JULIUS KOLA OLOKE, Ph. D.

Biotechnology Centre Telephone: 234-38-721342 (Home)

Ladoke Akintola University of Technology, Mobile: 234-08033806981

P.M.B. 4000,

Ogbomoso. Nigeria.

CAREER PROFILE

A highly motivated professional with over 21 years progressive experience demonstrated by construction of computerized bioreactor of different sizes and defining fermentation protocols for the over expression of *microbial metabolites*.

QUALIFICATIONS

- . Excellent educational background in microbiology and fermentation biotechnology.
- . Broad experience in the construction and use of computerized bioreactor
- . Extensive training and experience in genetic engineering and molecular biology.
- . Expertise in mushroom biotechnology
- . Highly developed conceptual/analytical and problem solving skills
- . Exceptional interpersonal, communication and presentation skills
- . Experience in operations and strategic Planning and administration

KEY ACCOUNTABILITIES ACCOMPLISHMENTS

- . Formulation of specialized nutritional diet using metabolite from *Rhodospirilium toruloides* for special fattening of monogastric
- . Manipulation of Rhodospirulium toruloides to over-produce its metabolite
- . Production of teleomorphs from Rhodotorula glutinis
- . Contributed significantly to the construction of computerized bioreactor.
- . Mass production and marketing of *Pleurotus oeastratu (oyster mushroom)*
- . Formulation of promising strains of *Bradyrizobium* into inoculants using cow dung and sub-bituminous coals as carrier.
- . Development of different plant metabolites into antibacterial and antifungal drugs.
- . Isolation and use of ethnogetic zymomonas.
- . Production of ethanol through unconventional methods.

PROFESSIONAL EXPERIENCE

Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

Professor of Microbiology and Biotechnology Associate Professor of Microbiology and Biotechnology Senior lecturer (Microbiology) Lecturer I (Microbiology) October 1999 till date October 1997-1999 October 1993-1997 January 1991-1993

Ondo State University, (Now University of Ado-Ekiti)

Lecturer II (Microbiology)
Assistant Lecturer

November 1989-1990
October 1986-1989

Obafemi Awolowo University

Research Fellow (Microbiology) October 1985-1986

EDUCATION AND POST-DOCTORAL EXPERIENCE

Post-Doctoral Fellow

July 1995-Feb.1996

Department of Biology, University of Waterloo, Ontario Canada Research Advisor: Dr. B.R. Glick, professor of Microbiology

Research Topic: Cloning of melanin producing gene of Bacillus thuringiensis oloke in

Escherichia coli

Achievements: Successfully cloned melanin producing gene in Escherichia coli

Ph.D., Microbiology

1989

Obafemi Awolowo University, Ile-Ife Nigeria. Research Advisor: Professor D. Kolawole

Ph.D. Thesis: Antibacterial and antifungal properties of partially purified extracts of Aframomu

Melegueta.

Research Area: Pharmaceutical Microbiology.

M.Sc. Microbiology

1986

B.Sc. (Hons.) Microbiology

1983

University of Ife, Ile-Ife Nigeria.

PROFESSIONAL DEVELOPMENT

Graduate student supervised

Supervised two Ph.D. students and five M.Sc. students. Two Ph.D. and five M.Sc. students under training.

COURSE TAUGHT AT BOTH GRADUATE AND UNDERGRADUATE LEVELS

Medical Microbiology, Virology, bacteriology, Microbial genetics, pharmaceutical Microbiology, Microbial Ecology, Introductory Microbiology, Molecular forms and functions in bacterial systems, Advance Molecular Biology, Fermentation Biotechnology, soil Microbiology, Microbial Technology and Microbial, Physiology and Metabolism.

ADMINISTRATIVE EXPERIENCE

Headship, Pure and Applied biology Department,
 Ladoke Akintola University of Technology (LAUTECH) Ogbomoso

 Deputy Dean, Post Graduate School, LAUTECH.
 Director, Academic Planning Unit LAUTECH.
 Director, Biotechnology Centre
 1997-2001
 1999 till date
 2002 till date

FELLOWSHIP AND AWARDS

- (a) NSERC/CDIA; used at Biology Department University of Waterloo; Canada from 1995 to February 1996.
- (b) United Nations Biotechnology Fellowship; used at Biology Department, University of Waterloo; Canada from June 1995 to February 1996

GRANT

Third World Academy of Science Research Grant NO.96-029. March 1997. Value: US\$5,000.00

MEMBERSHIP AND PROFESSIONAL ORGANIZATION

- Member Biotechnology society of Nigeria
- Member Foundation of African Development through International Biotechnology (FADIB)

PROFESSIONAL ACCOMPLISHMENT

- Formulation of specialized nutritional diet using metabolic from Rhodosporidium toruloides for special fattening of monogastric.
- **Development of teleomorphs from** *Rhodotorula glutinis.*

PUBLISHED ARTICLES

- 1. OLOKE, J.K. and ODEYEMI, O. (1988). An assessment of some Nigerian Bradyrhizobium Inoculants on the performance of Three Cowpea Cultivars (vigna unguculata) in Two Field plots. Biology and Fertility of Soils: 6: 178-182.
- 2. OBAFEMI, C.A., EJENAVI, A.N., KOLAWOLE, D.O. and OLOKE, J.K. (1989). Studies of Heterocyclic Compounds X (I). The Synsthesis and some properties of some organitin (iv) oxide and Nitrogen petecocytes. <u>Inorganica Chemical Acta Bioinorganic Chemistry. 151,(1),21-27.</u>
- 3. OLOKE, J. K., KOLAWOLE, D.O. and ERHUN, W.O. (1988). The Anti bacterial and Antifungal Activities of certain components of <u>Afra</u> momum melegueta fruits. FITOTERAPIA LIX, (5), 384 388.
- 4. OLOKE, J.K., KOLAWOLE, D.O. (1988). The Antimicrobial Spectrum of Inhitory Substances of some Fungi. Nig. J. Biotechnology, Vol. 6: 127 130.
- 5. OLOKE, J.K., KOLAWOLE, D.O. and ERHUN, W.O. (1989) Antimicrobial effectiveness of paradols. I. A structure activity relationship study on six Homologues. *J. ETHNOPHARMACOLOGY* 25: 109 115.
- 6. ADEBAJO, A.C., OLOKE, J. K. and ADESANMI, J. A. (1989). Antimicrobial Activities and Microbial Transformation of Volatile Oils of Eugenia uniflora. FITOTERAPIA (LX) 5, 451–456.
- 7. ADEBAJO, A.C., OLOKE, J.K. and ALADESANMI, J.A. (1989). Antimicrobial Activities of the Leaf Extract of Eugenia uniflora
- 8. OLOKE, J.K. and FAMUREWA, O. (1991). Suitability of media formulated from local raw materials for the growth of some selected microorganisms Discovery and Innovation 3(4): 77-81.
- 9. ADEBAJO, A.C. ALADESANMI, A.J. and OLOKE, J.K. (1991). Antimicrobial activity of Laportes austuans. FITOTERAPIA LXII (6): 504-505.
- 10. ADEBAJO, A.C., ALADESANMI, A.J. and OLOKE, J.K. (1991). Antimicrobial activity of *phelline comosa heartwod FITOTERAPIA* LXII (6): 5005-506.
- 11. OLOKE, J.K. (1992). Fungicidal effects of the Volatile oil of *Aframomum melegueta*. *FITOTEPIA* LXII (3): 269.
- 12. OLOKE, J.K. (1997) Comparison of antibacterial effectiveness of *Aframomum melegueta* extact with its mosquitocidal potency. African Journal of Science. 1: 62 65.
- 13. OLOKE, J.K. (1997) Synergism between tetracycline, bacterium and seed extract of *Aframomum melegueta*. African Journal of Science. 1: 82 85.

- 14. OLOKE, J.K. (1997) Microbiological analysis of Hawked Water. African Journal of Science. 1: 22 28.
- 15. OLOKE, J.K., O.O. ADELOWO and A.O. Faleye 1998. Behaviour of two *Pseudomonas* starins in the control of bacterial wilt disease. Bioscience Research Communications. 10(40: 107-111.
- 16. OLOKE, J.K., F.A. AKANGBE, O.A. ODUNOLA and J.A.O. WOODS, 1998. Comparison of the antimicrobial activities of metal (II) Complexes of Barbituric acid and Barbitone sodium. BioScience Rsearch Communications. 10(4):323-327.
- 17. AKANGBE, F.A.; J.K. OLOKE, J.A.O. WOODS and O.A. ODUNOLA, 1998. The antimicrobial activities of the nikel (II) and copper (II) complesex of various diketones and their adducts. BioScience Research Communications 10(4)317-322.
- 18. OLOKE, J.K.; K.E.B. Guegium and A.E. Okeyinka, 1998 Computer-aided approach to locating the conserved regions of amino acid sequencies BIOKEMISTRI 8(2): 79-91.
- 19. AFOLABI, T.J. and J.K. OLOKE, 1999. Effect of yeast and its sources on alcohol produced from banana and plantain. Biosciences research Communications 11(3): 263-267.
- 20. OLOKE, J.K. 2000. Activity pattern of natural and synthetic Antibacterial agent among hospitals isolates. MICROBIOS. 102: 175-181.
- 21. Adeoye I.O., O.A. Odunola and OLOKE, J.K. 2000. preliminary investigation of anitmicrobial properties of some metal hydrates Journal of Science Engineering and Technology. 7(3): 2626-2630.
- 22. Adeoye, I.O. and J.K. OLOKE, 2000 Structure-effect relationship of bezoic acid and its analogues on *Trichophton mentagroghytes and Saccharo myces cerevisae*. Applied Natural Research. 1(2): 6-8.
- 23. OLOKE, J.K. 2001 The performance of three plant extract-based media in the cultivation of medica bacteria. African Journal of Clinical and Experimental Microbiologyu. 2(2):32-36.
- 24. Gueguim K.E., J.K. Oloke and A. Lateef 2002 Overproduction of ammonia by a Local isolate of Staphlococcus aures in a cheaply fabricated medium. Journal of Nigerian Society for Experimental Biology. 2(2).
- Lateef A. and J. K. Oloke 2001. The effect of Pseudomonas aeruginosa ammonia-based biofertilizer on yield performance of two maize varieties in the green house. Bioscience Research Communications. 14(20.
- 26. Gueguim K, OLOKE J.K. and Lateef A. 2001. Overproduction of ammonia by a Local isolate of Straphlococcus aures in a cheaply fabricated medium. Journal of Nigerian Society for Experimental biology. 1(4):297-304.

- 27. Adebiyi A.O. and J.K. Oloke (2002). Effects of diets supplemented with starch hydrolysed with amylase from Trichodrema viride on Ratus ratus. Science Focus vol. 172-78.
- 28. Adebiyi A.O., Akinboro A. and J.K. Oloke (2003). Characterization of thermostable lipase from local isolate of Trichoderma viridiae. Science Focus. Vol. 2: 49-54.
- 29. Geugium Kana, E.B.; J.K. Oloke and Lateef A. (2003). Construction of a rugged 4.5-liter bioreactor for the fermentation of Actinomyces Sp. African Scientist. 4(1): 1-5.
- 30. Geugium Kana, E.B.; J.K. Oloke and lateef a. and Zebaze Kana M.G. (2003). Computer software for real time control and monitoring of fermentation process. Asian Journal of Microbiology, Biotechnology and Environmental Sciences. Vol. 4.
- 31. Lateef A, J.K. OLOKE, and Gueguim K.A. 2003. Overproduction of Ammonia by a local isolate of Pseudomonas aeruginosa in cheaply fabricated media. Research Communication in Microbiology 1(2):62-67.
- 32. Adelowo O.O., J.K. Oloke 2003 Biotransformation of Okpara mine (Nigeria) Lignite by microbial biosurfactant. Journal of the Nigerian Society of Experimental Biology.
- 33. Adelowo O.O. and Oloke J.K. 2003. Comparison of the emulsification and oil displacement profile of some biosurfactant. Journal of the Nigerian Society of Experimental Biology.
- 34. Gueguim Kana E.B., Oloke J.K., Lateef A,. and Zebaze Kana M.G. 2003. Constructional features of a 15-litre home-made bioreactor for fed-bath fermentations. African Journal of Biotechnology vol. 2(8)233-236.
- 35. Lateef A and J.K. Oloke. 2003. Enzymatic synthesis of oligosaccharide by Actinomyces Spp. Asian Jr. of Microbiol. Biotech. Env. Sc. 5(3):9-13.
- 36. Gueguim Kana E.B., Oloke J.K., Lateef A and Zabaze Kana M.G.2003. Use of artificial intelligence in control and optimizationz of microbial fermentations. Science Focus 3:56-60.
- 37. Lateef A, Oloke J.K. and Gueguim Kana E.B. 2003. The prevalence of bacteria resistance in clinical, food, water and some environmental samples in Southwets Nigeria. Environmental Monitoring and Assessment. Neitherland.
- 38. Lateef A and Oloke J.K. 2003. Resistance pattern of some clinical and soil isolates of Pseu domonas aeruginosa. Science Focus. 4; 22-26.
- 39. Lateef A, J.K. Oloke and Gueguim Kana E.B. 2003. Production of oligossacharides by partially purified alpha-amylase from Alternaria Alternata. Science Focus. 4:36-40.
- 40. Lateef A. and Oloke J.K. 2002. The effect of pseudomonas aeruginosa ammonia-based biofertilizer on yield performance of two maize varieties in greehouse. Bioscience Research Communications 14(6):521-525.

- 41. Lateef A, Oloke J.K. Gueguim Kana E.B. and Adebayo I. Aspect of the isolation and characterization of thermostable alpha-amylase from Alternaria alternate. Global journal of Pure and Applied Sciences.
- 42. Gueguim K.E, J.K. OLOKE and A Lateef. 2002-Advanced control of fermentation process, Research Communications in Microbiology.
- 43. Adelowo O.O. and JK. OLOKE 2001. Biological treatment of environmental pollutants: The potentials of microbial biosurfactants. Foundation for Africa Development through International Biotechnology(FADIB). Workshop on Environmental Pollution & Remediation Technologies in Soil and Water in Africa, Nike Lake Resort hotels, Enugu. 15-19 July, 2001.
- 44. OLOKE, J.K. and Glick, B.R. 1998 WO971235A2: A new pigment-production strain of *Bacillus thuringiensis*. USA patent published in 1988 Chemical Abstract. Website page: http://www.Patents.ibm.com/detail? Pn = WO O9741235 A2 abl = fr.
- 45. OLOKE, J.K. Osundina, M.A., O.O. Fawole and M.O. iasu. 1998. Introductory General Biology. Y-Books. Ibadan 9LAUTECH Book Series). ISBN: 978-2659-82-7.
- 46. Osundina, M.A J.K. Oloke, O.O. Fawole and M.O. Liasu. 1998. Diversity of orgasnism. Y-Books. Ibadan (LAUTECH Book Series): ISBN: 978-34532-5-4.