

CURRICULUM VITAE (RESUME)

1.1 PERSONAL PROFILE.



1.1.1 Personal Details

Name	Dr .Eng .Daniel Okang'a Oyoo.
Date of Birth	5 th February 1972.
Age	49 yrs
Nationality	Kenyan
Gender	Male
Marital Status	Married
Cell phone	0721-94-24-75 or 0724-60-88-77
E-Mail	oyoo.daniel@ku.ac.ke or danoyoo@hotmail.com
Designation	Lecturer
PF. No	6565
ORCID I.D	https://orcid.org/0000-0002-4241-854X
Google Scholar Address	Dr. Eng. Daniel Okang'a Oyoo.

1.1.2 Academic and Professional Qualifications.

1.1.2.1 Postgraduate

- **1999 – 2003: Russia State University of Oil and Gas.**
(Named after Gubkin)
 - **Ph. D in Petrochemistry and Process Engineering**
 - **Research and Thesis based on:**
Data Analysis of related positions in the area of organic synthesis of oil and gas, by using sulphur cations as the main catalyst to demonstrate the ability to improve petroleum production under ecologically friendly conditions, in specific chemical processes.
- **1998 – 1999: Moscow State Academy of Fine Chemical Technology.**

(Named after Lomonosov).

- **Masters of Science (M.Sc) in Chemical and Process Engineering** (Petrochemical Engineering).
- **Research and Thesis based on:**
Analysis of parametric areas in reactors and rectification columns used in petroleum Refineries, based on the chemical reactions of the type
 $A + B = C$.

1.1.2.2 Undergraduate

- **1992 – 1998: Moscow State Academy of Fine Chemical Technology.**
(Named after Lomonosov).
 - **Bachelor of Science (B.Sc)** in Chemical Engineering and Biotechnology.
 - **Project and Thesis based on:**
Attaining 100% conversion in Petrochemical processes by using the principle of spreading concentration poles as a result of chemical reactions.
- **1991 – 1992: Moscow State University of Chemical Technology.**
(New Moscow.)
(Named after Mendeleev)
Certificate of proficiency in Russian language.
- **1990 – 1991: The University of Nairobi, Nairobi, Kenya.**
Enrolled for B.Sc .General Degree program.

1.1.2.3 High School.

- **1987 – 1990: The Highway Secondary School Nairobi, Kenya**
Kenya Certificate of Secondary Education (K.C.S.E)

1.1.2.4 Primary School.

- **1978 – 1986: Madaraka Estate Primary School, Nairobi, Kenya**
Kenya Certificate of Primary Education (K.C.P.E)

1.1.3 Employment History /Work Experience

- **Feb 2015 to date** Lecturer, Department of Gas and Petroleum Engineering, School of Engineering and Technology
Kenyatta University.

- **Feb 2012 – 2015** Lecturer, School of Engineering and Technology. Kenyatta University.
Administrative assistant, Dean's Office School of Engineering and Technology, Kenyatta University.
- **April 2004 -2012** Lecture –Industrial Chemistry, School of Pure and Applied Sciences, Chemistry Department, Kenyatta University.
- **1996 – 2003:** High School Tutor in Science Subjects.
(Chemistry, Physics, Mathematics and Biology)
For the British School and Anglo American School in Moscow Russia.
- **1995 – 1996:** Store Manager, Azteca Restaurant in Moscow, Russia.
- **1990 – 1991:** Office Clerk, Shirikon Publishers, Nairobi, Kenya.

1.1.4 Major Achievements since Last Appointment/Awards.

- Received a **certificate of recognition** from the Vice Chancellor Kenyatta University for having served as a **Staff Commissioner** in the Kenyatta University Students Association Electoral commission in 2016.
- Received **Certificate of Attending the Incubator Management Workshop** at the Hochschule Neu-Ulm University of Applied Science, -Neu-Ulm –December 2019.
- Received **The Gold Standard Certificate of Honor** From the international Society of Petroleum Engineers (S.P.E).For the best managed S.P.E Student chapter in the world in 2017.
- Received **Certificate of Honor** from Kenyatta University towards University achieving the ISO 9001:2000 certification in- May 2008.
- Received a **Certificate of Merit** for development of Performance Audit and indicator manual for the then, Ministry of Local Government of Kenya and the Development of Performance Indicators for Local Authorities in Kenya, to monitor water treatment, solid waste management and General Environmental Management among others - August 2009.
- Received a **Certificate of Honor for being Patron and Founder of Kenyatta University Industrial and Analytical students clubs (KUSIAC)** - January 2007.
- Received a **Certificate of membership** for American Chemical Society. – May 2003.

1.2 RESEARCH AND PUBLICATIONS

1.2.4 Articles in Referred Journals.

1. Nzomo T.K., Adewole.S. E., Awuor K.O., and **Oyoo.D.O.**(2021).Mathematical Description of a Bounded Oil Reservoir with a Horizontal Well: Late Time Flow Period.ISSN:2710-0758. DOI 10 .33886/ajpas.v2il.188.Journal homepage:<http://journal.ku.ac.ke/index.php/AIPAS>.
2. Nzomo T.K.,Adewole.S. E.,Awuor K.O., and **Oyoo.D.O.** (2021).Mathematical Description of a Bounded Oil Reservoir with a Horizontal well: Early Time Flow Period.ISSN:2710-0758 DOI 10.33886/ajpas.v2il .190.Journal homepage:<http://journal.ku.ac.ke>
3. Mutili,P.M., Adewole,S.E,Awuor K.O., and **Oyoo.D.O.**(2020).Effects of Fluid and Reservoir Characteristics on Dimensionless Pressure and Derivative of a Horizontal Well in a Bounded Oil Reservoir with Simultaneous Single Edge and Bottom Water Drive. IOSR Journal of Mathematics (ISOR-JM) e-ISSN: 2278, p-ISSN:2319-765X. Volume 16,Issue 5 Ser.IV(Sep-Oct.2020),PP 01-13.www.iosrjournals.org
4. Mutili, P.M., Adewole,S.E, Awuor K.O., and **Oyoo,D.O.**(2020).A Mathematical Model for Pressure Distribution in a Bounded Oil Reservoir Subject to Single –Edge and Bottom Constant Pressure. IOSR Journal of Mathematics(IOSR-JM) e-ISSN:2278,p-ISSN:2319-765X.Volume 16,Issue 4 Ser.1 (Jul-August.2020)P 30-36.www.iosrjournals.org
5. Mugendi, D.M., Mireri,C.,Kibwage, J., and **Oyoo, D.O.**(2020).Assesent of Land Use/Land Cover Changes Linked to Oil and Gas Exploration. Tema. Journal of land use, Mobility and Environment, 13(2), 169-190.<http://dx.doi.org/10.6092/ISSN 1970-9870/6739>.
6. Wambua, C.M., Joel, O.F.,Ikiensikimama,S.S. and **Oyoo, D.O.**(2019).Validation of Calculated Flow Regime Using Experimental Data with Standard Methods of an Existing Software.Uniport Journal of Engineering and science research (UJESR)Vol.4,Issue 1,2019,61-66.ISSN:2616-1192.
7. Wambua, C.M., Joel O.F., Ikiensikimama ,S.S.and **Oyoo, D.O.** (2020).Validation of Calculated Pressure Drop Using Experimental Data with Standard Methods of an Existing Software. Journal of Engineering Research and Reports. JERR, 9(3):1-10, 2019; No JERR.53705 ISSN: 2582-2926
8. Otieno, J. P., **Oyoo, D. O.** and Bichanga, R. (2018).Characterization of Dead Crude Oil from Ngamia Region Turkana county Kenya.Global Sientific journals.Volume 6, issue 12, December 2018, Online: ISSN 2320-9186.www.globalscientificjournal.com
9. Odundo, J. O., **Oyoo, D.O.** and Nawiri, M. P (2013).The artemisin potential of leaves from cultivars and wildlings of *Artemisia annua* L. grown in Western Kenya. International Journal of Education and Research Vol. 1 No. 7 1-10.
10. Odundo, J. O., **Oyoo, D.O.** and Nawiri, M. P. (2013) The *Artemisia* potential of flowers from *Artemisia annua* L. grown in Western Kenya. Industrial Crops and Products 49(2013) 233–236.
11. Zavarotny, B. A., **Oyoo, D. O.** and Korenev K. D. (2002). Formation of Associates of Formaldehydes and their inter-conversion to methylene bis-alkylphenols (MBAP) in Petroleum Refinery and Petrochemical Technology Journal Vol. 11 No ISSN 02333-5727 25-30.

12. Zavarotny, B. A., **Oyoo, D. O.** and Korenev K. D. (2002). Ecologically friendly method of producing methylene bis-alkyl phenol (mbap) and the petrochemical products based on this method in Petroleum Refinery and Petrochemical Technology Journal Vol. 1 No ISSN 02333-5727 27-32

1.2.2 Other publications.

1. Salokin, A. B., **Oyoo, D. O.** and Nazinski, A. (1997) **Attaining 100% Conversion by Using the Principle of Spreading Concentration Poles as a Result of Chemical Reaction.** Unpublished B.Sc. Thesis, Moscow State Academy of Fine Chemical Technology, 1997.
2. Salokin, A. B., **Oyoo, D. O.** and Nazinski, A. (1999) **“Analysis of Parametrical Areas of Reactors and Rectification Columns of Reaction of Type $A+B = C$ ”** Unpublished M.Sc. Thesis, Moscow State Academy of Fine Chemical Technology.
3. **Oyoo, D. O.** and Zavarotny, B.A. (2003) **“Data Analysis on related Position in the Area of Organic Synthesis (of Oil and Gas) by Using Sulphur Cations as the Main Catalyst to Demonstrate the Ability to improve reduction Under Ecology Friendly Conditions, in Specific Chemical Processes,”** Unpublished Ph. D Thesis, Russian State University of Oil and Gas, 2003.

1.2.3 Conferences Attended.

1. Nuclear power plant Training program for Kenya, held from 13th to 28th August 2019 at Kenyatta University Nairobi.
2. Kenya Petroleum Technical Assistance project (KEPTA) Validation workshop for the development of resettlement policy framework for the petroleum sector in Kenya held at the intercontinental Hotel Nairobi Kenya on the 12th of June 2019
3. Kenya Petroleum Technical Assistance Project (KEPTA) Conference held at the Intercontinental Hotel Nairobi, Kenya on the 21st of May 2019.
4. Inaugural Transmission Research conference, organized by the Kenya Electricity transmission Company (KETRACO) held at the Intercontinental Hotel, Nairobi, Kenya on the 23rd May 2019.
5. Kenya petroleum technical Assistance project (KEPTA) validation workshop for the development of transparency and accountability framework for the petroleum sector in Kenya. Held at the Strathmore University, Nairobi Kenya, on the 15th of May 2019.
5. National scoping workshop for the Strategic Environmental and social Assessment (SESA) for The petroleum sector in Kenya.

6. Kenya Electricity Generating Company (Ken Gen) Good to Great (G2G) Technical conference, held at the safari park hotel Nairobi, Kenya, on the 28th of June 2016.
7. Opportunities for capacity building in the oil and Gas Sector and other Extractives in the Eastern African Region. Organized by the Morendat Institute of Oil And Gas (MIOG). Paper Presented: **Oyoo,D.O** and Kiriamiti: *Opportunities from the petrochemicals And requisite skills*. Held at Morendat Institute Naivasha from 16th to 17th May, 2018.
8. Oil and Gas pipeline competency based curricula validation workshop organized by Kenya Pipeline Company limited (KPRL) Held at the Panari Hotel Nairobi on the 31st of May, 2016.
9. Symposium on Capacity Building in Sustainable Resource Development in Africa Held on the 23rd of Mach 2016, at the Japanese Embassy in Nairobi. Presented:**Oyoo, D.O.** :*Petroleum ,Exploration,drilling,and production.Its realization challenges and Expectation in Kenya*.
8. The 7th International Conference of the Kenya Chemical Society 15th to 18th October 2012 Botanic Garden Maseno University, Kenya. Theme: Chemical Sciences as a Vehicle for Achieving Kenya's vision 2030. Presented: Odundo, J. O., **Oyoo, D.** and Nawiri, M. P (2013).*The artemisin potential of leaves From cultivars and wildlings of Artemisia annua L. grown in Western Kenya*.
9. The 2nd International Symposium for Science and Technology -Carbon dispersion System Held in Ufa.Russia. (2000)Presenter: Zavarotny,V.A., **Oyoo, D.O.**,*Production of MBAP in the Presence of sulphonium-cation catalyzt*.
10. The 4th Technical Conference in commemoration of 300 years or engineering education in Russia.(2003)Presenter; **Oyoo,D.O.**,Zavarotny,V.A. *Mechanisms of synthesis of MBAP used in industrial Chemical Production.* **Oyoo, D.O.**,Zavarotny,V.A. *Structure and composition of transit products in the synthesis of MBAP*.
11. The 75 years memory of organic chemistry and petro chemistry. (2002) Presenter; Zavarotny,V.A., **Oyoo, D.O.**,Zavarotny,V.L. *Production of MBAP ,by using Ions of Surface active substances*.

1.3 QUALITY TEACHING AND LEARNING.

1.3.1 Center of Teaching Excellence and valuation.

(Student lecture Evaluations for the Academic Years);

- 2010 to 2011 Min Grade of B
- 2011 to 2012 Min Grade of B
- 2012 to 2013 Min Grade of A
- 2013 to 2014 Min Grade of A

1.3.2 Successful Postgraduate supervision (M.Sc)

1. 2013; **(M.SC), Joseph Ochieng Odundo** B.Ed.(Sci)REG.NO;I56/CE/14147/09. *Quantification of Artemisia in flowers and leaves of cultivars and wildlings of Artemisia Annus L. in Western Kenya soils*.

2. 2019; **(M.Sc), Otieno Judith Peres** B.Ed (Sci) REG; NO I56/CE/25227/2013.
Characterization of Dead crude oil from Ngamia Region Turkana County, Kenya.

1.3.3 Successful Postgraduate supervision (Ph.D)

1. 2017; **(Ph.D), Sarah Kadesa Vugigi** (M.PHARM)REG.NO;P97/25201/2013.
Industry Assessment of the Pharmaceutical Manufacturing in Kenya to forecast in local Production sufficiency.
2. 2020; **(Ph.D) Chris Wambua** (M.Sc) *Design and optimization of Efficient Natural gas pipeline distribution system for the Kenyan oil fields. University of Port Harcourt.*

1.3.4 On-going Postgraduate supervision (M.Sc)

1. .2005; **(M.Sc), Stanley Madaraka C.Kidondi** (B.Ed.Sci) REG NO I56/13111/2005.
Kinetics and Equilibrium studies of coffee (coffea Species) husks as bio sorbent for Cadmium (II) and Lead (II) Ions.
2. 2012; **(M.Sc), Samuel M.Kariuki** (B.Phil.) REG NO: JI04/23381/2012.
Engine performance and Emission for Petro-Diesel and Transesteremified biodiesel from Ricin communis Beans grown at Mwea ,Kirinyaga.county.
3. 2012; **(M.Sc),Linet Kwamboka Ondongo** (B.Ed) *.Quality assessment of Honey produced by Apis Mellifera from suba Region, Homabay county,Kenya.*

1.3.5 On-going Postgraduate supervision (Ph.D)

1. 2016; **(Ph.D) Nzomo Timothy Kitungu**,(M.Sc) REG NO:I84/33007/2015.
Well test Analysis of a Horizontal well in a completely bounded Reservoir.
2. 2016; **(Ph.D) Mutili Peter Mutisya**,(M.Sc) REG NO;I84/33008/2015.
Simulating pressure distribution in a bounded layered oil reservoir with lateral wells.
3. 2011; **(Ph.D) Kiama Philip** (M.Sc) REG NO; N85/22657/11.
Sanitation standards and their implications on sanitation provisions in Karengeta And Ongata Rongai Areas.

1.3.6 Professional courses, Training and Skills.

- **2019 July;** Training in General requirements for competence of testing and calibration laboratories work shop .ISO/IEC 17025:2017.
- **2017 November:** Hochschule Neu –Ulm University of Applied Sciences and Kenyatta University. Applied Entrepreneurship Educational Program (AEEP).
Certified AEEP Trainer.
- **2014 March:** National Institutes of Health and Kenyatta University, (Ethical and Responsible Conduct of Research).
Certificate in Ethical and Responsible Conduct of Research.

- **2013 May to November:** CENTER FOR TEACHING EXCELLENCE AND EVALUATION. (KENYATTA UNIVERSITY)
Certificate in Teaching Methodology.
- **2009 May to June:** KENYA BUREAU OF STANDARDS (KEBS).
Certificate in Environmental Management Systems.
(ISO 14001:2004)
- **2009 May:** KENYA BUREAU OF STANDARDS (KEBS).
Certificate in Occupational Health and safety.
(OHSAS 18001:2007)
- **2008 February :** SGS KENYA L.T.D (Internal Quality Auditing Course)
Certificate in Internal Auditor Course.
- **2007 March:** KENYA BUREAU OF STANDARDS (KEBS).
ISO 9001: 2000: Quality Management Systems, Training and Process
Monitoring and Continual Improvement.
Certificate in ISO 9001:2000 Implementation

1.4 **PROFESSIONAL CONSULTING**

1.4.1 **Consulting for External Industry/Academic Institutions**

- March 2018: Appointment to National Oil Cooperation of Kenya Evaluation Committee of the request for proposal for onshore Drilling Operations, as a consultant with Kenya Institute of Supplies Management.
- June 2018: Consultancy services for National Oil of Kenya, (NOCK) on post qualification due diligence assessment for provision of a shore drilling operation partnership between National Oil Corporation of Kenya (NOCK) and Marriot Drilling Group of Chesterfield in United Kingdom.
- November 2018: Consultancy services for National Oil of Kenya, (NOCK) on post qualification due diligence assessment for provision of a shore drilling operation partnership between National Oil Corporation of Kenya (NOCK) and KCA Deutag Portlehen, Aberdeen.
- Consultancy services for National Oil of Kenya, (NOCK) on post qualification due diligence assessment for provision of a shore drilling operation partnership between National Oil Corporation of Kenya (NOCK) and KCA Deutag Drilling GmbH in Turkey.
- September 2016: Consultancy services for Mount Kenya University under commission for university Education for the review and development of the Petroleum Exploration and Production Technology course, as an Adjunct faculty.

- August 2009: Consultancy services for Ministry of Local Government for The Development of Performance Audit Systems, Indicator Manual and Development of indicators for local Authorities to monitor water treatment, solid wastes management and Environmental Management among others.

1.5 ADMINISTRATIVE POSITIONS HELD

1.5.1 Recognized Administrative Positions in the University.

- February 2015.to date: Appointed and Renewal of appointment as Chairman of Gas and Petroleum Engineering Department.
- February 2013 to February 2015: Appointed and Worked as a warden for Nyayo Hostels (Male students).

1.5.2 Other Responsibilities

- February 2021: Renewal of contract as a Professional mentor at the Chandaria Innovation, Incubation and University Industry linkages.
- March 2021: Appointed Chairman to the, KUSA Electrol Commission (2020).
- February 2020: Extension of Appointment as chairperson Department of Gas and Petroleum Engineering.
- June 2019: Appointed as a Member to a committee to come up with specialized courses for Mama Ngina University College.
- February 2019: Appointed as a Member to the Inspection and Acceptance committee-Gas and Petroleum Engineering Equipment.
- March 2019: Appointed as a Professional Mentor at the Innovation, Incubation and University Industry Linkages.
- April 2019: Renewal of Appointment as Chairperson, Department of Gas and Petroleum Engineering.
- 2019 : Appointed to Chair the tender committee for the Department of Physics.
- September 2018: Appointed as a Member to the KUSA Elections Appeals Committee (2018).
- May 2017: Appointed as a Member to a committee to prepare MOA with Masinde Muliro University of science and Technology (MMUST) and Mogadishu University.
- October 2017: Appointment as a Member to a Tender supply, Delivery, Installation, Training and

- August 2017: Appointed as The Chairman, committee to Appraise Performance of the Kenyatta University Petrol Station.
- February 2017: Renewal of Appointment as Chairman Department of Gas and Petroleum Engineering.
- July 2016: Appointed as a Member to the Infrastructural Development proposal committee.
- August 2016: Appointed as a permanent member KUSA Electoral commission.
- September 2016: Appointed as a commissioner to the KUSA Electoral commission-2016.
- September 2016: Appointment to the school of Engineering and Technology South Bank University collaboration committee.
- September 2015: Appointed to a Subcommittee for the Chapter on Stakeholders Engagement for Kenyatta University Strategic plan.
- October 2015: Appointment as a member to a Tender Evaluating Committee for installation and commissioning of petroleum Laboratory Equipment.
- August 2015: Appointed as Chairman, committee to Audit and Rationalize the Labor on sites.
- June 2015: Appointment as a member to the Centre for Career Development and Placement Board.
- February 2015: Appointed as a Staff Mentor for the Academic Year 2017/2018.
- January 2014: Appointment to the Planning committee for the 6th ICAT Conference on Appropriate Technology.
- November 2014: Appointed as the Petroleum Engineering Programme Coordinator.
- November 2013; Appointment to a committee to Develop a Partnership Between Kenyatta University and the Safaricom Foundation.
- January 2013: Appointed to a committee to develop Petroleum Engineering Curriculum.
- July 2013: Appointed as a member to a Committee to Develop a Center of Excellence in Petroleum and Energy
- May 2013: Appointed as a member of the Inter-School Research Review Committee.
- Appointed Chairman Board of undergraduate Students School of Engineering and Technology.
- September 2013; Appointed to a committee to work on Kenyatta University and National Oil Corporation Collaboration.
- November 2012: Appointed as a Staff Mentor for Academic year 2012/2013.

- July 2007;Conducted a survey which led to the introduction of Industrial Chemistry and Analytical Chemistry with Management Programs - 2007
- Coordinated Industrial Chemistry and Analytical Chemistry programs in Chemistry Department Kenyatta University – April 2004 to February 2012.

1.6 PROFESSIONAL AFFILIATION

- 2003 to Date, Joined the American chemical society
- 2004 to Date, Joined The Kenya Chemical society
- 2007 to Date, joined The International Society of Petroleum Engineers
- 2015 to Date, Joined Engineering Board of Kenya.

1.7 REFEREES

PROF.RUTH WANJAU
KENYATTA UNIVERSITY
CHEMISTRY DEPARTMENT
P.O BOX 43844-00100
NAIROBI
TEL: 810901-20/811622 MOBILE: +254 722423183.

DR. RICHARD MUSAU
CHAIRMAN CHEMISTRY DEPARTMENT
KENYATTA UNIVERSITY
P.O BOX 43844 – 00100
NAIROBI
TEL: +254721615630

PROF PENINAH ALOO OBUDHO
P.O BOX 51336 – 00200
TEL: +254 716209522
EMAIL: booksparlour@yahoo.com

• **DR. DANIEL OKANG'A OYOO**

• **SIGNATURE.....**

DATE.....