounters at different times.

My interest in Extraction of Geothermal Energy stems largely from my cumulative experience as a Petroleum Geoscientist through which I gained proficiency in regional geological studies. With about 6 years' experience as a Petroleum Geoscientist, I am adept in wild reservoir studies, field development and surveillance, well control, staff mentoring, and I'm familiar with worldwide petroleum regulations. Furthermore, while my on-the-job experience has afforded me a well-rounded skill set, including first-rate field management, I have knowledge in integrating seismic, well and production data to evaluate reservoir characteristics and develop field development strategies. My years of experience has afforded me skills in 3D static reservoir modeling, seismic interpretation skills and advance petrophysical analysis skills using several industry software like SLB Petrel, SLB Techlog, Landmark DecisionSpace, Geographix, DGB OpendTect, Didger tool, and Neural Suites.

My Master's degree in Petroleum Geoscience greatly prepared me for my subsequent professional exploits as it mainly focused on exploration petroleum geoscience thorough training in aspects of subsurface geology, geophysics, and geo-engineering, all relating to the exploration, appraisal, and development of subsurface resources. My study focused on inferring subsurface using seismic attributes by analytically modifying the original seismic data to emphasise certain geological, physical, or reservoir property characteristics, and establishing that the properties are quantitatively connected to the seismic.

My experience has allowed me to execute workflows in a variety of projects including reservoir characterisation of conventional and unconventional reservoirs in the Nigerian Niger Delta Basin. For various projects, I've analysed and visualised seismic properties using seismic data, and I've been in charge of appraising and suggesting prospective hydrocarbon-bearing zones while keeping high quality control and quality assurance requirements for geophysical data. I've worked on a number of oil and gas development projects involving the creation of high-resolution, useful Geocellular models at field and near-field prospect scales, as well as the integration of well, seismic, geological, engineering, and other valuable field data types as needed to keep an up-to-date geological insight of the subsurface and related risk elements.

Concurrently, I have also coached roughly 25 geoscientists and petroleum engineers, including undergraduates, post-graduates, and entry-level professionals.

The recent worldwide attention on the importance of boosting the supply of indigenous, renewable energy highlights the need to re-evaluate all options, especially those that are huge and widely spread internationally. Geothermal energy, produced by both traditional hydrothermal and enhanced (or modified) geothermal systems (EGS), is one such alternative that is frequently overlooked. Other geothermal resources, in addition to hydrothermal and EGS, include coproduced hot water related to oil production, and geopressured resources which comprise hot fluids with dissolved methane, thus the connection with my previous expertise and present interest.

Coal-fired thermal, nuclear, and combined-cycle gas-combustion turbines are the major non-renewable choices for offsetting this expected loss of world energy-generating capacity. Though these are clearly viable possibilities, one of the major worries is the impending significant increase in natural gas consumption and pricing over the next few decades. As a result, significant increases in imported gas will be required to fulfil rising demand, putting global energy security at risk.

In lieu of the formal introduction of my prior experience as a petroleum geoscientist, began the journey and vested interest in geothermal research in the context of abandoned oil wells; and with the great team-work skills and experiences I have garnered over years, I believe it would be a great opportunity to offer immensely to this research as it focuses on the intricate interconnections of aforementioned factors on total well-being and how this interconnectedness interacts with global experiences.

Given your research expertise and interests in fractured reservoir research and methods such as deterministic Discrete Fracture Network modelling etc, I, therefore, believe that the opportunity to work under your mentorship will provide me with the requisite support for my academic and research career progression and advancement.

Also, in my quest for a graduate program that would prepare me for my future career aspiration as a renewable energy professional, Indian Institute of Technology Kharagpur and University of Manchester loomed large because of its research methods in designing courses that not only emphasises on localised needs but also has global reach. The importance of building a career in Geothermal energy cannot be overlooked especially with the current global dispensation,

making a difference by bridging the yawning schism created by the discrepancy in distribution of wealth and resources, thus the focal point in my pursuit of the graduate program.

In conclusion, given my academic background, professional experience, and strong interest in geothermal energy research, and dedication to continuous learning, I believe that the opportunity to join the Quantitative Fractured Reservoirs (QFRRI) group at the Petroleum Centre will enable me to contribute immensely to the success of this project. Therefore, I would be glad to join your research group and the Ph.D. program as a new student. Thank you for your time, and I look forward to hearing from you.