

CURRICULUM VITAE



**ISAAC OGANGU JUMBA
(BSc, MSc, Ph.D)**

**PROFESSOR OF CHEMISTRY
FACULTY OF SCIENCE AND TECHNOLOGY
UNIVERSITY OF NAIROBI**

A. SYNOPSIS

Prof. Jumba is a Kenyan Citizen by birth, with origins in Vihiga County of Western Kenya. He is married with children.

His academic life started with primary education at Womulalu and Gavalagi Primary Schools (1961 – 1967) before joining Kakamega High School (1968 – 1971), and Murang'a High School in Murang'a County (1972 – 1973) for "O" and "A" levels, respectively. He then proceeded to the University of Nairobi for a Bachelor of Science degree in Chemistry and Biochemistry (1974 – 1977), Master of Science in Chemistry (1978 – 1980), and finally Doctor of Philosophy in Chemistry (1986 – 1989) with a special attachment at the Moredun Research Institute and University of Edinburgh, Scotland (1988 – 1989), for a course in Analytical Chemistry and Animal Nutrition under sponsorship of the British Council.

His working career started in the Civil Service as a Research Officer in the then Ministry of Agriculture (1977 – 1985) where he worked in several research centres under the then Kenya Agricultural Research Institute, now called Kenya Agricultural and Livestock Research Organization (KALRO). He then joined the University of Nairobi as a Tutorial Fellow in September 1985 where he progressed to Lecturer (1987), Senior Lecturer (1993), Associate Professor (1998), and finally Professor (2006) in the Department of Chemistry, College of Biological and Physical Sciences, Chiromo Campus.

As he was pursuing his academic career, he also took up administrative duties as Chairman of the Faculty of Science Postgraduate Studies Committee (1993 – 2001), Chairman, Department of Chemistry (2001 – 2007); Associate Dean (Science), Kenya Science Campus (August 2007 –

October 2007), Deputy Principal, College of Education and External Studies in Charge of Kenya Science Campus (formerly Kenya Science Teachers College) (October 2007 – May 2013), Principal, College of Education and External Studies (May 15th 2013 to June, 2021). He was appointed Dean of the Faculty of Education in July 2021, following restructuring that created faculties and disbanded Colleges and schools in the University.

Prof. Jumba therefore has 8 years of experience in the Civil Service; 12 years of dedicated service as a member of the University of Nairobi senior management; 21 years as a member of the University of Nairobi Senate, and 36 years of teaching experience at the University of Nairobi.

Prof. Jumba has published over 70 scientific journal articles, book chapters and research papers that have made him a distinguished Google Scholar cited internationally. He has also successfully supervised and mentored numerous postgraduate students at masters and PhD levels.

Prof. Jumba has also received a number of awards and certificates in recognition of his achievements. Notable among these is the World Bank End-of-Project Certificate of Merit award for being ranked 2nd out of 145 Agricultural Research Projects evaluated in 2003.

In the cause of his duties as Deputy Principal (6 years) and Principal of the then College of Education and External Studies (8 years), Prof. Jumba successfully initiated a number of development projects including facelift of teaching and learning facilities as well as improvement of the work environment in the College, and construction of state-of-the art Science Laboratories and Lecture Theatre at Kenya Science Campus. In addition, several international links and collaborations were established to enhance benchmarking of academic programmes, visibility, and image of the College.

The on-going collaborations with the Faculty of Educational Sciences at the University of Helsinki, and Linköping University, Sweden are two notable examples. During the same period (2013 – 2021) the College hosted 11 international conferences and numerous workshops to foster academic scholarship.

PRESENTATION OF CV:

This Curriculum Vitae was last updated in December 2021. For ease of reference, the content is organized and presented as follows:

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B. PERSONAL PARTICULARS

CURRENT DESIGNATION: Dean Faculty of Education
University of Nairobi, Kenya

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NATIONALITY: Kenyan

DATE AND PLACE OF BIRTH: 22nd February, 1954, Central Maragoli
Location, Vihiga County, Western Kenya

ACADEMIC DESIGNATION: Professor

ACADEMIC QUALIFICATIONS: BSc. Chemistry and Biochemistry (1977)
MSc. Chemistry (1981), University of Nairobi
PhD Chemistry (1989), University of Nairobi
Certificate in Analytical Chemistry, Animal Nutrition and
Biostatistics (Moredun Research Institute, Edinburgh
Scotland).

LANGUAGES: English, Swahili, Luhya

MARITAL STATUS: Married with Children

C. EDUCATION BACKGROUND

Institution	Date	Qualification
Moredun Research Institute Edinburgh, Scotland (Special Attachment)	1988 – 1989	Advanced PhD course in Chemical Analytical Techniques, Animal Nutrition and Biostatistics
University of Nairobi	1986 – 1989	PhD in Chemistry
University of Nairobi	1978 – 1980	MSc. (Chemistry)
University of Nairobi	1974 – 1977	BSc (Chemistry & Biochemistry)
Muranga High School	1972 – 1973	East African Advanced Certificate (A – Level)
Kakamega High School	1968 – 1971	East African Certificate of Education (O – Level)
Gavalagi Primary School	1967	Primary Education
Womulalu Primary School	1961 – 1966	Primary Education

D. ADMINISTRATIVE EXPERIENCE

July 2021 to date	:	Dean, Faculty of Education
May 15, 2013 to July 2021	:	Principal, College of Education and External Studies University of Nairobi
October 2007 - May, 2013	:	Deputy Principal, College of Education and External Studies in charge of Kenya Science Campus, University of Nairobi
November 2001 – June 2007	:	Chairman, Department of Chemistry College of Biological and Physical Sciences, University of Nairobi
1993 – October 2001	:	Chairman, Faculty of Science Postgraduate Studies Committee, College of Biological and Physical Sciences, University of Nairobi

E. CAREER PROGRESSION

- December, 2006 to date : Professor of Inorganic/Analytical Chemistry, Department of Chemistry, University of Nairobi.
- August 1998 – December 2006 : Associate Professor, Department of Chemistry, University of Nairobi.
- November 1993 to July, 1998 : Senior Lecturer, Department of Chemistry, University of Nairobi.
- April, 1987 to October, 1993 : Lecturer, Department of Chemistry.
- September 1985 to March, 1987 : Tutorial Fellow, Department of Chemistry University of Nairobi.
- June, 1985 to August, 1985 : Senior Research Officer and Head of Biochemistry Section, National Agricultural Laboratories, KARI, Nairobi.
- July 1977 to May 1985 : Research Officer and Head Chemist, Animal Research Division, National Agricultural Research Station Kitale (KARI)
- November, 1971 to May, 1972 : Trainee Technician Kenya Power and Lighting Co., Training School, Ruaraka, Nairobi.

F. WORK EXPERIENCE AND ACHIEVEMENTS

I. Dean, Faculty of Education

Major Objectives

1. To manage the Faculty resources and facilities optimally.
2. To manage all academic programmes in the Faculty.
3. To produce quality graduates
4. To promote academic scholarships

Duties and Responsibilities

1. Provide academic and administrative leadership at the Faculty.
2. Propel the Faculty in matters of performance and programme delivery.
3. Chair Faculty Academic and Faculty Management Committee meetings.
4. Perform any other duties as may be assigned by the Vice Chancellor.

Achievements:

1. Successfully managing academic programmes
2. Providing administrative leadership in the Faculty

2. Principal, College of Education and External Studies.

(May 15th 2013 to June 2021)

Major Objectives:

1. To effectively manage of the College resources and facilities
2. To produce high quality graduates
3. To improve University ranking both nationally and internationally
4. To enhance quality of academic programmes to match industry needs
5. To intensify enrolment for University education at all campuses and Extra-Mural Centres.

Duties and Responsibilities:

1. Provision of leadership and promotion of efficient management of the College.
2. Continue to propel the College in matters of performance contracting as had been done since 2007/2008.
3. Membership of every management at the College.
4. Optimal management of College resources.
5. Exploit available opportunities to make the College grow in training and services.
6. Chair Appointment Committees for Grades I-IV, A-F, and Academic Staff upto Graduate Assistant, Tutorial Fellows and Assistant Lecturer.
7. Perform any other duties assigned or delegated by the Vice Chancellor (Statute I.II).

Achievements:

1. Managed the College optimally and provided administrative leadership that has ensured continuity in operations, teaching and learning between May 15th, 2013 and June 2021.
2. Effectively managed the College Performance Contract to achieve Position 1 overall among the six Colleges of the University between **2007/2008 and 2013/2014** with “Excellent” score and Position 3 in 2019/2020.
3. Fast-tracked the construction of School of Education Car Park at Kikuyu Campus in 2015.
4. Facilitated construction of 400 capacity Cafeteria at Library Hill Complex Kikuyu Campus.
5. Maintained enhancing revenue generation by the College, rising from Kshs.538M in 2007/2008 to a peak of Kshs.1.013B in 2014/2015.

6. Successfully hosted 11 International Conferences and two workshop. These are:

- 1) **Emerging Role of Victimology and Victim Assistance Services in Changing Times.** 4th Annual International Conference on Research and Innovation in Education. 22 – 23 November 2021
- 2) **Collaborative and Problem Solving based Teacher Education in the 21st Century.** 3rd Annual International Conference on Research and Innovation in Education. 14 – 15 October 2020
- 3) **Re-thinking Teacher Education and Management in the 21st Century and Beyond.** 2nd Annual International Conference on Research and Innovation in Education. 23 – 24 October 2019.
- 4) **Education Reforms – Towards Sustainable Development.**
1st International Research Conference in Education. 24 – 26 October 2018.
- 5) International Conference on Value Creating Education for Sustainable Development – Chiromo Campus University of Nairobi, 2017.
- 6) International Conference on Value Creating Education for Sustainable Development In collaboration with Soki University, Japan Kenya Science Campus, 2016.
- 7) The Nairobi Symposium: Maximizing Impact of Women, Peace and Security Policies in Africa. Jointly sponsored by The Institute for Inclusive Security and University of Nairobi. July 22 – 25, 2014. Grown Plaza Hotel, Nairobi
- 8) Distance Education and Teacher Education in Africa (DETA 2013) hosted at Kenya Science Campus in collaboration with University of Pretoria: July 29th – 1st August, 2013. Participants were drawn from 37 countries around the world.
- 9) Pan-African Reading for All Conference hosted at Kenya Science Campus from August 12th -16th 2013. Under sponsorship of the Canadian Organization for Development through Education (CODE).

- 10) Association of Commonwealth Universities Conference and Centenary celebrations held at Taifa Hall and Mount Kenya Safari Club, 26th – 30th September, 2013.
 - 11) Africa for Research in Comparative Education Conference (AFRICE) held at Kenya Science Campus in June 2015.
7. Launched the University of Nairobi Alumni Association Education Chapter in 2015.
 8. Refurbished the entrance to the College headquarters to enhance visibility.
 9. Facilitated the public launched 8 Flagship Programmes to support the realization of the Kenya Vision 2030
 - 1) Master of Education in Educational Foundations with specialization in History of Education, Sociology of Education, Philosophy of Education and Comparative and Contemporary Issues in Education
 - 2) Master of Education in Educational Administration and Planning with specialization in: Economics of Education, Educational Planning, Educational Administration, Education in Emergencies, Curriculum Studies and Corporate Governance.
 - 3) Master in Distance Education
 - 4) Master of Arts in Peace Education
 - 5) Master of Arts in Project Planning and Management
 - 6) Bachelor of Education in ICT at Kenya Science.
 - 7) Master of Education in Physical Education and Sport.
 - 8) Master of Arts in Religious Studies

II. Deputy Principal, College of Education and External Studies, (October 3rd, 2007 – May 15th, 2013)

Major Objectives:

1. To transform the acquired Kenya Science Teachers College (KSTC) into a University of Nairobi Campus status.
2. To phase out the existing Diploma in education programme and introduce degree courses.
3. To effect smooth transition and integrate hired KSTC staff into University Service.
4. To manage the Campus effectively

Duties and Responsibilities:

1. Administrative and Academic Head of the Kenya Science Campus.
2. Ensure effective transition and create an appropriate teaching and learning environment commensurate with University of Nairobi standards.
3. Launch Bachelor of Education (Science) and other programmes at the Campus
4. Manage campus resources optimally.
5. Play a leading role in Strategic Planning and Performance Contract of the College.
6. Coordinate improvements, maintenance and repair of existing physical facilities at Kenya Science Campus.
7. Successfully manage the phasing out of the Diploma programme of the Ministry of Education.
8. Chair Performance Contract Meetings at the College on behalf of the Principal.
9. Carry out any other duties as may be assigned by the Principal or Vice Chancellor.

Achievements:

1. Became a team player in the College Management Board.
2. Managed the Campus resources optimally.
3. Developed a plan to grow and refurbish the Campus in an effort to increase student enrolment and fees collection.
4. Successfully managed the transition and transformation of Kenya Science Teachers College (as the Ministry of Education institution) to University of Nairobi Campus status.
5. As a result of Achievement No. 3 above, contributed to revenue growth from Kshs.538 Million in 2007/2008 to 988.5 Million in 2013/2014, translating to 84% growth.
6. Successfully launched B.Ed Science and B.Ed ICT programmes at Kenya Science Campus to full cycle with student population of just over 1000.
7. Successfully phased out the Ministry of Education Diploma Teacher Training programme. Teaching Practice supervision was successfully undertaken.
8. Successfully held three graduation ceremonies for the Diploma students at Kenya Science on behalf of the Ministry of Education in 2007, 2008 and 2009.
9. Developed a customized 2007 -2012 Campus Strategic Plan whose targets were met within the period.
10. Provided technical input and support during the construction and equipping of the new Science Laboratories and Lecture theatre.
11. Improved environmental management at Kenya Science that has an atmosphere conducive to learning and working.
12. Facilitated the overhaul improvement of ICT facilities including installation of both WAN and LAN, at Kenya Science Campus.

III. Associate Dean, Science, Kenya Science Campus (August – October, 2007)

Objectives:

1. To prepare for the 1st intake and launch of Bachelor of Education Science Programme at Kenya Science.
2. To make provisions for launch of other programmes at Kenya Science Campus.
3. Make preparations for the Teaching Practice and Graduation Ceremony of the Diploma students of the Ministry of Education.
4. Wind up the Diploma programme of the Ministry of Education.
5. Plan for introduction of any other STEM programmes at Kenya Science Campus.

Achievements:

1. Successfully launched the B.Ed Science Programme with the 1st admission of 186 students on October 15th, 2007.
2. Successfully launched the B.Ed ICT Programme in October, 2012.
3. Successfully wound up the Diploma programme of the Ministry of Education in 2009.

IV. Chairman, Department of Chemistry - (2001-2007)

Responsibilities:

1. Administrative and academic Head of the Department, responsible for day to day operations
2. Preparation of Departmental Strategic Plan and Annual Budget.
3. Make recommendations to the College Management Board regarding teaching, examinations, and syllabus.
4. Member of the University of Nairobi Senate.

Achievements:

1. Equipped the Laboratories with new instruments and apparatus for practicals.
2. Renovated and completely refurbished the Department to ISO standards.
3. Refurbished and equipped the fume extraction chambers, and improved water supply to the Science Laboratories.
4. Increased student enrolment in the department from 1,200 in 2002 to over 2,000 in 2006.
5. Organized several stakeholders' workshops to on relevance of programmes offered and subsequent review of curricula in 2006.
6. Organized and hosted the 1st Regional Conference on Trace Element Research in Africa, in collaboration with Trace Element Institute for UNESCO, Silver Springs Hotel, Nairobi December 2002.
7. Facilitated a number of MOUs hosted in the Department between: UNEP – GEF Chemicals Branch for Accreditation of the Pesticides Laboratory and Nairobi River Pollution Monitoring, and International Union for Conservation of Nature and Natural Resources – World Conservation Union for Survey and analysis of Nairobi River Pollutants. These MOUs brought in a total of over 300,000 USD in 2006.

V. Research Officer, Civil Service (Ministry of Agriculture and Livestock Development)**Duties:**

Head of the Chemistry and Biochemistry laboratories at the National Agricultural Research Centre Kitale and National Agricultural Laboratories Nairobi.

- 12) Manage resources effectively.
- 13) Coordinate the analytical laboratory services to ensure effective support to all researchers.
- 14) Carry out research on animal feeds and forage chemistry.

Achievements:

1. Coordinated services effectively to all sections and departments in the base stations.
2. Conducted research on tropical soil – plant interactions in relation to mineral imbalances in grazing livestock in Western Kenya).
3. Conducted research on pasture and forage chemistry that later led to publication of several articles in peer reviewed journals.

F. SCHOLARSHIPS AND RESEARCH FUNDS AWARDED

1. Government of Kenya scholarship to pursue M.Sc studies at the University of Nairobi **(1978 to 1980)**.
2. DAAD scholarship to pursue Ph.D. Studies at University of Nairobi **(1986 to 1989)**.
3. British Council scholarship **(September, 1988 to December 1989)** to pursue a special training in animal nutrition and chemical analytical techniques (Moredun Research Institute) and Biostatistics (Kings Buildings, University of Edinburg). Practical and theory courses were based at the following institutions:
 - (a) Base station: Moredun Veterinary Research Institute, Edinburg, Scotland.
Activity: Animal experiments, serology and fluorometric analysis.
 - (b) Scottish Agricultural Statistics Service, Kings Buildings, Edinburgh Scotland.
Activity: Biostatistics.
 - (c) West Scotland College of Agriculture, Edinburgh, Scotland.
Activity: Graphite Furnace Atomic Absorption Spectrometric analysis techniques.
 - (d) Edinburgh Research Station of MacCaulay Land Use Research Institute, Scotland.
Activity: X-ray fluorescence analysis and soil chemistry.
4. Agricultural Research Fund (USD 37500) through Kenya Agricultural Research Institute for the project: The Identification, Distribution and Impact of Mineral Imbalances in Grazing Livestock in Western Kenya, **(2002)**.
5. Princeton University USA (Chromatographic equipment worth USD 10,000) for collaborative research: Worker exposure and occupational health risks associated with organic compounds utilized in the paint manufacturing industry in Kenya **(2001)**.

6. Kenya Wildlife Service Nairobi (USD 10,000) for research on animal health in the Lake Nakuru National Park ecosystem **(2006)**.
7. Ministry of Transport and Communications through University of Nairobi Enterprises and Services (UNES) Ltd (Kshs.54 Million) for Environmental Impact assessment of pollution along the Northern Corridor. The Northern Corridor Road Transport Improvement Project/the UNES Task Team **(2004)**. Specific Assignment: Determination of baseline levels of Sulphur Dioxide emissions from vehicular traffic along the Northern Corridor (Mombasa-Nairobi-Nakuru-Kisumu-Busia Route).
8. Ministry of Environment and Natural Resources Kenya POPS Office through UNES Ltd (Kshs. 38 Million) for project on: Kenya National Inventory of Persistent Organic Pollutants (POPS) under the Stockholm Convention. GEF/UNEP/GOK Project: Enabling Activities for the Development of a National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants. The UNES Task Team. **(2003/2006)**. Specific Assignment: Identification of Pentachloro dibenzo dioxins (PCDD) and Polychloro dibenzo furans (PCDF) in Kenya.
9. Deans Committee Grant, University of Nairobi (Kshs.240,000.00) for research on: Identification of mineral imbalances in soils, forages and blood serum as constraints to cattle production in the Mt. Elgon region of Western Kenya.

G. CERTIFICATE OF MERIT AWARDS

1. Kenya Agricultural Research Institute (KARI): The World Bank Agricultural Research Fund END-OF-PROJECT Evaluation. Awarded Certificate of Merit for winning. **SECOND OVERALL AWARD** In recognition of outstanding Project Report on: **“THE IDENTIFICATION, DISTRIBUTION AND IMPACT OF MINERAL IMBALANCES IN GRAZING LIVESTOCK”**. Presented at the KARI Annual Conference KARI HEADQUARTERS, NAIROBI 2nd - 4th December, 2003
2. University of Nairobi College of Biological and Physical Sciences. Awarded Certificate of Recognition for outstanding work performance in the category of **“Best Department in Maintaining a Clean Environment – Department of Chemistry” for the Year 2006**.

3. United Nations Industrial Development Organization (UNIDO) & Ministry of Industry Republic of Indonesia. Awarded Commendation Certificate for presentation of the Kenya Country Report on: **“THE STATUS OF EFFLUENT TREATMENT AND SAFE WASTE DISPOSAL OF TOXIC AND OBSOLETE PESTICIDES UNDER THE STOCKHOLM CONVENTION.”** UNIDO-RENCAP WORKSHOP, Bogor, INDONESIA, 18 – 20 December 2006

H. GOOGLE SCHOLAR PLATFORM/RANKING

Google Scholar is a web-search engine research tool that indexes scholarly literature and academic resources across many disciplines and data bases. Google Scholar indexes individual academic papers from journal articles and conference papers, theses and dissertations, academic books, pre-prints, abstracts, technical reports and other scholarly literature from all broad areas of research.

The University of Nairobi has been using the Google Scholar Platform since 2015 to profile research portfolio of all academic members of staff. This has improved the University’s position in the World Webometrics Ranking system which is based on four parameters: **Presence, Impact, Excellence and Transparency**. The Transparency parameter accounts for the number of citations in the top Google Scholar research profiles. In January 2019, the University of Nairobi was ranked among the top 5% universities globally in terms of Transparency, and continues to hold Position 1 in Kenya.

The citations are determined by the metric indices, the H-Index and the i-10 index. The h-index measures both productivity and citation impact of a scholar’s publications, thus it is a count of the author’s largest number of papers(h) that have as many citations. The i-10 index refers to the number of papers with 10 or more citations. This means the most highly cited articles contribute to the Google Scholar rating. These are the articles published in the high impact journals.

The College has 120 academic members of staff. To keep pace with global citations of their research profiles, the College has created accounts for ALL the staff, and conducts regular Google updates to ensure the accounts are current, active and visible to students and other researchers worldwide.

By December 2021, Prof. Jumba's research publications had attracted 618 global citations, with H-Index of 13 and i10-index of 18.

I. CURRENT RESEARCH INTERESTS

Current research interests include chemical and environmental pollution; occupational toxicology; mineral metabolic profile testing in grazing animals; pesticide degradation profiles in soils, sediments and water; nutrient flux measurements in marine environments and terrestrial ecosystems; and animal health research..

J. COLLABORATIVE RESEARCH PROJECTS UNDERTAKEN

1. Kenya Wildlife Service, Nairobi. Nutritional factors affecting animal health in Kenya's National Game Reserves. Contact: Dr. Richard Kock, KWS Box 40241 Nairobi. 2006.
2. Stockholm Environmental Institute, Sweden. Development of Sensitivity Maps on the effects of acidic deposition on local ecosystems. 2001.
3. Princeton University, USA. Assessment of volatile organic pollutants in the Paint manufacturing industry in Kenya. 2002.
4. Max Plank Institute for Chemistry, Mainz Germany. Impacts of biomass burning in relation to atmospheric pollution in Kenya. 1997 – 2000.
5. Trace Element Institute for UNESCO. Trace Element research in East and Central African region. Kenya Satellite Centre. 2004.
6. Ministry of Transport and Communications and University of Nairobi Enterprises and Services (UNES) Ltd: Environmental Impact Assessment of Aerial Pollution along the Northern Corridor. 2003 – 2006.
6. UNES Ltd and Ministry of Environment and Natural Resources. Establishment of Kenyan Inventory on persistent organic pollutants (POPs) with special reference to Unintentional POPs – Polychlorodibenzo Dioxins and Polychlorodibenzo Furans. 2006.

K. SOME SELECTED CONFERENCES AND WORKSHOPS ATTENDED

1. 4th Annual Forensic Victimology and Victim Support Conference “Emerging role of victimology and victim assistance services in changing times” 22 – 23 November 2021, University of Nairobi, Kenya.
2. 3rd Annual Internal Conference on Research and Innovation in Education. “Collaborative and problem-solving based teacher education in the 21st Century” 14 – 15 October 2020, University of Nairobi, Kenya.
3. 2nd Annual International Conference on Research and Innovation in Education “Rethinking teacher education and management in the 21st Century and beyond” 23 – 24 October 2019, University of Nairobi, Kikuyu Campus.
4. 1st Annual International Conference on Research and Innovation in Education “Education Reforms: Education Reforms – Towards achieving Sustainable Development” 24 – 26 October 2018, University of Nairobi, Kikuyu Campus.
5. International Conference on Value Creating Education for Sustainable Development – Chiromo Campus University of Nairobi. 2017.
6. International Conference on Value Creating Education for Sustainable Development. In collaboration with Soki University, Japan 2016. Kenya Science Campus.
7. Africa for Research in Comparative Education (AFRICE) Conference at Kenya science Campus, June 2015,
8. The Nairobi Symposium: Maximizing Impact of Women, Peace and Security Policies in Africa. The Institute for Inclusive Security/University of Nairobi. July 22-25, 2014. Crowne Plaza Hotel, Nairobi.
9. Distance Education and Teacher Education in Africa (DETA). July 29th – August 2nd, 2013, Kenya Science Campus. Theme: “The need for Access, equity, sustainability, quality and relevance within the context of globalization”. www.deta.up.ac.za.
10. The 8th Pan-African Reading for All (PARFA) Conference 12th – 16th August, 2013, Kenya Science Campus. Theme: “Literacy for All: Leading the way to Literacy excellence”.

11. Association of Commonwealth Universities Conference and Celebrations, Taifa Hall, University of Nairobi. Theme: Beyond 2015: Gender Milestones in Education in Developing Countries 26 – 30 September **2013**.
12. Peace Education International Workshop – A joint collaboration between University of Nairobi and University of Coventry, 27th August, **2013** - Silver Springs Hotel, Nairobi. Theme: “Community Tensions, Dialogue and Peace Building in Kenya and East African region, including Somalia”.
13. Effluent treatment and safe waste disposal of toxic and obsolete pesticides. UNIDO/RENAP/Ministry of Industry Indonesia. Bogor, Indonesia 18-20 September, **2006**. Paper presented: The Status of Effluent Treatment and Safe Waste Disposal of Toxic and Obsolete Pesticides under the Stockholm Conventions. Kenya Country Report.
14. The 11th World Lakes Conference, October 31 – November 4, **2005**, Grand Regency Hotel, Nairobi.
15. The Agricultural Research Fund Annual Conference, KARI Headquarters Nairobi 3rd – 4th December, **2003**.
16. The International Society for Trace Element Research in Humans (ISTERH): Paper presented: Prospects of Heavy Metal Poisoning in Wild herbivores in Lake Nakuru National Park, Kenya. Book of Abstracts, 338 – 339, 8 – 11 September **2002**. Quebec, Canada.
17. National workshop on Science and Technology Parks Development for sustainable industrial growth: In commemoration of the Scientific Revival Day of Africa. June 30th **2004**, Holiday Inn, Nairobi.

L. POSTGRADUATE SUPERVISION

Prof. Jumba has supervised many postgraduate students at Masters and PhD levels. Some are listed below:

1. **Njagi-Kithure J. G. (PhD): UoN** Distribution of chlopyrifos and some pesticides residues in the upper Tana River catchment (2014)
2. **Abong'o D. A. (PhD), UoN:** Occurrence, distribution and environmental impact of organo-chlorine pesticide residues in Lake Victoria Catchment: A case study of River Nyando drainage Basin of Winam Gulf in Kenya (2010)
3. **Lelon, J. K. (PhD), UoN:** Uptake of micronutrients by Acacia Senegal varieties and its possible effect on gum Arabic quality (2009)
4. **Oduor, F. D.O. (PhD), UoN:** Identification of the mineral deficiencies in soils, forages and animal blood as constraints to cattle production in Mount Elgon Region of Western Kenya (2004)
5. **Kituyi, E.N. (PhD), UoN:** Atmospheric emission budgets for domestic biomass burning in Kenya (2000)
6. **Pembere, A. (M.Sc.), UoN:** Influence of industrial and agricultural activities on the heavy metal content of vegetables along Nzoia River (2013)
7. **Musila, N. S. (M.Sc), UoN:** Fate of chlorothalonil and assessment of its residues sampled in Nairobi in French beans, passion fruits and snowpeas (2010)
8. **Mwiluka J. Tenge(M.Sc): UoN** Assessment of alternative resources in Kenya – A case study on coal energy (2009)
9. **Shisia, K.S. (M.Sc), : Kenyatta University** Soil-plant composition in relation to macro and trace elements for grazing cattle in Uasin Gishu (2009)
10. **Madadi, V.O. (MSc.), UoN:** Chemodynamic studies and assessment of pesticide residues in Lake Victoria Catchment Area for Rivers Sio and Nzoia (2005)
11. **Mutaaga, G. (MSc.), UoN:** The distribution, metabolism and toxicity of ¹⁴C-DDT in a model Ecosystem simulating a tropical marine environment (2000)

12. **Yugi, P.O. (M.Sc), UoN:** The distribution of pesticide residues in the marine organochlorine environment along the coastal region of Kenya (2000)
13. **Barasa, M.W. (M.Sc) : UoN** : Studies on the distribution of organochlorine pesticide residues in the tropical environment along the Kenyan Coast (1999)
14. **Ongeri, D.M.K. (M.Sc) : UoN** : The distribution, dissipation and volatilization of DDT in a tropical marine system (1999)
15. **Wafula, G.A. (M.Sc) : UoN** : Measurement of some air pollutants in selected areas of Nairobi, its Environs, and in other selected industrial sites (1999)
16. **Limo, S.K. (M.Sc) UoN:** Investigation of the physico-chemical properties and characteristics of palm oil (1998)
17. **Mwashote, B.M. (M.Sc), UoN:** Sources of dissolved inorganic nutrient fluxes in the Gazi Bay and implications for coastal ecosystems (1998)
18. **Siva, K.S. (M.Sc), UoN:** Mineral status of soils and forages of Lake Nakuru National Park and implications for animal Health (1998)
19. **Kiarie, P.K. (M.Sc) : Egerton** : Assessment of heavy metals acid pollution from lead storage battery and extent of manufacturing firms in Nairobi (1995)
20. **Kituyi, E.N. (M.Sc.),UoN:** Occurrence of chlorfenviphos in cow's milk sampled at a range of sites in Western Kenya (1995)
21. **Wafula, G.A. (Ph.D), UoN:** Determination of mass aerial suspended fine particulate matter and implications for environmental health in Nairobi and its environs (on-going)

M. PUBLICATIONS AND SPECIAL RESEARCH ARTICLES

1. Abong'o, DA, Wandiga SO, **Jumba I.O.**, (2018). Occurrence and distribution of organochlorine pesticide residue levels in water, sediment and aquatic weeds in the Nyando River catchment, Lake Victoria, Kenya. **African Journal of Aquatic Science**. **43 (3), 255-270**.
2. Abong'o, DA, Wandiga SO, **Jumba I.O.**, den Brink PJV, Naziriwo BB, Madadi VO, WAFULA GA, Nkedi-Kizza P, Kylin H. (2015). Occurrence, abundance and distribution of benthic macro invertebrates in the Nyando River catchment, Kenya. **African Journal of Aquatic Science**. **40 (4) (1608-5914):373-392**
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N. EXTERNAL EXAMINATION

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