**Zakpaa Domakyaara Hilary (Ph.D.).**

**Associate Professor, Department of Biochemistry and Biotechnology, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana**

**(**[**hdzakpaa.cos@knust.edu.gh**](mailto:hdzakpaa.cos@knust.edu.gh)[**hzakpaa@gmail.com**](mailto:hzakpaa@gmail.com)**;** [**hzakpaa@hotmail.com**](mailto:hzakpaa@hotmail.com) **)**

# Personal

●Date of Birth 21 October 1966

●Gender Male

●Home Town Jirapa (Upper-West Region, Ghana)

●Place of Birth Tamale (Northern Region, Ghana)

**1.**

**(a) Academic Degrees Earned with Dates**

**March 1998 Ph. D.** Food Science and Technology, (Fermentation Technology). Kyushu University, Fukuoka, Japan.

**March 1995 M.Sc.** Food Science and Technology, (Fermentation Technology). Kyushu University, Fukuoka, Japan

**August 1991 B.Sc. Biochemistry and Food Science** (Second Class, Upper Division), University of Ghana, Legon, Ghana

# **Education**

**(b) Institution Attended with Dates**

**1999-2001** Post-Doctoral Researcher, Laboratory of Microbial Science and Technology, Division of Bioscience and Biotechnology, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Fukuoka, Japan.

**1995-1998** Kyushu University, Fukuoka, Japan, Laboratory of Microbial Science and Technology, Division of Bioscience and Biotechnology, Graduate School of Bioresource and Bioenvironmental Science

Ph. D. Food Science and Technology

**1993-1995** Kyushu University, Fukuoka, Japan, Laboratory of Microbial Science and Technology, Division of Bioscience and Biotechnology, Graduate School of Bioresource and Bioenvironmental Science

M.Sc. Food Science and Technology

**1988-1991** University of Ghana, Legon, Ghana, Department of Nutrition and Food Science

B.Sc. Biochemistry and Food Science

**1984-1986** Nandom Secondary School, Nandom, Upper-West Region.

General Certificate of Education (G.C.E.) Advance Level

**1979-1984** Nandom Secondary School, Nandom, Upper-West Region.

General Certificate of Education (G.C.E.) Ordinary Level

# **2. University Teaching Experience and or Research Experience with Dates**

**(a)**

**October, 2020** Appointed Associate Professor effective 1st August, 2019

**August 01, 2016** Head of Department, Biochemistry and Biotechnology, College of Science, KNUST

**August 01 to** Appointed Head of Department, Biochemistry and Biotechnology, Faculty of Biosciences, College of Science, KNUST.

**July 31, 2017.**

**November 2008** Appointed Senior Lecturer effective 1st October 2007.

**2004-2008** Faculty Cognate Representative on Board of Faculty of Distance Learning

**2003-Present** Co-ordinator of Post-Graduate Programmes. Department of Biochemistry and Biotechnology

**2003- 2006** Assistant Examinations Officer. Department of Biochemistry and Biotechnology

**October 2002** Appointed Lecturer. Department of Biochemistry and Biotechnology, Faculty of Biosciences, College of Science, K.N.U.S.T. Staff number 0826166806

**May 2002** Appointed temporary Lecturer. Department of Biochemistry and Biotechnology, K.N.U.S.T.

**1999-2001** Post-Doctoral Researcher, Laboratory of Microbial Science and Technology, Division of Bioscience and Biotechnology, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Fukuoka, Japan.

Kyushu University Post-Doctorial Fellow

Fukuoka, Japan 1999-2001

Kyushu University Teaching Assistant

Fukuoka, Japan 1995-1998

**March 1998** Awarded Ph. D. Food Science and Technology, (Microbial Fermentation Technology). Kyushu University, Fukuoka, Japan.

**March 1995** Awarded M.Sc. Food Science and Technology, (Microbial Fermentation Technology). Kyushu University, Fukuoka, Japan

**1991-1992** Teaching Assistant (National Service). Department of Nutrition and Food Science, University of Ghana, Legon.

**August 1991** Awarded B.Sc. Biochemistry and Food Science (Second Class, Upper Division), University of Ghana, Legon, Ghana.

**2. University Teaching and/or Research Experience with Dates**

**(a) Academic Ranks Held and Subjects Taught**

**2019-Present** Lecturer and Examiner **BTC 558**: Industrial Microbiology and Bioprocessing.

**2019- Present** Lecturer and Examiner **BTC 561**: Fermentation and Enzyme Technology

**2013-Present** Service Lecturer and Examiner **AGB 454**: Food Biotechnology.

**2018-Present** Lecturer and Examiner in the following Post-Graduate **M.Sc. Biotechnology IDL courses**:

**BCHEM 575**: Industrial Microbiology

**BCHEM 576**: Environmental Biotechnology

**2009-Present** Lecturer and Examiner in the following Under-Graduate courses:

**BCHEM 357:** Fermentation Biochemistry and Biotechnology I

**BCHEM 358;** Fermentation Biochemistry and Biotechnology II

Class: Biochemistry and Biotechnology (Third Year)

**2008-Present** Lecturer and Examiner in the following Under-Graduate course:

**BCHEM 468**: Food Biotechnology

Classes:

Food Science and Technology (Fourth Year)

Biochemistry and Biotechnology (Fourth Year)

**2006-Present** Lecturer and Examiner in **BCHEM 365**: Biophysics (New syllabus)

Classes: Biochemistry and Biotechnology (Third Year)

Applied and Theoretical Biology (Third Year)

**2003-Present** Lecturer and Examiner in the following Post-Graduate (M.Sc. Biotechnology) courses:

**BCHEM 575**: Industrial Microbiology

**BCHEM 576**: Environmental Biotechnology

**BCHEM 585**: Industrial Biotechnology

Classes: M.Sc. Biotechnology (First Year)

**2002-2006** Lecturer and Examiner in the following Under-Graduate courses:

**BCHEM 365**: Biophysics I

BCHEM 366: Biophysics II.

Classes: Biochemistry and Biotechnology (Third Year)

Applied and Theoretical Biology (Third Year)

Medical Laboratory Technology (First Year)

**List of Publications:**

1. Abdul-Mumeen Iddrisu, **Zakpaa Hilary D.**, Felix Charles Mills-Robertson and Lowor, Samual T. (2020). *Vitellaria paradoxa* fruit pulp bioethanol production potential: A review. African Journal of Biochemistry Research. Vol. 14(2), pp 33-45.
2. Beauty Didia, Zakpaa Hilary D., Mills-Robertson F. C. and Abdul-Mumeen Iddrisu (2018). Qualitative analysis of enzyme-assisted traditionally extracted shea butter from different pretreated shea kernel substrates. J. Cereals Oilseeds Vol. 9(2), pp. 10-19.
3. Beauty Didia, Zakpaa Hilary D., Mills-Robertson F. C. and Abdul-Mumeen Iddrisu (2018). Enzyme-assisted traditional extraction of shea butter using different levels of pre-treated shea kernels. J. Agric. Biotech. Sustain. Dev. Vol. 10(1), pp. 1-10.
4. Ofosu-Appiah C., **Zakpaa H. D**., Mak-Mensah E. and Bentil J. A (2016). Evaluation of ethanol production from pito mash using *Zymomonas mobilis* and *Saccharomyces cerevisiae.* African Journal of Biotechnology. 15(30), pp 1613-1620, July.
5. Adane G., **Zakpaa H. D**., and Mak-Mensah, E. E (2015). Biodegradation potentials of bacterial isolates from petroleum storage facilities within the Kumasi Metropolitan area. *African Journal of Microbiology Research.* 9(7), pp. 433-447, February.
6. Abdul-Mumeen, I., **Zakpaa, H. D**., and Mills-Robertson, F. C (2013). Proximate and bio-phytochemical properties of shea nut cake. *Journal of Chemical and Pharmaceutical Research*, 5(12):961-970
7. Abdul-Mumeen, I., **Zakpaa, H. D**., and Mills-Robertson, F. C (2013). Biochemical and microbiological analysis of shea nut cake: A waste product from shea butter processing *Journal of Agricultural Biotechnology and Sustainable Development*. Vol. 5(4), pp. 61-68, July
8. **Zakpaa, H. D**., F., Al-Hassan, H., and Adubofour, J. (2010). An investigation into the feasibility of production and characterization of starch from “apantu” plantain (giant horn) grown in Ghana. *African Journal of Food Science* Vol. 4(9), pp. 571 - 577, September.
9. **Zakpaa, H. D**., Akoto, F., Mak-Mensah, E. E. and Adubofour, J. (2010). Production and charactization of flour produced from ripe “Apem” plantain (*Musa sapientum* l. var. *paradisiacal;* French horn) grown in Ghana. *Journal of Agricultural Biotechnology and Sustainable Development.* Vol. 2(6) pp. 92-99, April.
10. **Zakpaa, H. D**., Mak-Mensah, E. E., and Johnson, F. S. (2010). Saccharification of Maize agrowastes by cellulolytic fungi isolated from Ejura farms in Ejura, Ghana. *Journal of Science and Technology* Vol. 30(1) pp. 10-17, April.
11. **Zakpaa, H. D**., Mak-Mensah, E. E., and Avio, O. A. (2010). Effect of storage conditions on the shelf life of locally distilled liquor (Akpeteshie). *African Journal of Biotechnology* Vol. 9(10), pp 1499-1501, 8 March.
12. **Zakpaa, H. D**., Imbeah, C. M., and Mak-Mensah, E. E. (2009). Microbial characterization of fermented meat products on some selected markets in the Kumasi metropolis, Ghana. *African Journal of Food Science* Vol 3. (11) pp. 340-346, November.
13. **Zakpaa, H. D**., Mak-Mensah, E. E., and Johnson, F. S. (2009). Production of bio-ethanol from corncobs using *Aspergillus niger* and *Saccharomyces cerevisae* in simultaneous saccharification and fermentation. *African Journal of Biotechnology* Vol. 8 (13), pp. 3018-3022, 6 July.
14. Abdul-Mumeen, I., **Zakpaa, H. D**., and Mills-Robertson, F. C (2013). Biochemical and microbiological analysis of shea nut cake: A waste product from shea butter processing. *Journal of Agricultural Biotechnology and Sustainable Development.* Vol. 5(4) pp. 62-68, July.

**Zakpaa Domakyaara Hilary (Ph.D.)**