

NAME: KOFI OHEMENG KYEI PREMPEH

**ADDRESS: DEPARTMENT OF MATHEMATICS,
K.N.U.S.T. - KUMASI.**

TEL NO.#: +233240054942/ +233271850720

SKYPE ID: live:prempeh106

E-MAIL: prempeh106@gmail.com / kprempeh@nims.edu.gh

Profile

A resourceful individual with impeccable mathematical modelling, analytical, and scientific computing skills. Looking forward to leverage research potential to advance Science.

EDUCATION

Degree: **MPhil. Scientific Computing and Industrial Modelling**
Research Area: **Petroleum Reservoir Modelling and Simulation**
Institution: Kwame Nkrumah University of Science and Technology - KNUST
Research Centre: National Institute for Mathematical Sciences - Ghana
Duration: August 2014 - June 2017
Scholarship Award: KNUST - Petroleum Geo-Services Research Scholarship

Degree: **B.Sc. Petroleum Engineering (First Class Honours)**
Institution: Kwame Nkrumah University of Science and Technology-KNUST
Duration: August 2009 - June 2013
Scholarship Award: Newmont Ghana Scholarship
Research Facilitator: KNUST - Technip Research Project (Pioneering Group of 2013)

WORK EXPERIENCE

May 2016 - Till Date **Research Associate**
Engineering and Scientific Computing Solutions.

Sept. 2019 - Oct. 2019 **Research Intern/Trainee**
Ghana National Petroleum Corporation(GNPC)

Jan. 2019 - Aug. 2019 **Graduate Teaching And Research Assistant**
KNUST - Department of Mathematics

Sept. 2013 – Aug. 2014	Teaching Assistant KNUST - Department of Petroleum Engineering
June 2012 – Nov. 2013	Mathematics Teacher Elite College
June 2011 – July 2011	Intern/Trainee Ghana National Petroleum Corporation(GNPC)

Published Papers

- Kofi Ohemeng Kyei Prempeh, Larissa Chequer, Alexander Badalyan, Pavel Bedrikovetsky, 2019. "**Effects of the Capillary-entrapped Phase on Fines Migration in Porous Media**", Journal of Natural Gas Science & Engineering – Elsevier, JNGSE-103047. Vol. 73. <https://doi.org/10.1016/j.jngse.2019.103047>.
- K. K. Prempeh, L. Boechat Chequer, A. Badalyan, P. G. Bedrikovetsky. 2019. "**Effects of Kaolinite on Fine Migration and Formation Damage**", Society of Petroleum Engineers, 2020 SPE International Conference and Exhibition on Formation Damage Control – SPE-199293-MS.
- Wilberforce Nkrumah Aggrey, Kofi Ohemeng Kyei Prempeh, Gloria Gyanfi, 2019. "**Numerical Study of the Impact of Surfactant/Polymer Flooding on Different Reservoir Wetting Phases**", Journal of Petroleum Engineering & Technology, STM Journals, Vol.9, No. 1, pp 14-25, <https://doi.org/10.37591/jopet.v9i1.2356>.
- Wilberforce Nkrumah Aggrey, Kofi Ohemeng Kyei Prempeh, Anthony Morgan, 2019. "**Thermodynamic Modelling of the Effects of High Temperatures on Brine Fluid Density**", Journal of Petroleum Engineering & Technology, STM Journals, Vol. 9, No.1, pp 26-35, <https://doi.org/10.37591/jopet.v9i1.2355>.
- Gloria Gyanfi, Wilberforce Nkrumah Aggrey, Ernest Ansah Owusu, Kofi Ohemeng Kyei Prempeh, 2019. "**Polymer Optimisation-Shear Thinning or Thickening?**", Asian Journal of Applied Sciences, AJAS-Vol.7. doi.org/10.24203/ajas.v7i4.5808.

SPECIALIZED SKILLS & ABILITIES

Proficient at:

- Python programming
- MATLAB programming (MRST)
- C/C++ programming
- R-programming
- Data Analysis and Machine Learning
- Petrel E&P Software
- CSS, HTML, PHP, SQL programming

CONFERENCES AND WORKSHOPS

Speaker

Mathematics And Its Application Workshop, 2017

African Institute For Mathematical Sciences, Ghana

Topic: *“Modelling Coupled Geo-mechanic and Multiphase Flow Phenomena in Unconventional Tight Oil Reservoirs.”*

Speaker

NIMS Conference On Scientific Computing And Industrial Modelling, 2017

Kwame Nkrumah University Of Science And Technology

Topic: *“The Boltzmann Transformation Approach to Simulate a Two Phase Radial Diffusivity Model for Tight Oil Reservoirs.”*

CO-CURRICULAR ACTIVITIES

Co-opt Member

NIMS International Conference, Organization Committee
Aug. 2017 - Dec. 2017

Chairman

Petroleum Engineering Student Association (PESA),
Trade & Technology Committee - TRATECH
Aug. 2012 - May 2013

AFFILIATIONS

- Society of Petroleum Engineers (SPE).
- Ghana Institute of Engineers (GhIE).

