

# Curriculum Vitae

**HELLEN MAKENA KALUAI**

*M.A ( counselling) BE.D (Arts)*



*MOBILE; 0722727563: E-Mail Address:hellenkaluai@yahoo.com*

## **ACADEMIC QUALIFICATIONS (in chronological order):**

- 2004 - 2007 M.A. (SOCIOLOGY) COUNSELING**  
**19781 - 1985 BACHELOR OF EDUCATION (ARTS)**  
**1975 - 1976 KACE 'A' LEVEL**  
**1971 - 1974 KCE 'O' LEVEL**

## **PROFESSIONAL QUALIFICATIONS (in chronological order):**

- 2007 M..A. in counselling sociology – University of Nairobi  
1985 Bachelor of Education (Arts) - Kenyatta University college

**CAREER DETAILS (in chronological order):**

<b>DATE</b>	<b>INSTITUTION</b>	<b>DESIGNATION</b>	<b>RESPONSIBILITY</b>
2009 - 2012	Kenya Polytechnic university college	Ag. Chairperson Dept. Psychology counselling, Lecturer	Co-ordination of programmes in the dept.
2004 - 2008	Kenya polytechnic university college	Lecturer:	Course co-ordinator
2003 - 1996	Sunshine Secondary school -Nairobi	Senior Graduate Teacher Approved	Senior Head of Dept. Guidance and Counselling
1995- 1996	Hospital Hill Secondary school, Nairobi	Teacher	Head of Dept. Guidance and Counselling
1994- 1985	Highway Secondary School, Nairobi	Graduate approved Teacher I	Assist Head Dept. Guidance and Counselling
1985- 1986	Nakeel Secondary School, Kajiado	teacher	Class Teacher

**HONORS and AWARDS:**

April 1993 -- Appreciation for Good KCSE results in S.E.E and CRE.

May 1998 – Commendation for excellent results in KCSE results in S.E.E

April 2000 -- Certificate of merit for Good results in KCSE in CRE

March 2001 -- Certificate of merit for Good results in KCSE in CRE

April 2001 -- Certificate of merit 3<sup>rd</sup> position in KCSE CRE in Nairobi Province

May 2002 -- Certificate of merit for Good results in KCSE CRE

**MAJOR TASKS & ACCOMPLISHMENTS (in chronological order):**

***AT NATIONAL LEVEL:***

I have been involved in counselling individuals in various areas of life, such as Marital conflicts family conflicts at church congregations and families.

As Women Chairlady in Methodist church at Ruaraka church, have participated in various

Workshops involving the youth; married couple on health issues such as HIV/AIDs, capacity

building among women

Offered volunteer trauma counselling services to internally displace at Limuru P.C.EA.

***AT INSTITUTIONAL LEVEL***

Member of the School examination Board: Assist in coordination coordination and Implementation University and Government education policies

A member of the University students' counselling committee

Key in guidance and counselling and the school Teachers Welfare Chairperson

Member of College Academic Board Committee

Coordinated the developing of two Curriculums in counselling Psychology--Diploma in Counselling Psychology and Bachelor of Arts in Counselling Psychology

Ag, Chairman Dept. psychology and Counselling managed to initiate diploma and Bachelor curriculums.

Set aside some time to listen and guide students on personal social issues that hinder them from

learning

***AT PROFESSIONAL LEVEL:***

1985- 1987 – At my first station demonstrated diligent and integrity in teaching subjects such as English ,home science and Agriculture which had no background training in College .This showed flexibility and adaptability to change. The students' performance was excellent

1988-1994 demonstrated ability to tolerate cultural, religious diversity as a class teacher, teacher of 'A' Level majority None- African origin.

1995-2003- excellent working knowledge as a teacher and senior teacher heading Guidance and Counselling department. As senior teacher demonstrated ability strong interpersonal and professionalism to maintain stable relationship between the administration, students and the parents.

2004-2012- As a lecturer, have showed enthusiasm and willingness to embark on new initiatives in different curriculums and the tenacity to hold on to greater heights of learning and teaching.

AS Ag. Chairman has the ability to work under pressure without supervision to meet tight deadlines.

**DIPLOMA & HND STUDENTS & RESEARCH PROJECTS SUPERVISED (in chronological order):**

The following are some of the research projects supervised:

M/S Elizabeth Kemuto Mwamboga “psychological effects of sexual behaviour among students in private secondary schools” case study of Kasarani division in Nairobi, 2011

M/s Janet chepkwony “impact of HIV among discordant couples in long term relationship”- case study of Mathare slums in Nairobi, 2012-09-04

M/S Rachael Anyona “Effects of Child abandonment on family members” Case Kibera Slums Nairobi, 2011

Mr. Brian Onyoo “Substance Addiction among the youth living in slums” Case Maisha House. 2011

Ms Nancy Adhiambo “Psychosocial Consequences of Rape on women and Girls” case study of Njiru –Embakasi 2010

Mr. John Mwaniki Murage “ Effects of Violence Against Women on Community Development” 2010

Ms Anne Wambui Ngatia “psycho-social Effects of Divorce among children” Case study Ruiru Watalaam Estate 2009

Ms Kattam Winnie Chemutai ‘Effects of Early Teenage Pregnancy on Secondary Education performance- Njoro Division of Nakuru 2008

**PUBLICATIONS IN REFEREED JOURNALS (in chronological order)**

2007 Management of Counselling Programmes in government secondary schools in Nairobi Province. A project paper in partial fulfilment of a Master Degree in Counselling University of Nairobi

**PRESENTATIONS AT CONFERENCES, SYMPOSIA & WORKSHOPS ATTENDED (in chronological order):**

Attended a workshop organised by the Ministry of Education (MOEST) on guidance and counselling of students in school. May 4<sup>th</sup> -8<sup>th</sup>, 1998

Actively participated in the First National Psychology Conference in Kenya 7<sup>th</sup>-11<sup>th</sup> September 1998, Nairobi

Participated in an in-service seminar for teacher on personal and professional development, 14<sup>th</sup> -Golden Beach Hotel Mombasa 21<sup>st</sup> – 22<sup>nd</sup> June 1996

Attended Patent Application Training by Kenya Industrial Property Institute (KIPI) at the Red Court Hotel South C 23rd May 2012

**PROFESSIONAL AFFILIATIONS (in chronological order)**

Member of Kenya Professional Association of Counsellors

**HELLEN MAKENA KALUAI  
SEPTEMBER, 2012**

# Curriculum Vitae

## HELLEN MAKENA KALUIA

*BACHELOR OF EDUCATION (B.E.D ),SOCIOLOGY) COUNSELING(M.A)*

### Work Address:

*Kenyapolytecnic university college po,box 52428 nairobi  
E-Mail Address:hellenkauai@yahoo.com*

*Mobile No: 0722-727563*

### ACADEMIC QUALIFICATIONS :

### HONORS and AWARDS:

### MAJOR TASKS & ACCOMPLISHMENTS (in chronological order):

*At National Level:*

•

*At Institutional Level:*

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*At Professional Level:*

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### RESEARCH GRANTS AWARDED (in chronological order):

(format as below)

June, 2007 Jointly awarded **USD 50,000.00** Grant per Year for three (3) years by VicRes in support of a research project entitled “**Investigating the Factors Affecting Levels of Omega-3 Polyunsaturated Fatty Acids (PUFA) in Commercial Fish Species in Lake Victoria**”. Collaborating Institutions: Department of Chemistry, University of Nairobi (Kenya); Department of Biochemistry, University of

Nairobi; and Department of Fisheries Science and Aquaculture, University of Dar-Es-Salaam (Tanzania).

April, 2001: Awarded an Agricultural Research Fund (ARF) grant of **US\$ 30,000.00** by the Kenya Agricultural Research Institute (KARI) in support of a project entitled "*Towards an Improved System for the Selection and/or Production of High Quality Gum Arabic in Kenya*"

etc

**DIPLOMA & HND STUDENTS & RESEARCH PROJECTS SUPERVISED (in chronological order):**

D.L. Barasa, "Simultaneous Spectrophotometric Determination of Fe (III) and V (V) ions", (2012).

S. Munguti, "Effects of Cationic Surfactants on Sulphur (II) - Azide Reactions", (2010).

M.B. Wabuye, "Evaluation of Iron-Enriched Calcium Carbonate as a Potential Adsorbent for Phenol in Water", (2008)

etc

**UNDERGRADUATE STUDENTS & RESEARCH PROJECTS SUPERVISED (in chronological order):**

R.L. Adhiambo, "Effect of Ethylenediamine tetraacetic acid (EDTA) on Cationic Exchange Properties of a Locally Available Micaceous Mineral", (2012).

D.O. Olum, "Removal of Methylene Blue Dye from an Aqueous Solution Using a Micaceous Mineral of Kenyan Origin", (2009).

F. Odeka, "Adsorption of Textile Dyes from Aqueous Solutions by a Biodegradable Material in Batch and Continuous Flow Modes of Operation", (2005).

etc

**POSTGRADUATE STUDENTS & RESEARCH PROJECTS SUPERVISED (in chronological order):**

**M.Sc. Students & Research Projects Successfully Supervised to Completion:**

Wycliffe Chisutia Wanyonyi, "Biosorption of Organic Dyes from Aqueous Solution using Water Hyacinth (*Eichornia Crassipes*) from Lake Victoria", M.Sc. Thesis Successfully Defended and scheduled to graduate in September, 2012.

Dorice Soita Situma, "Analysis of Polycyclic Aromatic Hydrocarbons in Ambient Air and Soils at Selected Sites within Nairobi City"; M.Sc. Thesis Successfully Defended and Graduated at the University of Nairobi in September, 2010.

Caroline Agoi, "Dye Adsorption Characteristics by Two Unmodified Lignocellulosic Biomass Materials (*Telfairia Pedata* and *Luffa Cylindrica*) in Batch and Fixed-Bed Systems"; M.Sc. Thesis Successfully Defended and Graduated at the University of Nairobi in September, 2010.

Herbert Wanjala Kavunja, "Properties and Performance Testing of Biodiesel from *Jatropha Curcus* and its Blends"; M.Sc. Thesis Successfully Defended and Graduated in September, 2010.

S.M. Munguti, "Separation and Characterization of Polymeric and Particulate Matter by Thermal Field-Flow Fractionation", M.Sc. Thesis successfully defended and graduated at the University of Nairobi in December 2001).

etc

**Continuing M.Sc. Students & Research Projects Supervised:**

Robert Koigi, "Assessment of Spatial and Temporal Trends in Pesticide Residues and Nutrients in Water, Soil, and Sediments from Nairobi River" M.Sc. Thesis Submitted for Examination (May, 2012).

Amboga Davis Anzenze, "Biosorption of Heavy Metals from Water using Water Hyacinth: Adsorption Properties and Technological Assessment", M.Sc. Thesis submitted for Examination (May, 2012).

Edna Masenge, "Assessment of Total Petroleum Hydrocarbon, Oil, and Grease in Sediments and Waters in Ngong and Mathare Rivers" M.Sc. Research, Continuing student (Registered September 2009).

Veronica M. Muinde, "Investigating the Factors Affecting Levels of Omega-3 Polyunsaturated Fatty Acids (PUFAs) in Commercial Fish Species in Lake Victoria", Continuing M.Sc. student (Registered September 2010).

Tonkei Wilson Kayiongo, "Towards the Development of an Electrochemical Sensor for the Detection of Heavy Metals in Wastewater", Continuing M.Sc. student (Registered September 2010).

**Ph. D. Students & Research Projects Successfully Supervised to Completion:**

J. Wabomba, "Single- and Multi-component Metal Ion Sorption on a Micaceous Mineral of Kenyan Origin: Kinetics and Equilibrium Studies", Ph.D. Thesis Successfully Defended and graduated at the University of Nairobi in December 2011.

Peter N. Muigai, "Eutrophication of Nairobi Dam and its Implications on the Surrounding Environment", Ph.D. Thesis Successfully Defended and Graduated at the University of Nairobi in September 2008.

Vincent O. Madadi, "Studies of Pesticides and Macronutrients Cyclization and Interaction Dynamics in Lake Victoria and Nairobi River Ecosystems", PhD Thesis Submitted for examination and expected to graduate at the University of Nairobi in December 2012.

etc

**Continuing Ph. D. Students & Research Projects Supervised:**

Dorice S. Situma, "Risk Assessment and Photocatalytic Oxidation of Endocrine Disrupting Compounds (EDCs) in Effluents from Sewage Treatment Plants and Light Industries in Nairobi", Fully Registered as Ph.D Research Student in 2010 at the University of Nairobi and continuing.

Elizabeth N. Ndunda, "Assessment of Estrogenicity of Nairobi River using Vitellogenin in Tilapia (*Oreochromis sps*) as a Biomarker and Remediation of the River using Iron (III) Tetra Amido Macrocyclic Ligand (Fe-TAML)", Fully Registered as Ph.D. Research Student in 2010 at the University of Nairobi and continuing.



Immaculate Achieng' Odero, "Evaluating the Efficacy of Selected Lignocellulosic Materials of Kenyan Origin in the Removal of Textile Dyes and Inks from Aqueous Industrial Effluents: Kinetics and Equilibrium Studies", Fully Registered as Ph.D Research Student in 2009 at the University of Nairobi and Continuing.

etc

### **PUBLICATIONS IN REFEREED JOURNALS (in chronological order)**

Harry Amuguni Chanzu, John Mmari Onyari, and **Paul Mwanza Shiundu**, "Biosorption of Malachite Green from Aqueous Solutions onto Polylactide/Spent Brewery Grains Films: Kinetic and Equilibrium Studies"; *J. Polym. Environ.*, DOI 10.1007/s10924-012-0479-5, ISSN 1566-2543; Published online: 29 May 2012

Stephen Attahiru, **Paul M. Shiundu**, and Enos W. Wambu, "Removal of Cr(III) from Aqueous Solutions using a Micaceous Poly-Mineral from Kenya"; *International Journal of Physical Sciences*, **7(8)**, 1198 – 1204, (2012). Available online at <http://www.academicjournals.org/IJPS>; DOI: 10.5897/IJPS11.1691

Were, Faridah Hussein; Kamau, Geoffrey N.; **Shiundu, Paul M.**; Wafula, Godfrey A.; Moturi, Charles M.; "Air and Blood Lead Levels in Lead Acid Battery Recycling and Manufacturing Plants in Kenya", *Manuscript Accepted for Publication in The Journal of Occupational & Environmental Hygiene, December, 2011.*

Enos W. Wambu, Gerald K. Muthakia, Joseph K. wa-Thiong'o, and **Paul M. Shiundu**, "Kinetics and Thermodynamics of Aqueous Cu(II) Adsorption on Heat Regenerated Spent Bleaching Earth"; *Bull. Chem. Soc. Ethiop.*, **25(2)**, 181 – 190, (2011).

etc

### **MANUSCRIPTS SUBMITTED FOR PUBLICATION IN REFEREED JOURNALS**

Ndunda, Elizabeth; Wandiga, Shem; **Shiundu, Paul**; Madadi Vincent; "Assessment of Organochlorine Pesticides Residues in Nairobi River", *Manuscript submitted to CSIRO Publishing – Manuscript No. EN12086, June, 2012.*

Wilson G. Kamundia and **Paul M. Shiundu** "Adsorption-Desorption Characteristics of Cu (II) ions using a micaceous mineral in the presence of Selected Co-solutes", *Manuscript submitted to Global Journal of Environmental Research, August, 2012.*

etc

### **MANUSCRIPTS IN PREPERATION FOR SUBMISSION FOR PUBLICATION IN REFEREED JOURNALS**

**Paul M. Shiundu**, Wilson G. Kamundia and John M. Onyari "Influence of EDTA and other Selected Co-solutes on Batch Cu (II) Removal from Aqueous Solutions Using a Micaceous Mineral of Kenyan Origin", *Manuscript in Preparation.*

etc

### **BOOKS/ BOOK CHAPTERS/ MONOGRAPHS/e-Learning Modules:**

P.M. Shiundu and D.W. Mbui; Authored a Teaching Module for **Open and Distance Learning (ODL)** Course titled “*Advanced Chemical Kinetics and Electrochemistry*” (2008).

P.M. Shiundu; Author of an e-Learning Module in Chemistry entitled “**Volumetric Chemical Analysis**” under the Chemistry Curriculum Design & Development and Content Authoring for the African Virtual University (AVU) Teacher Education Program (2007). Edited by Dr. Buchweishaija.

P.M. Shiundu and D.M. Yusuf; Author of an e-Learning Module in Chemistry entitled “**Introduction to Chemistry**” under the Chemistry Curriculum Design & Development and Content Authoring for the African Virtual University (AVU) Teacher Education Program (2007). Edited by Dr. George Mhehe.

etc

### **PATENTS & TECHNICAL REPORTS:**

June/07: “**Integrating HIV & AIDS Information in the Teaching Curricula**”. A Report submitted to United Nations Educational, Scientific and Cultural Organization (UNESCO) and African Women in Science & Engineering (AWSE)

Jan., 2006: “**Status of Science Training Programmes in Kenyan Public Universities**”. A Report Submitted to the Public Universities Inspection Board (PUIB).

etc

### **PRESENTATIONS AT CONFERENCES, SYMPOSIA & WORKSHOPS ATTENDED (in chronological order):**

Successfully organized the 2<sup>nd</sup> Annual East and Central Advanced Chromatography & Regulatory Training/Vendor Exhibition Workshop at the School of Physical Sciences, Chiromo Campus, University of Nairobi, March 8<sup>th</sup> – 18<sup>th</sup>, 2010.

Invited by the National Council for Science and Technology to Chair the “**Water and Sanitation**” session at the 3<sup>rd</sup> National Conference on Dissemination of Research Results and Exhibition of Innovations” held at Kenyatta International Conference Centre (KICC), Nairobi Kenya, 3<sup>rd</sup> – 7<sup>th</sup> May, 2010.

etc

### **PROFESSIONAL AFFILIATIONS (in chronological order):**

Feb. 05-Now: Member, Kenya National Academy of Sciences (KNAS).

Sept./06- 09: Invited Member of the Editorial Advisory Board of the Journal CLEAN – Soil, Air, Water (Journal of Sustainability and Environmental Safety).

2002 - Now: Member, The American Chemical Society (ACS) - Identification Number: 2327005.

1998-2002: Secretary, Editorial Sub-committee of the Journal of the Kenya Chemical Society (JOKCS).

etc

### **PROFESSIONAL TRAINING & EXPERIENCE (in chronological order):**

May 4, 2009: Attended an Eleven (11) day PART I “International Deans’ Course Africa 2009/10” in Osnabruck and Berlin Germany (May 4 – 14, 2009). This is an intensive training course which is part of the Dialogue on Innovative Higher Education Strategies (DIES) programme and jointly coordinated by DAAD

- and HRK (German Rectors' Conference). Issues to be discussed include; Faculty management, higher education governance, financial management, change management, quality assurance and leadership.
- Feb. 25, 2008: Attended a Two (2) weeks' Management Development Training Workshop at Ghana Institute of Management and Public Administration (GIMPA), Accra, Ghana (Feb. 25 – March 08, 2008).
- May 28, 2007: Attended a one day Training Workshop on **Public Procurement** at the Kenya College of Accountancy, Ruaraka, Nairobi –Kenya.
- May 21, 2007: Attended a half-day **Senior University of Nairobi Management Rapid Results Initiative Brief** on Rapid Results Initiative and the Role of each member of the University Community during the 100 days.
- June/July 2004: Attended a three-weeks training course: “**Analytical Skills Development Course 2004**” organized and sponsored by **The Organization for the Prohibition of Chemical Weapons (OPCW)** at The Hague, Netherlands.

etc

### **EXPERTISE AND RESEARCH INTERESTS:**

- Environmental Science Technologies including environmental pollution monitoring and risk assessment and control; Development of novel, affordable, and environmentally friendly techniques for the removal/destruction of dissolved organic/inorganic pollutants in water and wastewater systems; and Use of selected aquatic plants as biological indicators for heavy metal pollution.
- Exploration and Exploitation of Kenyan-Based Minerals and Ligno-Cellulosic Materials in wastewater pollution control strategies.
- Analysis of Pesticides (and/or their metabolites) and other Persistent Organic Pollutants (POPs) in water, sediments, plant and particulate matter.
- Environmental Impact Assessment; Environmental Audits; Environmental Management tools.
- Separation Science Technologies, specifically Field Flow Fractionation (FFF) techniques for the separation and characterization of macromolecular, colloidal, and particulate materials.

etc

### **Departmental, Faculty/School, and University College Responsibilities:**

- Feb. 2010: Appointed as **Member** of the College Corruption Prevention Committee-College of Biological and Physical Sciences by the Vice Chancellor, University of Nairobi.
- May 2009: Appointed **Supervisor** of the Student Organization of Nairobi University (SONU) Elections by the Vice Chancellor, University of Nairobi to oversee the student electioneering exercise.
- Jan. 2008: Appointed **Chairman** of the College of Biological & Physical Sciences “**Rapid Response Sub-Committee**” to coordinate support for students and staff directly and indirectly affected by the events following the post poll violence of December 2007.
- June 2006: Appointed as **Chairman of a Technical Evaluation Committee** for the Purchase of Equipments for the Centre for Biotechnology and Bioinformatics (CEBIB) of the College of Biological and Physical Sciences (CBPS) by the Vice-Chancellor, University of Nairobi.
- 1995 - 2006: Department of Chemistry Representative to the Faculty of Science Educational Resource Committee (FSERC), University of Nairobi.

etc

**External & Internal Examination Responsibilities:**

- 2010 - 2013: Appointed External Examiner for Analytical, Environmental and Physical Chemistry examination papers for the Department of Chemistry, Maseno University.
- 2009 - 2012: Appointed External Examiner for 3 years for Analytical, Environmental and Physical Chemistry examination papers for the Department of Chemistry, Chepkoilel University College.
- Sept., 2009: Appointed External Examiner for Ms Nancy Nyamai's M.Sc. thesis entitled: **“Assesment of Acacia Nilotica in Nitrogen Fixation and Nitrogen Availability in the Lake Victoria Basin: A Case Study at Kendu Bay, Rachuonyo District of Western Kenya”**; Faculty of Science, Chemistry Department, Maseno University, Kenya.
- July/08 -2010: Appointed External Examiner for Analytical, Environmental and Physical Chemistry examination papers for the Department of Chemistry, Jomo Kenyatta University of Agriculture Technology.
- 2004 - 2007: Appointed External Examiner for Analytical, Environmental and Physical Chemistry examination papers for the Department of Chemistry, Kenyatta University.
- 13/09/2000: Served as Member of the Board of Examiners' for Mr. Nyongesa F. Wanjala's Ph.D. thesis entitled; **“Influence of Composition and Temperature on Physio-Mechanical Properties of a Kenyan Triaxial (Quartz-Feldspar-Kaolin) Porcelain.”**, University of Nairobi -KENYA.

etc

**Regional External Examination Responsibilities:**

- Feb., 2010: Appointed External Examiner for Mr. K.J. Gillham's M.Sc. thesis entitled: **“A Detailed Kinetic and Mechanistic Investigations into the Rate of Chloride Substitution from Chloro Terpyridine Platinum (II) and Analogous Complexes by a Series of Azole Nucleophiles”**; Faculty of Science & Agriculture, University of KWAZULU-NATAL, Pietermaritzburg, South Africa.
- Nov., 2009: Appointed External Examiner for Mr. Backison M. Tembo's PhD thesis entitled: **“Heavy Metal Distribution in the Environment and their Risk Assessment: Case Study of Kabwe and Kitwe”**; Department of Chemistry, School of Natural Sciences, The University of Zambia, Zambia.
- Jan., 2009: Appointed External Examiner for Mr N. Xaba's PhD thesis entitled: **“Kinetic and Mechanistic Studies on Hydroboration Reactions of Selected Unsaturated Organic Compounds with Haloborane Addition Complexes: Application of <sup>11</sup>B NMR Spectroscopy”**; Faculty of Science and Agriculture, School of Chemistry, University of KWAZULU-NATAL, Pietermaritzburg, South Africa.

etc

**STAFF NAME & TITLE – Month, Year**