#### **CURRICULUM VITAE**

#### I. PERSONAL DATA

a) Name : Adikwu, Michael Umale

b) Title : Professor c) Sex : Male d) Age : 60 Years

e) Date and Place of Birth : April 19, 1963; Olanyega-Edumoga

f) Marital Status : Married g) State of Origin : Benue h) Local Government Area : Okpokwu i) Nationality : Nigerian

j) Language Spoken : English, French, German

k) Religion : Christianity
l) Denomination : Catholic

**Permanent Home Address**: RCM Primary School

Ijege-Amejo, Edumoga

Via Otukpo

Benue State, Nigeria

**II. Contact Address** : Department of Pharmaceutics

Faculty of pharmaceutical Sciences

University of Nigeria Nsukka 410001 Enugu State Nigeria

Phone: 08034378988 (Mobile); E-mail: adikwum@yahoo.com

michael.adikwu@unn.edu.ng michael.umale@gmail.com

# III. QUALIFICATIONS WITH DATES

a) First School Leaving Certificate 1975 b) General Certificate of Education 1981 Bachelor of Pharmacy (B. Pharm) c) 1986 Master of Pharmacy (M. Pharm) d) 1989 Doctor of Philosophy (Ph.D.) e) 1994 Postdoctoral Fellow: Germany 1999 f) Postdoctoral Fellow: Japan 2002 q)

h) Postdoctoral Fellow: UK : 2006

#### IV. SCHOOLS ATTENDED WITH DATES

a). St. Paul's Catholic School, Utonkon, Nigeria : 1970 - 1975
b). Federal Government College, Jos, Nigeria : 1976 - 1981
c). University of Nigeria, Nsukka, Nigeria, Nigeria : 1981 - 1986

d). University of Nigeria, Nsukka, Nigeria, : 1986 - 1987, 1988 - 1989

e). University of Nigeria, Nsukka, Nigeria, : 1990 - 1994 f). Heinrich Heine University, Düsseldorf, Germany : 1999 - 2000

h). Kyoto Pharmaceutical University, Kyoto, Japan : 2002

i ). University of Manchester, Manchester,

United Kingdom : 2006

j). Harvard University Institute for Graduate Education: 2018

k). Hebrew University, Israel: 2018

#### V. TRAININGS

a). Training on German Language at Goethe Institute, Dusseldorf, Germany, July 3-August 31, 1999

- b). Pastoral Training at Peace House (Ministers Refresher and Leadership Training (MILERT) (Living Seed), Gboko, Benue State, Nigeria, 2003-2004
- c). Training on Drug Development (Modern Methods of Drug Discovery) for the Third World, Trieste June 4-10, 2006
- d). Training on Project Management (sponsored by the World Bank), Maputo, Mozambique, October 29-November 2, 2007
- e). Training on Bioinformatics and Combinatorial Chemistry, Douala, Cameroon, Organized by TWAS/ICS, December 10-14, 2007
- f). World Bank Training on Project Design and Management, Kaduna, Nigeria, 2-8 February, 2008
- g). Training at the World Bank Institute on Education for Development and Competitiveness: Challenges and Opportunities for Post-Basic Education, April 14-25, 2008, Washington, DC, USA.
- h). Training on Total Project Management, Ghana Institute for Public Administration and Management (GIMPA) 17-23, August, 2008.
- i). Training on Project Monitoring and Evaluation by Supreme Consultants, Kano, Nigeria, 1-5 September, 2008.
- j). Training at the British Council on Global Economic Crisis: Implications for Businesses in a Developing Economy, Abuja, February 5, 2009.
- k). Training at the British Council on Building Successful Organizations; Tried and Proven Business Structures, Abuja, February, 5, 2009.
- l). Training on Project Leadership and Governance, Organized by Supreme Management Consultants; Saravo Panafric Hotel, Kenya, December 7-11, 2009

- m). Training on Monitoring and Evaluation by the World Bank, 20-24 September, 2010. Kaduna, Nigeria.
- n). Training on Programme Management, Galilee International Management Institute, Galilee, Israel, March 7-22<sup>nd</sup>, 2013
- o). Training at Harvard Institute for Graduate Education (HGSE): July 15-27, 2018.
- p). Training on Innovations in Higher Education, Hebrew University, November 1-12, 2018.
- q). Training at the Workshop on Going Global and the Globalization of Tertiary Education, British Council Going Global, Kuala Lumpur Malaysia, May 1-4, 2018.
- r). Workshop on E4Impact Entrepreneurship, Università Cattolica, Milan, Italy, April 1-3, 2019.
  - s). Faculty Development Workshop, Association of African Universities (AAU) Secretariat, Accra Ghana, 19-22<sup>nd</sup> March, 2019.
  - t). Training at the Workshop on Knowledge Divide and the Digital World: Does International Tertiary Education Have a Role? The British Council: Berlin, 13-15 May, 2019.
  - u). Internationalization Workshop in Higher Educational Institutions Association of African Universities (AAU) Secretariat, Accra, Ghana from 28<sup>th</sup> 31<sup>st</sup> May 2019.
  - v). Training at the University of the West of Scotland on Entrepreneurship, 16<sup>th</sup>-20 June, 2019
  - w). Training by HPLWC on Peace Education Empowerment Training, South Korea, April 9
     May 28, 2022.

#### VI. WORKING EXPERIENCE

a)	Pupil Pharmacist, University of Nigeria Medical Ce	entre:	1986-1987
b)	National Youth Service Corps Pharmacist,		
	Civil Service Clinic Ilorin:		1987-1988
c)	Pharmacist Grade I, State Medical Stores, Makuro	di/	
	General Hospital, Otukpo	:	1988-1989
d)	Assistant Lecturer, University of Jos, Jos	:	1989-1990
e)	Lecturer II, University of Nigeria, Nsukka	:	1990-1993
f)	Senior Lecturer, University of Nigeria, Nsukka	:	1993-1998
g)	Professor, University of Nigeria	:	1998
h)	Coordinator, Science and Technology Education		
	(STEP-B) Post-Basic Education Project	:	2007- 2013
i)	Vice Chancellor, University of Abuja	:	2014-2019
j)	National Institute for Security Studies, Abuja	:	2019-2020

# VII. ADMINISTRATIVE EXPERIENCE

a)	Chairman, Faculty Research Grants Committee	:	1995-1998
b)	Chairman, Strategic Planning Committee	:	2003-2007
b)	Member, Faculty Week Committee	:	1992-1998
c)	Member, Home Coming Committee	:	1992-1998

d) Chairman, Faculty Consultancy Services Committee: 1997-1998 e) Chairman, Faculty Postgraduate Committee: 2002-2007

f) Head, Department of Pharmaceutics : 1995-1998;2002-2004

g) Member, National Project Steering Committee,

Science &Technology Education Post-Basic (STEP-B): 2007-2013
h) Vice Chancellor, University of Abuja : 2014-2019
i). Chairman, Research Grant/External Collaboration Committee: 2022-Date
j). Chairman, Faculty Consultancy Management Board : 2022-Date

#### VII. FELLOWSHIPS AND SCHOLARSHIPS WON

- a). Associateship of the Third World Academy of Sciences Trieste, Italy 2008.
- b). Global Technological Entertainment and Development (TED) Conference Travel Fellowship, Arusha Tanzania, 2007
- c) Travel Grant for conference attendance from International Centre for Theoretical Physics (ICTP), Trieste, Italy, to attend Conference on Drug Development for the Third World, Trieste, Italy, 2006
- d). Third World Academy Associate Fellowship to Argentina (2000, Unutilized)
- e). Third World Academy of Sciences, South-South Fellowship to Cameroon (1996, Unutilized)
- f). Alexander von Humboldt Foundation Fellowship Germany: 1999-2000
- g) Matsumae International Foundation Fellowship, Japan: 2002
- h). Federal Scholarship for Best 20 Students, University of Nigeria, Nsukka : 1982-1986
- i). Federal Scholarship for Best 3 Students, Federal GovernmentCollege, Jos : 1976-1981

#### **VIII. RESEARCH GRANTS WON**

a). National Institute for Research and Development Grant : 2008
b). Short International Visit Grant from the Royal Society: 2006
c) Third World Academy of Sciences Research Grant : 2004

d). International Foundation for Science Grant, Sweden : 2004/2006

e) Royal Society of Chemistry of Great Britain Grant : 2002 f). Wellcome Nigeria Fund, Lagos : 1993 g). Raw Materials Research and Development Council Grant: 1998 h). University of Nigeria Research Grant : 1990/1991 i). University of Nigeria Research Grant : 1994/1995

j). University of Nigeria Research Grant : 1997 k). University of Nigeria Research Grant : 1999

#### IX. HONOURS WON

a). TWAS Regional Award: Development of Scientific Educational Material

: 2019

b). Won the May and Baker Prize, for excellence in the

Practice of Pharmacy

: 2009

c). Won the Nigerian Liquefied Natural Gas/Nigerian

Academy of Science Prize for Science

: 2006

d). Won the Trophy for the Best Behaved Student, Federal

Government College, Jos

: 1980

### X. BOOK REVIEWS DONE

**a** The Living Seed, The Biography of Chief Michael Okibe Onoja, 2017

**b** Salvation is for You and Your Household by John Ogboji, 2017

**c** Growing in Christ by Reverend Father George Ehusani, 2022

#### XI NOMINATIONS BY DIFFERENT EXTERNAL AND NATIONAL

#### **BODIES FOR HONOURS AND AWARDS**

1).	Nomination for Award by Pharmaceutical Association of
	Nigerian Students for Academic Excellence (3 Times)

2).	Nomination by Marquis Who is Who in the World	1994
3)	Nomination for American Bibliographic Institute	

Nomination for American Bibliographic Institute Board of Directors

1995

4). Nomination by American Association for the

Advancement of the Sciences for Membership

2000

5). Nomination by the New York Academy of Sciences for Membership

6). Nomination for Membership of the Royal Society 2000 of Pharmaceutical Sciences of Great Britain

7). Nomination for Membership of the American 2002
Diabetics Association 2004

8). Nomination for Award for Academic Excellence, Federal Government Old Boys Association

9). Nomination for Award for Academic Excellence, 2007
Pharmaceutical Society of Nigeria, Enugu State Branch

10). Nomination for Gold Award for Academic Excellence, The New Magazine, 2007

11). Nomination for Fellowship and Membership Awards,

Institute of Industrial Administration of Nigeria 2008 12). Nomination for Developmental Gold International Award for Excellence, African Age Magazine 2008 13). Nomination for 21st Century Continental Legacy Makers Award, Our Majesty Global Publications 2008 14). Nomination into the Pillar in Nigeria Education Development Award (PINEDA), Education Development Magazine, 2008. 15). Nomination by News in Africa Magazine for Excellence 2008 Merit Award (For Community, Infrastructure, Human and Physical Development in Nigeria and Africa Sub-Region) 2008 16). Nomination for Membership of American Chemical Society (ACS) 2008 17). Nomination for Distinguished Statesmanship Award, Living Legends International Magazine 2008 18). Nomination by American Bibliographic Institute as Nigerian's Man of the year 2009 19). Nominated as e-tutor by ISC-UNIDO, Trieste, Italy :2009 20) Awarded the Pharmaceutical Society Platinum Prize for Young Mentors 2009 21). Nomination into the Universal Achievers International Gold Award, Nigerian Top Leaders International Magazine 2010 22). Nominated for Award of Excellence for Heading one of the most Successful and Transparent Agencies (STEP-B) in Nigeria in 2011 by African Development Magazine, 2012

- 23). Nominated for Award of Honorary Doctor Science Degree, Commonwealth University of Belize, 2012.
- 24). Nominated for Award for Personal Excellence in Public Performance, African Development Magazine, 2013
- 25). Awarded Certificate of Performance, after Completion of the Science and Technology, Post-Basic Project (STEP-), the World Bank, Abuja, 2013.
- 26). Certificate of Recognition, The OMICS International, USA 2015
- 27). Nominated as Patron, United Nigeria Chaplaincy, Federal Republic of Nigeria, 2015
- 28). Certificate of Entrepreneurship Skills Rating, Abuja Graduate School, 2015.
- 29). Nigerian Library Association, Certificate of Special Award, for Uncommon Support to the Library Profession and for Accelerated Library Development at University of Abuja, 2015.
- 30). Advisory Board of the Nigerian Liquefied Natural Gas Limited (NLNG) Prize for Science 2015-20121.

- 31). Certificate of Attendance at Committee of Directors of Academic Planning of Nigerian Universities (CODAPNU) Workshop and Conference, 2016
- 32). Integrity in Leadership Award, The Guardian Newspaper, 2017
- 34). Appointment as Advisory Board Member, Youths Ambassadors for Development and Legacy Initiative, 2017.
- 35). Vice Chancellor of the Year Award, Dignity of Labour Foundation, 2017
- 36). Icon Education Award, Icon Africa Media, 2017
- 37). African Prize for Transparency, Integrity, Selfless Service and Accountability in Leadership, Lead Times Africa, Ghana, 2017.
- 38). Nigerian Heroes of Good Governance Award, Africa's Good Governance Monitoring Network, 2017.
- 39). African Distinguished Leadership Hall of Fame Certificate, West African Students' Union, 2017.
- 40). Meritorious Humanity Service Award, Network of Civil Society Group, 2017.
- 41). Platinum Leadership Award for Excellence, Northern Youth Council of Nigeria, 2017.
- 42). Academic Personality of the Year, Foundation for Economic Advancement Advocacy, 2017.
- 43). Nominated as the Ambassador of the Association of Elites Community Initiative (Corps) of Nigeria (Elites Corps), 2017.
- 44). Nominated as Outstanding Alumni of Northern Nigeria, Leadership, 2017
- 45). Grandix International, Award for Excellence and Nation Building, 2017.
- 46). Outstanding Alumni of Northern Nigeria, Leadership Award, 2017.
- 47). Arewa Media Publications Event Company, Special Recognition Award as the Best Performing Outstanding Vice Chancellor of the Year, the Most Innovative Top Nigeria Best Run University of the Year, and Golden Pillar Prestigious Peace and Security Lifetime Achievement Award, 2017.
- 48). Northern Nigerian Students Forum (GAMJI), Conferment of Platinum Leadership Excellence Title of Ubandoma Gamji, 2018.
- 49). The SoulMedia Conferment of Human Resource Development Ambassadorial Award, 2018.
- 50). Arewa Media Publications Even Company, Conferment of the Northern Achievers Magazine Distinguished Annual Excellence Recognition Award, 2018.
- 51). JHE Foundation, Conferment of the Most Prestigious Vice Chancellor 2018 Award, 2018.
- 52). Unified Nigerian Youth Forum (UNYF), Award Most Outstanding Institution of the Year, 2018.
- 53). National Association of Nigerian Students (NANS), Award for the Extraordinary Contributions to Education Development in Nigeria, 2018.
- 54). Nominated as National Patron, National Association of Nigerian Students (NANS), 2018.

- 55). Anti-Corruption and Society Sanitation Initiative (ACSSI), Award of Honour as the Best Vice Chancellor in Nigeria and Africa for the year, 2018.
- 56). The Capital Territory Law Review, Merit Award for Academic Personality of the Year, 2016-2017, 2018.
- 57). African Strides International, Pacesetters in Education for African Renaissance Leadership (PEARL) Award, 2018.
- 58). Universal Peace Federation, Nomination for International Ambassador for Peace Award, 2108.
- 59). Nominated for Fellowship, The Institute of Management Specialists, 2018.
- 60). The Nigerian Festival of Awards Magazine, Excellence in Education Advancement Award, 2018.
- 61). Nomination for Science, Technology and Innovation Achievers Award by STEP-A Project Africa (Science and Technology Entrepreneurship Promotion in Africa), November, 29, 2018.
- 62). Award for Humanitarian and Academic Services by the Forum of Pastors for Peace and Reconciliation Entitative, October 20, 2018.
- 63). Award for Administrative Excellence by University of Abuja Medical Students, 2018.
- 64). RichReach Communications Limited: Balance Magazine Excellence Awards, 2018.
- 65). Guzape-Kpebi-Kpaduma Gbagyi Carnival 2018 (KKKGC) awards for Outstanding Service to Human and Exceptional Leadership Award, 2018.
- 66). Development of Youth Initiative in Nigeria, Nomination for the Award for Excellence: 2018.
- 67). Guardian, Nominated as one the 20 Exemplary Vice Chancellors of Universities in Nigeria, 2018.
- 68). Karifest Awards for Academic Excellence and Educational Reformation, 2018.
- 69). Institute of Oil and Gas Research Award of Fellowship of the Institute for Oil and Gas and Hydrocarbon Studies, 2018.
- 70). Appointment as Patron of Kwararafa Congress, by Kwararafa Descendants Association, 2018.
- 71). Nominated for Award of Excellence, Nigerian Economics Students' Association, Abuja Chapter, 2018.
- 72). Nomination as Board of Trustees Member, Budding Classrooms, 2018.
- 73). Prestige Exclusive Award for Excellence in Nation Building, Prestige Exclusive Magazine, 2019.
- 74). Integrity Merit Award, Quarters Community, Gwagwalada, Abuja.
- 75). Certificate of Recognition as one of its great reviewers 2020 (Awarded every year since 2008). International Journal of Pharmaceutics,
- 76). Platinum Leadership Award for Icon of Integrity and Humanitarian Services, by Sir Ahmadu Bello Northern Youth Council of Nigeria (ABYCN), 2022
- 77). Award for Exemplary Godly Leadership, by the Head of Service Interdenominational Christian Fellowship, 2018.

78. Duty Bears United Nations Humanitarian Integrity Award as Eminent Nigerian Child's Right Education Ambassador, 2023

#### XII. SPECIAL CONGRATULATORY LETTER

Special Congratulatory Letter from Dr. George Akume, the Executive Governor of Benue State of Winning the Nigerian Prize for Science, 2006.

# XIII. TEACHING EXPERIENCE (Undergraduate and Post-Graduate Levels)

- a). Physical Pharmaceutics
- i). Colloids and Interfacial Phenomenon
- ii). Storage of Drugs
- iii). Stability and Expiry Dating
- iv). Sustained Release Formulations and Microencapsulation
- v). Biopharmaceutics and Pharmacokinetics
- vi). Drug Delivery Technology
- vii). Radiopharmaceuticals
- viii). Rheology and Viscosity
  - ix). Current Good Manufacturing Practice (CGMP)

# b). Pharmaceutical Microbiology

- i). Sterilization Practice
- ii). Microbial Variation and Genetics
- iii). Bacterial Resistance
- iv). Immunology and Serology
- c). Pharmacy Ethics/Forensic Pharmacy
- i). Dangerous Drugs Acts, Chapter 48, 1948
- ii). Code of Ethics for Pharmacists in Nigeria
- iii). CGMP in the manufacture of sterile products

#### **XIV. RESEARCH COMPLETED**

- a). Use of Auto-Oxidation Enhancing Enzymes in the Formulation of Creams for Hyperpigmentation (Wellcome Nigeria Fund Grant).
- b). Molecular Modelling of Charge Transfer Complexes (Alexander von Humboldt Fellowship Award, Germany).
- c). The use of tropical polysaccharides as antidiabetic agents (Matsumae Research Foundation Fellowship, Japan).
- d). Prediction intestinal permeability of drugs using artificial neural networks and molecular orbital calculations (Third World Academy of Science Grant)

- e). Modelling of some Charge Transfer Complexes (Royal Society of Great Britain)
- f). Effect of some additives on the physico-chemical properties of mucin (International Foundation for Science, Sweden).
- g). Production of Pharmaceutical Grade Starch from Three Sources (Nigerian Institute for Pharmaceutical Research and Development, Abuja, Nigeria.

#### XV. CURRENT RESEARCH INTERESTS

- a). Issues in Health Reforms and Social Health
- b). Extraction of Antimicrobial Agents from Lichens and other plants
- c). Bioadhesive Drug Delivery Design Using Natural Polysaccharides.
- d). Use of mucin and honey for wound healing
- e). Use of mucin as a rectal absorption enhancer.
- f). PEGylated polysaccharides in drug delivery
- g). Mucinated polysaccharides in drug delivery
- h). Gelatinated polysaccharides in drug delivery
- i). PEGylated Mucins in drug delivery
- j). PEGylated gelatin in drug delivery

#### XVI. EDITORSHIP OF JOURNALS

- a). Editorial Member, Health Education and Movement Journal, University of Nigeria, Nsukka.
- b). Editorial Member, Plant Products Research Journal, University of Nigeria, Nsukka.
- c). Contributing Editor, Nigerian Journal of Pharmaceutical Research and Development, Abuja.
- d). Contributing Editor, Journal of Pharmacy Practice and Continuing Education, Lagos.
- e). Technical Editor, African Journal of Pharmaceutical Research and Development, Nsukka.
- f). Managing Editor, Journal of Pharmaceutical and Allied Health Sciences, Nsukka.
- g). Review Papers for over 20 journals including Drug Development and Industrial Pharmacy (USA); Pharmaceutical Biology (Germany), Antibiotics and Chemotherapy (Germany), International Journal of Pharmaceutics, Chemotherapy, Immunopharmacology and Immunobiology, Alternative and Complementary Medicine, International Journal of Plant Products, International Journal of Plant

Physiology and Biochemistry, Research Essays, African Journal of Pharmacy and Pharmacology, Journal of Plant Products, Journal of Medicinal Plant Research, Tropical Journal of Pharmaceutical Research, Journal of Agricultural Biotechnology and Sustainable Development, Journal of General and Molecular Virology, Chemical Oggi/Chemistry Today, ScienceDomain

International, Journal of Pharmaceutics and Drug Research, Journal of Parasitology and Vector Biology, Journal of Veterinary Medicine and Animal Health, etc. International Journal of Library and Information Science, etc.

- h). Editorial Advisory Board International Journal of Pharmaceutical Sciences
- i). Editorial Advisory Board, African Journal of Pharmaceutical Sciences and Pharmacy,
- j). International Journal of Tropical Diseases,.
- k). Editorial Board, Journal of Pharmaceutical Sciences and Insights
- I). Nano Science, Romania, etc.
- m). Editor, Journal of Ufia Affairs.

#### XIX. POLICY PAPERS DEVELOPPED FOR THE FEDERAL GOVERNMENT

- a). Strategy Document for Setting Up Centres of Excellence Based on National Needs (submitted to the World Bank) - 2008
- b). Increasing Access to Tertiary Education through Public-Private
  Arrangements (submitted to the Federal Ministry of Education) -2012
- c). Reversing the Falling Standard in Education through Postdoctoral Research Foundation (submitted to the Federal Ministry of Education) -2012
  - d). Stimulating Research in the Nigerian Research Sector through Postdoctoral Research (submitted to the Federal Ministries of Education and Science and Technology)- 2016
- e). On Serving and Former Vice Chancellors
- f). A Study on Drug Use Among Students at All Levels of Education in Nigeria (A Study Proposal).

g). Low Productivity Among Academics and Civil Servants in Nigeria: The Reason for Huge Unemployment in Nigeria (A Study Proposal).

#### XX. STUDENT SUPERVISION

- a). Undergraduates 80
- b). Postgraduates 40
- c). Technicians 24

# XXI. Achievement of Some of My Past Postgraduate Students

- 1. Prof. C. O. Esimone; Alexander von Humboldt Fellow, Bochum, Germany /Fulbright Fellowship University of Pittsburgh USA; Vice Chancellor, Nnamdi Azikiwe University, Awka.
- 2. Prof. A. A. Attama; Alexander von Humboldt Fellow, Branschweig, Germany. Dean Faculty of Pharmaceutical Sciences, University of Nigeria, Nsukka.
- 3. Prof. K. C. Ofokansi, Alexander von Humboldt Fellow, Munich, Germany and Director of Research, University of Nigeria, Nsukka.
- 4. Dr. P. Builders, Associate Professor, National Institute for Pharmaceutical Research, Idu, Abuja.
- 5. Dr. K. I. Chukwu, Senior Lecturer, University of Nigeria, Nsukka, Department of Pharmaceutical Technology, University of Nigeria, Nsukka.
- 6. Dr. J. O. Okafor, Deputy Director/ Pharmacist, Orthopaedic Hospital, Enugu
- 7. Mr. David Uzuegbu, Senior Lecturer, Department of Pharmaceutical Microbiology, University of Nigeria, Nsukka
- 8. Professor. Ifeanyi Iroha, Alexander von Humboldt Fellow, Bochum, Germany; Head, Department of Microbiology, Senior Lecturer, Ebonyi State University, Abakiliki
- 9. Mr. A. C. Ezugwu, Director, Pharmacists' Council of Nigeria, Abuja.
- 10. Dr. Sylvester Eraga, Senior Lecturer, Department of Pharmaceutics, University of Benin, Benin.
- 11. Professor M. A. Momo, Matsumae Fellow, Japan; Associate Professor and Head, Department of Pharmaceutics, University of Nigeria, Nsukka
- 12. Dr. (Mrs.) Ngozi Udem, Deputy Director, University of Nigeria Teaching Hospital, Enugu.

- 13. Dr. A. A. Agboke, Senior Lecturer, Department of Pharmaceutical Microbiology, University of Uyo, Uyo, Akwa-Ibom State, Nigeria.
- 14. Dr. P. A. Akpa, Senior Lecturer, Department of Pharmaceutics, University of Nigeria, Nsukka
- 15. Professor (Mrs.) P. O. Nnamani, Alexander von Humboldt Fellow; Senior Lecturer, Department of Pharmaceutics, University of Nigeria, Nsukka.
- 16. Dr. E. Ebong, Senior Lecturer, Department of Pharmaceutical Microbiology, University of Uyo, Uyo, Akwa-Ibom State, Nigeria.
- 17. Mr. E. Eze, Lecturer 1, Department of Crop Science, University of Nigeria, Nsukka
- 18. Dr. C. C. Mba, Senior Lecturer, Department of Pharmaceutical Technology & Industrial Pharmacy, University of Nigeria, Nsukka.
- 19. Dr. E. Onuigbo, Senior Lecturer, Head, Department of Pharmaceutical Microbiology, University of Nigeria, Nsukka
- 20. Dr. (Mrs.) M. Ngwu, Senior Lecturer Department of Pharmaceutical Microbiology, University of Nigeria, Nsukka
- 21. Dr. Emmanuel Olurinsola, Senior Lecturer, University of Uyo, Uyo. (PhD, 2015).
- 22. Dr. Chika Ejikeugwu, Matsumae Fellow, Japan; Senior Lecturer, Department of Microbiology, Ebonyi State University, Abakaliki, Ebonyi State.

#### **XXII. EXTERNAL ACTIVITIES**

- 1). External Examiner, PhD/Masters Students, Ahmadu Bello University, Zaria, 2011
- 2). Adjunct Professor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka, 2010-2015
- 3). Adjunct Professor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Ahmadu Bello University, Zaria, 2011-2015
- 4). Adjunct Professor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Delta State University, Abraka, 2013-2014.

- 5). Adjunct Professor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, University of Port Harcourt, 2013-2017
- 6). External Assessor for Reader/Professor Cadre, Faculty of Pharmaceutical Sciences, Ahmadu Bello University, Zaria, 2011
- 7). External Examiner, Undergraduates, Nnamdi Azikiwe, University, 2009
- 8). External Assessor for Reader/Professor Cadre, Faculty of Pharmaceutical Sciences, Ahmadu Bello University, Zaria, 2009
- 9). External Examiner, Master's Degree, Department of Pharmaceutics and Pharmaceutical Technology, University of Benin, Benin City, Nigeria. 2009
- 10). External Assessor for Candidates for Employment, Faculty of Pharmacy, Nnamdi Azikiwe University, Awka, 2007
- 11). Visiting Professor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Madonna University, Elele, 2007
- 12). External Assessor for Reader/Professor Cadre, Faculty of Pharmacy, Nnamdi Azikiwe University, Awka, 2007
- 13). Sabbatical Leave, Department of Pharmaceutics and Pharmaceutical Microbiology, Ahmadu Bello University, Zaria, December 1998-June 1999.
- 14). External Examiner, Department of Pharmaceutics and Pharmaceutical Technology, University of Jos, Jos, 1997/1998 Academic Session.
- 15). External Examiner, Department of Pharmaceutics and Pharmaceutical Technology, University of Benin, Benin City, Nigeria. 2005/2006 Session
- 16). External Examiner, Masters' Degree, Department of Pharmaceutics and Pharmaceutical Microbiology, Ahmadu Bello University, 2005/2006
- 17). Editor-in-Chief, the Catholic Charismatic Renewal of Nigeria, Nsukka Diocese, 2006-Date
- 18). Missions Board Member, God's Care Mission, Okpo, 1999
- 19). Part Time Lecturer, Department of Pharmaceutical Microbiology, Benue State Polytechnic, Ugbokolo, 1994-1995

- 20). Locum Pharmacist, Padbesco Pharmaceutical Company Limited, Adikpo, 1991
- 21). Locum Pharmacist, Amusa Pharmacy and Company Limited, Otukpo, 1992
- 22). Locum Pharmacist, Pharmagro Industries (Pharmaceutical Division), Makurdi, 1993.
- 23). Pharmaceutical Inspector and Regulatory Affairs Officer, Hospitals Management Board, Makurdi, 1989.
- 24). External Assessor for a Professorial Candidate, University of Benin, 2006. 25). Member, Ministerial Committee on Roadmap for the Education Sector 2007-2009.
- 25). Member, Local Organizing Committee for the Conference of the International Council of Associations for Science Education (Theme: Meeting Challenges to Sustainable Development in Africa). May 24-29, 2009
- 26). Appointment as an Advisory Board Member, International Conference of Association of Science Education (ICASE), 2017
- 27). Appointment as Visiting Professor, Department of Pharmaceutics, Faculty of Pharmacy, Bingham University, Karu, Nasarawa State, 2019-Date
- 28). Appointment as Visiting Professor, Department of Biotechnology, Faculty of Natural Sciences, Veritas University, Bwari, Abuja, 2019-2021
- 29). Director of Research and International Linkages, Veritas University, 2019-2020.
- 30). Appointment as Visiting Professor, Department of Microbiology, Faculty of Sciences, Nasarawa State University, 2019-2020.
- 31). Directing Staff on Sabbatical Leave, National Institute for Security Studies, Bwari, Abuja, 2019-2021
- 32). Visiting Professor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka, 2019-2020.
- 33). Approved PhD Supervisor, Department of Pharmaceutics, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka, 2021-Date

# **XXIII. International Appointments**

- a). Nominated as e-tutor by International Centre for High Technology, Trieste-United National Industrial Development, Vienna (ISC-UNIDO), Trieste, Italy, 2009.
- b). Nominated as Trialect (USA) Traineeship Host for Masters and PhD, 2021
- c). Nominated as United Nations Volunteer Mentor for Health, Community Development and Agriculture, 2021.
- d). Appointed as the Chief Coordinating Officer (CCO) Inter-Universities Affairs, Eureka, Grouperment D'Intert Economique, 2021.
- e). Appointed as Member, of the UniPeace African Campus Establishment Board, International University for Peace, Rome, 2021.
- f). Assessor for African Academy of Sciences' (AAS) Arise Science Grant Competition, Nairobi, Kenya, 2021

# XXIV. MEMBERSHIP OF LEARNED SOCIETIES

- a). Fellow, Pharmaceutical Society of Nigeria (2012)
- b). Member, Royal Society of Chemistry (Up till 2004)
- c). Chartered Chemist of the Royal Society (Up till 2004)
- d). Member, Nigerian Association of Academic Pharmacists (1999-Date)
- e). Member, Institute of Public Analysts of Nigeria (2001-Date)
- f). Fellow, Nigerian Academy of Science, 2009
- g). Fellow, Science Teachers' Association of Nigeria, 2011
- g). Fellow, Entomological Society of Nigeria, 2015
- h). Fellow, Institute of Entrepreneurship, Nigeria, 2015
- h). Fellow, Science Association of Nigeria, 2016
- i). Fellow of the African Science Institute, 2017
- j). Fellow of the Institute of Oil and Gas Research, 2018
- k). Fellowship of the Chartered Institute of Leadership and Governance, USA. 2018
- l). Fellow, International Society of Comparative Education, Science and Technology (FISCEST), 2015

# XXV. Nominated as Fellow but Could Not Attend the Investiture Due to Clashes with Other Activities

i). Fellow of the Nigerian Academy of Pharmacy (FNAP)

ii). Fellow of the Institute of Public Analysts of Nigeria (FIPAN) 2022

#### **XXVI. MISCELLANEOUS**

- a). Patron, Potentials and Career Molders Association of Nigeria, 2023
- b). Member, University Committee on Students' Insurance, 2006
- c). Member, University Committee for Avian Flu in the North Central and Eastern States of Nigeria, 2006
- d). Member, Committee on 2008 NUGA Games Forum, University of Nigeria, 2006
- e). Staff Adviser, Pharmaceutical Association of Nigerian Students, 1995-1998.
- f). Coordinator, Continuing Education for Pharmacists, UNN Chapter, 1997-1998
- g). Staff Adviser, National Association of Idoma Students, University of Nigeria, Branch 2005-Date
- h). Staff Adviser, National Union of Benue State Students, 2005-2007.
- Internal Examiner, Postgraduate Students (Masters and PhD) in Pharmaceutics, Pharmacology, Pharmaceutical Chemistry, Botany, Pharmaceutical Technology & Industrial Pharmacy, Clinical Pharmacy (over 50).
- j). Review proposals for International Foundation for Science (Sweden), National Institute for Pharmaceutical Research and Development, Idu, Abuja, etc.
- k). Part-Time Lecturer, Pharmaceutical Microbiology, Department of Science Laboratory Technology, University of Nigeria, Nsukka (1994-2006)
- l). Part-Time Lecturer, Physiology and Pharmacology, Department of Science Laboratory Technology, University of Nigeria, Nsukka (1994-2006)
- m). Adjunct Professor, Department of Pharmaceutics, Madonna University, Elele, 2007
- Keynote Address Speaker at various conferences including Science Teachers
   Association of Nigeria (STAN, 2008), Nigerian Society of Biochemistry
   and Molecular Biology (2008), Nigerian Association of Pharmacists in
   Academia, etc.

 o). Consultant to the National Institute for Pharmaceutical and Development (NIPRD) on the Scheme of Work and Conditions of Service June 2022-October, 2022

# XXVI. As Coordinator of the Nigerian Science and Technology Education Project, I was involved in setting up Centres of Excellence in the following fields:

- 1). Science, Technology, Engineering and Mathematics Education
- 2). Infectious and Zoonotic Diseases
- 3). Food Security Studies
- 4). Renewable Energy
- 5). Environment Protection and Preservation
- 6). Solid Minerals Research and Development
- 7). Advanced Materials and Manufacturing Technology
- 8). Software Engineering
- 9). Chemical Technology Research and Development
- 10). Multimedia Technology and Cinematography
- 11). Biotechnology and Genetic Engineering

# XXVII. HOBBIES/EXTRA CURRICULAR ACTIVITIES

i). Reading ii). Swimming (iii). Preaching. iv). Writing of religious books and articles

#### **XXVIII. COUNTRIES VISITED**

Benin, Cameroon, Ghana, Ivory Coast, Kenya, Tanzania, Mozambique, Germany, United Kingdom, Italy, United States of America, Estonia, Japan, Scotland, and South Korea, Equatorial Guinea, United Arab Emirates, Rwanda and South Africa.

#### XXIX. ADDRESSES OF HOST LABORATORIES VISITED ABROAD

- i). Professor Hans Dieter-Hoeltje, Department of Pharmaceutical Chemistry, Heinrich Heine University (University of Düsseldorf), Germany: 1999-2000
- ii). Professor Kanji Takada, Department of Drug Delivery, Kyoto Pharmaceutical University, Yamashina-ku, Kyoto, Japan: 2002
- iii). Professor Nicola Tirelli, Department of Drug Delivery, University of Manchester, England: 2006

#### XXX. REFEREES

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#### XXXI. LIST OF PUBLICATIONS

# a). **Project/Theses**

- i). Adikwu, M. U. (1986). Genetic Engineering as a Source of Pharmaceuticals and the New Techniques of Drug Delivery (First Degree Project).
- ii). Adikwu, M. U. (1989). Microencapsulation of Some Anti-malarial Drugs (Master's Degree Dissertation).
- iii). Adikwu, M. U. (1994). Physico-Chemical Properties and Pharmaceutical Application of *Prosopis africana* Gum (Ph. D Thesis).

# b). **Books and Chapters in Books**

- i). **Adikwu, M. U.** (2003). Job Choice and Challenges for the Graduate Pharmacist. Irawo Press, Makurdi, Nigeria
- ii. **Adikwu, M. U. and Okoye, E. I.** (2021). Job Choice and Challenges for the Graduate Pharmacist. Abuja: JemJoc Publishers (2<sup>nd</sup> Edition, including Disruptive Technologies)
- iii). **Adikwu, M U** et al. (2001). Basic Techniques in Pharmaceutics, El-Demak Publishers, Enugu, Nigeria.
- iv). **Adikwu, M. U.** (2006). What God Says About Politics. Praise Concept Publishers, Enugu.
- v). **Adikwu, M. U**. (2006). The Banner of His Presence. Praise Concept Publishers, Enugu.
- vi). **Adikwu, M. U.** and Attama A. (2007). Natural Products in Wound Healing; Research SignPost, Kerala, India. P. A. Akah, Ed.
- vii). **Adikwu, M. U.** (2009). The Pains and Gains of Disappointment, Abuja: Arowas Press and Publishers
- viii). **Adikwu, M. U.** (2019). A Land Flowing with Milk and Honey. Abuja University Press Limited.
- ix). **Adikwu M. U. and Esimone, C. O.** ed. (2009). Biopolymers in Drug Delivery: Recent Advances and Challenges. Bentham Publishers, Malaysia

- x). **Adikwu, M. U.** (2009). Multifarious potentials of tropical animal-derived biopolymers in drug delivery: Lessons from the African snail mucin. In Biopolymers in Drug Delivery: Recent Advances and Challenges, Bentham Publishers, Malaysia, pp. 27-38
- xi). Adikwu, M. U. (co-ed). (2010**).** Integrating Current African Concepts and Pharmaceutical Sciences and Pharmacy in a New Word, Pyramid Pharmaceutical Group Inc., USA. ISSN 2152-7849
- xii). **Adikwu, M. U.** (2010). Pharmaceutical Research Challenges and Barriers in Africa. In: Udeani, et al, Integrating Current African Concepts and Pharmaceutical Sciences and Pharmacy in a New Word, Pyramid Pharmaceutical Group Inc., USA. ISSN 2152-7849
- xiii). **Adikwu, M. U**. (2010). Pharmacy Practice Barriers and Challenges in Africa. In: Udeani, et al, Integrating Current African Concepts and Pharmaceutical Sciences and Pharmacy in a New Word, Pyramid Pharmaceutical Group Inc., USA. ISSN 2152-784
  - xiv). **Adikwu, M. U.,** J. O. Okafor and E.C. Ibezim (2011). Wound Healing Potentials of Honey-Mucin Combinations, ISBN 978-3-8443-8025-5, VDM Verlagsservicegesellschaft mbH, Saarbrucken, Germany.
- xv). Okore, VC, Ibezim, E. C., **Adikwu, M. U.,** Attama, A. A. And Ofokansi, K.C. (2004). Basic dispensing procedures. In: Pharmaceutics and Pharmaceutical Microbiology, El Demak Publishers, Enugu, Nigeria, 2004, pp. 39-79
- xvi). Adikwu, **M. U.,** Uzuegbu, D. B. and Attama, A. A. (2008). Physiology of microorganisms. In: Laboratory Techniques in Pharmaceutical Microbiology; Okore, V. C. and Attama, A. A. (eds.) Jolyn Publishers, Nsukka, 1-20.
- xvii). Adikwu, M. U., Agunbiade, M. O., Abah, J. M. U. (2017). Science and Technology Education Initiatives in Nigeria: The Case of STEP-B. In: Science Education: A Global Perspective. Springer: 145-173
  - xviii). Ejikeugwu, Chika, Esimone, C. O. and **Adikwu, M. U.** (2017). Antibiogram and Detection of ESBL and MBL in Gram-Negative Bacteria. LAP Lambert Academic Publishing, ISBN 97833303178892
  - xix). **Adikwu, M. U.** (2019). The Pains and Gains of Disappointment. Published by Parables, USA. xxi). **Adikwu (2019)**. The Road that Leads to Jerusalem. JemJoc Publishers, Abuja xxii). The Double Anointing of Elisha (2019). Published by Parables, USA.

- xxiii). **Adikwu M. U.** (2020). Editorial Adviser. Pharmaceutics in Focus: Dosage Form Development and Manufacture. Zaria: Ahmadu Bello University Press
- xxiv). **Adikwu M. U.** and Olorunsola, E. (2020). Pharmaceutics in Focus: Crystal Properties. In: Dosage Form Development and Manufacture. Zaria: Ahmadu Bello University Press
- xxv). **Adikwu, M. U.** (2020). Good Manufacturing Practices. In: Pharmaceutics in Focus: Dosage Form Development and Manufacture. Zaria: Ahmadu Bello University Press.
- xxvi). **Adikwu, M. U.** and Dan-Azumi, J. D. (2021). Health care systems and emergency preparedness in Nigeria. In: A Political Economy of Pandemics and Consequences of COVID-19 for Nigeria. (Suleiman, A. O., Editor). A Publication of the National Institute for Legislative and Democratic Studies, Abuja, Nigeria. Pp. 118-134.
- xxvii). **Adikwu, M. U. (2021)**. The Christian Brotherhood. JemJoc Publishers, Abuja.
- xxviii). **Adikwu, M. U.** (2018). A Land Flowing with Milk and Honey, University of Abuja Press.
- xxix). **Adikwu, M. U.** (2021). The Fathers' Inheritance for His Children, Hendoch Press, Kaduna
- xxx). **Adikwu, M. U.** (2021). The Youth and Global Christianity Today, Hendoch Press, Kaduna.

# XXXII). Journal Articles

 Adikwu, M U., Olorunfemi, J B and Emmanuel, T A. (1989). Out patient compliance with prescribed drugs at Kwara State Civil Service Clinic. Nig. J. Pharm.1 (1), 30-32

- 2. Chukwu, A., Agarwal, S P and **Adikwu, M U**. (1991). Some properties of chloroquine phosphate and quinine hydrochloride microcapsules. S T P Pharma. Sci. 1(2), 117-120.
- 3. Chukwu, A., Agarwal, S P and **Adikwu, M U**. (1991). Preliminary evaluation of dika wax as a sealant in quinine hydrochloride microcapsules. S T P Pharma Sci. 1(2), 121-124.
- 4. **Adikwu, M U.,** Chukwu, A. and Chiori, C O. (1991). Sealant effect of dika fat in the microcapsules of a highly water-soluble drug: chloroquine phosphate. Acta Pharm. Jugoslav. 4(1), 61-65.
- 5. **Adikwu, M U.** (1991). Titrimetric assay of paracetamol using dimethylsulpoxide (DMSO). Pharm. World Journal 8(3), 84-86.
- 6. **Adikwu, M U** and Chukwu, I K. (1991). Evaluation of fungal polysaccharide from the sclerotium of pleurotus as a disintegrant in aminophylline tablets. Pharmakeftiki 4(III), 127-130.
- 7. **Adikwu, M U** and Okafor, B O. (1991). Various facets of the essential drugs list and rational drug use. Pharm. World Journal 8(1): 27-30
- 8. **Adikwu, M U** and Osondu, B O. (1991). Four years of essential drugs list in Nigeria. Soc. Sci. Med. 33 (9), 1005-1010.
- 9. **Adikwu, M U.,** Udeala, O K and Ohiri, F C. (1992). Evaluation of prosopis gum in tabletting I. Binding properties in granules and tablets. S T P Pharma. Sci. 2(2), 159-163.
- 10. **Adikwu, M U.,** Udeala, O K. and Ohiri, F C. (1992). Release behaviour from microcapsules of chloroquine phosphate treated with polymerized latex of *Landolpia dulcis*. S T P Pharma. Sci. 2(3), 167-170.
- 11. **Adikwu, M U.**, Udeala, O K. and Ohiri, F C. (1992). Evaluation of prosopis gum in tabletting II. Disintegrant properties. S T P Pharma. Sci. 2(3), 221226.
- 12. **Adikwu, M U.,** Udeala, O K. and Ohiri, F C. (1992). Swelling studies on a gum from *Prosopis africana*. Pharmakeftiki 5, 169-170.

- 13. **Adikwu, M U**. and Agboola, J A. (1992). Adsorptive properties of a polysaccharide from the sclerotium of *Pleurotus tuber-regium*. Pharmakeftiki 5, 75-78.
- 14. **Adikwu, M U**. (1992). Differences in microcapsule micromeritics of two antimalarial drugs. J. West Afr. Pharm. 5(1), 45-48.
- 15. **Adikwu, M U.** (1992). Abuse of brand names in era of essential drugs. Lancet 339, 623-624.
- 16. **Adikwu, M U**. (1992). Could the law governing the use of prescription-only medicines not be extended to traditional medicines? Tropical Doctor 22, 21.
- 17. **Adikwu, M U.** and Okoye, K C. (1992). Patient factors militating against the laws on prescription-only medicines in Nigeria. Nig. J. Pharm. 23(3), 78, 11.
- 18. **Adikwu, M U.** (1993). Evaluation of a set of parameters for the optimum microencapsulation of chloroquine phosphate. J. Univ. Sci. Tech. 13, 45-49.
- 19. **Adikwu, M U.** (1993). In vitro adsorption of pyridoxine hydrochloride onto the sclerotium pleurotus: A case of food-drug interaction. Acta Pharm. 43, 201-207.
- 20. **Adikwu, M. U**. (1993). Release of theophylline from simple coarcervates of mucuna gum. Pharmakeftiki 6, 32-35.
- 21. Okore, V C. and **Adikwu, M U.** (1993). Release of theophylline from a heterogenous matrix containing dika fat, a consideration of the in vitro release mechanism. Pharmakeftiki, 6, 129-132.
- 22. **Adikwu, M U.,** Udeala, O K. and Ohiri, F C. (1993). Effect of environmental conditions and plasticization on the swelling properties of prosopis gum. S T P Pharma. Sci. 3, 494-498.
- 23. **Adikwu, M U.** (1993). Release of drugs from sustained release dosage forms. J. West Afr. Pharm. 7(2), 60-65.
- 24. **Adikwu, M U** and Ossai, A O. (1994). Properties and tablets prepared with *Landolphia dulcis* pseudolatex as the granulating fluid. S. T. P. Pharma. Sci. 4, 190-194.

- 25. **Adikwu, M U.** (1994). Suspending properties of prosopis gum. S T P Pharma Sci. 139-144.
- 26. **Adikwu, M U.**, Udeala, O K. and Ohiri, F C. (1994). Emulsifying properties of *Prosopis africana* gum. S T P Pharma. Sci. 4, 298-302.
- 27. **Adikwu, M U.** and Ossai, A O. (1994). Evaluation of *Landolphia dulcis* pseudolatex as a granulating fluid for aminophylline tablets. Acta Pharm. 44, 157-162.
- 28. **Adikwu, M U.** (1994). Adsorption of salicylates onto the sclerotium of pleurotus: implications in food-drug interactions. J Univ. Sci. Tech. 14, 2327.
- 29. Onunkwo, G C. and **Adikwu, M U.** (1995). Quantitative reactions of two amino-penicillins with π-acceptors. J West Afr. Pharm. 9, 40-43.
- 30. **Adikwu, M U**. (1995). Release behaviour of latex-treated matrix tablet formulations. Pharmakeftiki, 8, 83-88.
- 31. **Adikwu, M U.** (1995). Gel permeation chromatography of a polysaccharide gum from *Mucuna flagillepes*. Pharmakeftiki, 8, 151-153.
- 32. **Adikwu, M U.** and Okide, G B. (1995). Drug recall: a necessity for quality drug distribution system. Nig. J. Pharm. 26, 28-29.
- 33. **Adikwu, M U.** (1996). Charge-transfer complexation of chloranilic acid with pyrimethamine. Boll. Chim. Farm. 135, 15-17.
- 34. **Adikwu, M U.** (1996). Sales practices of patent medicine sellers in Nigeria. Health Policy and Planning 11, 202-205.
- 35. Chuku, A I., Kanu, A I., Okafor, R U. and **Adikwu, M U**. (1996). Use of labelling to promote responsible self-medication. J. West Afr. Pharm. 10, 1216.
- 36. **Adikwu, M U.** (1997). Street begging, sexuality and tropical diseases. Afr. J. Med. Pract. 4, 25-29.
- 37. **Adikwu, M U.** and Esimone, C O. (1997). Emulsifying properties of Gelrite stabilized with sodium sesquicarbonate (trona). Boll. Chim. Farm. 136(1), 22-27.

- 38. Echegi, E C. and **Adikwu, M U**. (1997). Detection of diethylcarbamazine on thin layer plates using π-acceptors in 1, 4-dioxane. Acta Pharm. 47(2), 143145.
- 39. **Adikwu, M U.** and Ofokansi, K C. (1997). Spectrophotometric determination of moclobemide by charge-transfer complexation. J. Pharm. Biomed. Analy. 16, 529-532.
- 40. Onunkwo, G C. and **Adikwu, M U.** (1997). Stability of Veegum/mucuna gum emulsions. S T P Pharma Sci. 7, 230-233.
- 41. **Adikwu, M U**. (1997). Drug release from latex-treated matrix tablet formulations. Acta Pharm. 47(1), 31-37.
- 42. **Adikwu, M U**., Ofokansi, K C. and Ofoefule, S I. (1997). Utility of chloranilic acid in the spectrophotometric assay of promethazine hydrochloride. Boll. Chim. Farm. 450-453.
- 43. Attama, A. A., Chuku, A. I., Muko, K N.and **Adikwu, M U.** (1997). Effect of Veegum on the suspending properties of mucuna gum. Boll. Chim. Farm. 136(7), 239-243.
- 44. **Adikwu, M U.,** Onyia, C C. and Ofokansi, K C. (1997). Evaluation of the physico-chemical properties of *Gladiolus actinomorphantus* starch. Acta Pharm. 47(3), 197-202.
- 45. Njoku, O U. and **Adikwu, M. U.** (1997). Investigation on some physicochemical, anti-oxidant and toxicological properties of *Moringa oleifera* seed oil. Acta Pharm. 47, 287-290.
- 46. Ohiri, F C., Muko, K N. and **Adikwu, M U**. (1997). Microbiological studies on tablets containing high proportions of *Prosopis africana* gum. J. Pharm. Res. Develop. 2(2), 11-13.
- 47. **Adikwu, M U.,** Muko, K N and Esimone, C O (1998). Formulation of sustained release theophylline tablets using mucuna gum as a hydrophilic retardant. J. Univ. Sci. Tech. 18: 4-7.
- 48. Echegi, E C., Ezeigwe, E I. and **Adikwu, M U.** (1998). The use of πacceptors in the detection of α-methyldopa on thin layer plates. Boll. Chim. Farm. 137(2), 59-61.

- 49. **Adikwu, M U.**, Udeala, O K. and Ohiri, F C. (1998). Evaluation of *Prosopis africana* gum in gel-forming sustained-release tablets. J. Pharm. Res. Develop. 2(3), 36-40.
- 50. **Adikwu, M U**. and Ofokansi, K C. (1997). The suspending properties of *Cissus rufescence* gum in combination with Veegum. Boll. Chim. Farm. 137(4), 120-124.
- 51. Attama, A. A. and **Adikwu, M U.** (1998). Release and permeation properties of gels formulated with mucuna gum. Plant Prod. Res. Comm. 2, 26-32.
- 52. Okide, G B. and **Adikwu, M U**. (1998). A kinetic study of the auto-oxidation of arachis oil. Boll. Chimico. Farmac. 137(7), 277-280.
- 53. Attama, A A. and **Adikwu, M U.** (1998). Evaluation of the cellulose material from *Prosopis africana* pods as a disintegrant in sodium salicylate tablets. Boll. Chim. Farm. 137(4), 97-102.
- 53. **Adikwu, M U**. (1998). Prescription patterns in some Nigerian health centres: implications for rational drug use. West Afr. J. Pharm. 12(2), 4043.
- 55. **Adikwu, M U.** and Ofokansi, K C. (1998). Energetics of the adsorption of some drugs unto the sclerotium of *Pleurotus tuber-regium*. Boll. Chim. Farm. 137(5), 165-168.
- 57. **Adikwu, M U**. (1998). Analysis of diethylcarbamazine by charge transfer complexation with chloranilic. Boll. Chim. Farm. 137(5), 173-177.
- 58. **Adikwu, M U.** (1998). Molecular weight and amylose/amylopectin ratio of the starch from *Gladiolus actinomorphantus*. Nig. J. Nat. Prod. 2, 54-56.
- 59. Ibezim, E C., Esimone, C O. and **Adikwu, M U.** (1998). The release properties of microcapsules prepared with polymerised latex of *Landolphia dulcis*. Acta Pharm. 48(2), 111-118.
- 60. **Adikwu, M U.,** Ofokansi, K C. and Attama, A A. (1998). Thermodynamic studies of the charge-transfer interactions of chloranilc acid with moclobemide and promethazine hydrochloride. Bio. Pharm. Bull. 21(12), 1243-1246.

- 61. Esimone, C O., **Adikwu, M U**. and Okonta, J C. (1998). Preliminary antimicrobial screening of the ethanolic extract from the lichen *Usnea subfloridans* (L). J. Pharm. Res. Develop. 3(2), 99-102.
- 62. **Adikwu, M. U**. (1998). Learning of ethics and faking of drugs in Nigeria. Afric. J. Med. Pract. 5 (6), 291-293
- 63. **Adikwu, M U.** and Esimone, C O. (1998). Susceptibility of tetracycline and ampicillin resistant strains of *Staphylococcus aureus* to bioactive column fractions of the lichen *Ramalina farinacea* (L.). Ach. J. Pharm. Pharmacol. 50(Supplement), 38.
- 64. Esimone, C O., Muko, K N. and **Adikwu, M U**. (1999). Antimicrobial properties of *Indigofera dendroides*. Fitoterapia, 70, 517-520.
- 65. Esimone, C O. and **Adikwu, M U.** (1999). Antimicrobial activity and cytotoxicity of *Ramalina farinacea*. Fitoterapia, 70, 428-431.
- 66. Esimone, C O., **Adikwu, M U**., Uzuegbu, D B. and Udeogaranya, O P. (1999). The effect of ethylenediamine tetracetic acid on the antimicrobial properties of benzoic acid and cetrimide. J. Pharm. Res. Develop. 4(1), 1-8.
- 67. Attama, A. A. and **Adikwu, M U.** (1999). The physicochemical properties of starch derived from *Tacca involucrata*. Nig. J. Nat. Prod. Med 3, 70-72.
- 68. Esimone, C O., Adikwu, **M U**., Ebi, G C, Anaga, A. and Njoku, C. (1999). Preliminary physicochemical evaluations and bioactive properties of column fractions from *Ramalina farinacea* (L.). Ach. Boll. Chim. Farm. 138, 19-25.
- 69. Okide, G B. and **Adikwu, M U.** (1999). The role of the academic pharmacist in oral rehydration (ORT) programmes. Nig. J. Pharm. Pract. Cont. Edu. 2(2), 19-22.
- 70. Attama, A A., Esimone, C O. and **Adikwu, M U**. (1999). Binary combination of detarium gum and Veegum as a binder in sodium salicylate tablets. Boll. Chim. Farm. 138(5), 199-202.
- 71. Attama, A A. and **Adikwu, M U.** (1999). Bioadhesive delivery of hydrochlorothiazide using tacca starch/SCMC and tacca starch/Carbopol 940 and 941 admixtures. Boll. Chim. Farm. 138(7), 329-336.

- 72. **Adikwu, M U.,** Ofokansi, K C. and Attama, A A. (1999). Spectrophotometric and thermodynamic studies of the charge transfer interaction between diethylcarbamazine citrate and chloranilic acid. Chem. Pharm. Bull. 47(4), 463-466.
- 73. Attama, A A., **Adikwu, M U** and Muko, K N (1999). Evaluation of *Prosopis africana* gum in the formulation of jellies. J Univ. Sci. Tech., 19, 124-128.
- 74. Ezugwu C O and **Adikwu, M U** (1999). Healthcare financing via privatisation process in secondary health care institutions. Nig J Pharm. Pract. Cont. Edu., 2, 6-13.
- 75. Attama A A., **Adikwu, M U** and Esimone C O (1999). Sedimentation studies on chalk suspensions containing blends of Veegum and detarium gum as suspending agents. Boll. Chim. Faramac. 138, 521-525.
- 76. Attama, A A and **Adikwu, M U** (1999). Effect of trona on the properties of tablets prepared with three disintegrants. J Pharm. Res. Develop. 4, 79-84.
- 77. Okide, G B., **Adikwu, M U.** and Esimone, C. O. (2000). Antimicrobial activities of some amino derivatives of 5,7-dibromo-2-methyl-8hydroxyquinoline. Biol. Pharm. Bull. 23(2), 257-258.
- 78. Njoku, O U., Eneh, F U., Ononogbu, I C and **Adikwu, M U** (2000). Compositional and toxicological studies on sheabutter. J. Nutraceuticals, Functional & Medical Foods 2(3), 33-38.
- 79. Attama, A A and **Adikwu, M U**. (2000). Dissolution of hydrophobic drugs from tablets containing trace amounts of trona as the dissolution enhancer. J. Pharm. Res. Develop., 5, 61-66.
- 80. Attama, A A., **Adikwu, M U** and Okoli, N D (2000). Studies on bioadhesive granules 1: granules formulated with *Prosopis africana* (prosopis) gum. Chem. Pharm. Bull. 48, 734-737.
- 81. Attama, A A., **Adikwu, M U** and Ezeabasili, S. I (2000). Use of goat fat/palm oil admixtures in the formulation of suppositories. J Pharm. Res. Develop. 5, 17-22.
- 82. Ojile, J E., **Adikwu, M U** and Okoli, N D (2000). Properties of films prepared from prosopis and mucuna gums. Boll. Chim. Farmac. 139, 190193.

- 83. **Adikwu, M U.**, Attama, A. A. and Esimone, C. O. (2000). Detection of halophantrine, mefloquine and proguanil by charge-transfer on thin layer plates. Boll. Chim. Farmac. 139, 46-48.
- 84. **Adikwu, M U.**, Ojile, J E and Okoli, N. D. (2000). Effect of dissolution fluid and presence of hog intestinal barrier on the dissolution of theophylline from bioadhesive granules. Boll. Chim. Farmac. 139: 242-246.
- 85. **Adikwu, M U.,** Udeala, O. K. and Ohiri, F C (2000). Physicochemical properties of a new polysaccharide gum from *Prosopis africana*. Part II. Coacervation properties with ethanol. Discovery and Innovation, 12, 80-84.
- 86. **Adikwu, M U** and Hoetje, H.-D. (2001). Mechanistic appraisal of the charge-transfer complexes of promethazine with chloranil: a modelling approach. Chem Pharm. Bull. 49, 669-674.
- 87. Esimone, C O., **Adikwu, M U.,** Nwafor, S. V. and Okoli, C O. (2001). Potential use of tea extracts as a complementary mouth wash: a comparative evaluation of two samples. J. Altnert. Complement. Med. 7, 15.
- 88. **Adikwu, M U.,** Builders, P. F., Ofokansi, K C and Attama, A A. (2001). Studies of the complexation of chloranilic acid with proguanil. Boll Chim. Farmac. 140, 172-176.
- 89. Esimone, C. O., Ezeabasili, S. I., Muko., K N., Ohiri, F C and **Adikwu, M U** (2001). Drug adsorption studies on pregelatinized gladiolus starch. Boll. Chim. Farmac. 140, 351-353.
- 90. **Adikwu, M U** and Ojile, J. E (2001). The Nigerian forensic pharmacy curriculum and pharmacy ethics. Pharm. Pract. Cont. Edu. 4, 9-12.
- 91. **Adikwu, M U.,** Ezeabasili, S. I. and Esimone, C O (2001). Evaluation of the physicochemical properties of a new polysaccharide gum from *Prosopis africana*. Boll. Chim. Farmac. 140, 40-45.
- 92. Attama, A. A., **Adikwu, M. U.** and Ngini, V. (2001). In vitro release of metronidazole from suppositories formulated with blends of cow fat and palm kernel oil. J. Univ. Sci. Tech. 21: 62-66
- 93. Esimone, C O and **Adikwu, M U** (2002). Susceptibility of some clinical isolates of Staphylococcus to bioactive column fractions from the lichen *Ramalina farinacea* (L) Ach. Phytotherapy Research, 16, 494-496.

- 94. **Adikwu, M U.,** Okoli, N D and Ojile, J. E. (2002). Formulation and evaluation of bioadhesive granules of theophylline formulated from mucuna and prosopis gums. Acta Pharm. 52, 53-56.
- 95. Esimone, C O, Nwafor, S V, Okoli, C O, Chah, K F, Uzuegbu, D B, Chibundu, C., Eche, M A and **Adikwu, M U** (2002). In vivo evaluation of the interaction between aqueous extract of *Garcinia kola* (Heckel) and ciprofloxacin hydrochloride. Am J Therap. 9 (4): 275-280.
- 96. Attama, A. A. And **Adikwu, M. U.** ((2002). Studies on modified gladiolus starch. Nig. J. Pharm. 35-42.
- 97. Esimone, C. O., **Adikwu, M. U.**, Ibezim, E. C. Ofoefule, S. I. Nwafor, S. V. and Onuoha, O. M. (2002). Potential application of *Garcinia kola* seed as a natural antidote in the management of ciprofloxacin hydrochloride poison. An in vitro study. Acta Pharmaceutica 52: 219-226
- 98. **Adikwu, M U** and Hoeltje, H.-D. (2002). Charge-oriented modeling in charge-transfer systems. Boll. Chim. Farmac. 141, 279-281.
- 99. C. O. Esimone, **Adikwu, M. U**., Nwafor, S. V., Okoli, C. O., Ndu, O. O. and Nwoke, O. I. (2002). In vitro antimicrobial interactions of arthemeter with some 4-quinolones. Boll. Chim. Farmac. 141: 385-388
- 100. Attama, A. A. and **Adikwu, M. U**. (2002). Physico-chemical properties of a new polysaccharide gum from *Prosopis africana*: prosopis gum-alginic acid complex coacervate system. Plant Prod. Res. J. (7) 43-50
- 101. Attama, A. A., **Adikwu, M U.,** and Nnamani, P. O. (2003). Self-emulsifying adhesive systems of diclofenac. Int. J. Pharm. 262 (1-2):23-8.
- 102. **Adikwu M U** (2003). Theoretical aspects of the interaction of ampicillin with chloranilic acid. J. Pharm. & Allied Sc. 1 (2), 73-77.
- 102. **Adikwu, M U.,** Yoshikawa, K. and Kanji, T. (2003). Bioadhesive delivery of metformin using a polysaccharide with antidiabetic potential. Bio. Pharm Bull. 26: 662-666
- 103. Attama, A. A., **Adikwu, M U** and Nnamani, P O. (2003). Delivery of diclofenac sodium via non-disintegrating bioadhesive tablets of paraffin wax. S. T. P. Pharma Sci. 13: 147-150, 2003

- 104. Attama A. A. and **Adikwu, M. U.** (2003). Release of indomethacin from bioadhesive tablets containing carbopol 941 modified with *Abelmoschus esculentus* (okra) gum Boll Chim Farm. 2003 Sep;142(7):298-302.
- 105. Attama, A. A., **Adikwu, M U** and Okoli, N. D. (2003). Studies of bioadhesive granules II. Granules prepared from mucuna gum. S. T. P. Pharma Sc. 13, 153-220.
- 106. Attama, A. A., Nnamani, P. O. and **Adikwu, M. U.** (2003). Diclofenac release from bioadhesive hydrophilic matrix tablets formulated with polyvinyl-pyrrolidone-sodium carboxymethyl cellulose copolymer. J. Pharm. Allied Health Sci., 1:1-7
- 107. Attama, A. A., Nnamani, P. O., Mbonu, I. K. and **Adikwu, M. U**. (2003). The effect of hypochlorite oxidation on the physical properties of gladiolus starch. J. Pharm. Allied Health Sci. 1 (1): 28-35
- 108. **Adikwu, M. U.** (2003). Theoretical aspects of the charge-transfer interactions of ampicillin with chloranilic acid. J. Pharm. Allied Health Sci. 1 (2), 73-79
- 109. Esimone, C. O., **Adikwu, M. U**., Ndu, O. O., Udeogaranya, P. O., Ezugwu, C. O. and Obonga, W. (2003). Effect of *Garcinia kola* seed extract on the antimicrobial properties of some antibiotics in vitro. J. Pharm. Allied Health Sci. 1(2), 114-120
- 110. **Adikwu, M. U.,** Ofokansi, K. C., Esimone, C. O., Kene, T. U. and Okorie, O. (2003). In vitro and ex vivo release study of drugs from ointments formulated with beeswax processed from locally available honeycombs. J. Pharm. Allied Health Sci. 1(1): 45-54
- 111. Attama, A. A., Nnamani, P. O., **Adikwu, M. U**. and Akidi, F. O. (2004). Thermodynamic consideration of the charge transfer interaction of the donor: acceptor type between chloranilic acid and haloperidol. Chem. Pharm. Bull. (Tokyo). 2004 52(3):303-6.
- 112. **Adikwu, M U,** Yoshikawa Y and Kanji, T. (2004). Pharmacodynamic-pharmacokinetic profiles of metformin hydrochloride from mucoadhesive formulation of a polysaccharide with antidiabetic potential in streptozotocin-induced diabetic rat models. Biomaterials 25: 3041-3048

- 113. Attama A. A., **Adikwu, M. U.** and Okpi, O. (2004). Bioavailability of metronidazole from in situ gelling and mucoadhesive suppositories formulated with Carbopol ETD 2020. Journal of Biological Research and Biotech. 2(1): 75-81
- 114. Attama, A. A., Nnamani, P. O., **Adikwu, M. U**. and Akidi, F. O. (2003). Spectrophotometric determination of haloperidol by charge-transfer interaction with chloranilic acid. S. T. P. Pharm. Sci., 13 (6), 4-9
- 115. Attama, A. A., **Adikwu, M. U**. and Akpa, P. A. (2004). Melt extrusion bioadhesive delivery of diclofenac sodium granules using theobroma oil. Boll. Chim. Farm. 143(4):174-7.
- 116.Onunkwo, G. C., Egeonu, H. C., **Adikwu, M. U.,** Ojile, J. E. and Olosuwulu, A. K. (2004). Some physical properties of tableted seed of *Garcinia kola* (Heckel). Chem. Pharm. Bull. 52: 649-653
- 117. Ofokansi, K. C., Adi**kwu, M. U.,** Esimone, C. O. and Nwodo, N. M. (2003). Antibacterial activity of the leaf extract of *Ocimum gratissimum* (Fam. Labiatae). J. Bio. Res. Biotech. 1: 35-42
- 118. **Adikwu, M. U**. and Ofokansi, K. C. (2003). Application of conformational space search in drug action. J. Bio. Res. Biotech. 2: 69-76
- 119. Attama, A. A. and **Adikwu, M. U**. (2002). Studies on modified Gladiolus starch. Nig. J. Pharmacy 33: 35-42
- 120. Ofokansi, K. C., **Adikwu, M. U.,** Esimone, C. O. and Nwodo, M. N. (2004). In vitro evaluation of the combined antibacterial activity of the leaf extracts of *Dissotis theifolia* with some disc antibiotics. Indian J Pharm. Sci. 66 (5): 659-664
- 121. **Adikwu, M. U**. Okorie, O. O. and Attama, A. A. (2004). Pharmacodynamics of metformin in detarium gum mucoadhesive formulations. J. Pharmaceutical Research (India) 3: 35-41
- 122. Attama, A. A. and **Adikwu, M. U**. (2004). Glucose lowering effects of parenteral doses of phenformin of expected low serum perturbations. African J. Pharm. Res. Dev. 1:7-10

- 123. Attama, A. A. **Adikwu, M. U** and Amorha, CJ. (2003). Release of indomethacin from bioadhesive tablets containing carbopol 941 modified with *Abelmoschus esculentus* (okra) gum. Boll. Chim. Farm. 142:298-302
- 124. **Adikwu, M. U.** (2005). Evaluation of snail mucin motifs as rectal absorption enhancer for insulin in non-diabetic rat models. Biological and Pharmaceutical Bull. 28 (9):1801-1805
- 124. **Adikwu, M. U.,** Nnamani, P. O. and Attama, A. A. (2005). Evaluation of snail mucin for the bioadhesive delivery of chlorpropamide. Bioresearch 5: 75-85
- 125. **Adikwu, M. U**. and Nnamani, P. O. (2005). Some physiological and toxicological properties of snail mucin. Bioresearch 5: 1-6.
- 126. **Adikwu, M. U.** and Ikejiuba, C. C. (2005). Some physicochemical and wound healing properties of snail mucin. Bolletino Chimico Farmceutico 144:1-8
- 127. **Adikwu, M. U.** and Okafor, J. O. (2006). Evaluation of Mucin as a Release Enhancer for Rectal Delivery of Glibenclamide. Current Drug Delivery 3 (3), 243-254
- 128. Ezugwu, C. O., **Adikwu, M. U**. and Nwodo, N. J. (2002). Determination of the HLB values of some natural gums. Plant Products Research Journal, 7: (2), 9-18
- 129. Esimone, C. O., **Adikwu, M. U.,** Ndu, O. O. Udeogaranya, P. O., Ezugwu, C. O. and Obonga, W. O. (2003). *Effects of Garcinia kola* seed extract on the antimicrobial properties of some antibiotics in vitro. J. Pharm. Allied Health Sci. 1 (2), 114-120.
- 130. Audu-Peter, J. D. and **Adikwu, M. U. (2006).** Binding of *Staphylococcus aureus* onto bovine intestinal mucin. Nigerian Journal of Pharmaceutical Sciences, 5: 5-8
- 131. **M. U. Adikwu**, A. H. Balami, J. E. Ojile and J. A. Onaolapo (2005). Compression Behaviour of Novel Acid Modified Mucilage from *Cissus populnea* stem bark. Journal of Raw Materials Research and Development 2: 17-33
- 132. Esimone **CO**, Omobowajo OR, Amadi C, **Adikwu MU**, Edrada R, Proksch P and Nabi G (2006). Antiviral potentials of Nigerian *Aframomum*

- *melagueta* Roscoe and *Piper guineense* Schum. and Thonn. Nig. J. Nat. Prod. Med. **10:** 51-54.
- 133. **M.U. Adikwu**, A. A. Attama and O. Okorie (2006). Effect of mucoadhesive delivery of metformin on the entero-insular axis. STP Pharma Sciences 16 (2):157-159.
- 134. Ezugwu, C. O. Odo, U. E. and **Adikwu, M. U.** (2005). Primary health care financing in Nigeria via privatisation using share holders' contribution mechanism. Journal of Pharmaceutical and Allied Health Sciences 3 (1), 300309.
- 135. **M. U Adikwu,** K. O. Aneke and P. F. Builders (2005). Biophysical Properties of Mucin and Its Use as a Mucoadhesive Agent in Drug Delivery: Current Developments and Future Concepts. Nigerian J. Pharm. Res. 4: 60-69
- 136. **M U Adikwu** and P.O. Nnamani. (2005). Rheological Studies on Snail Mucin with Potential for Bioadhesive Drug Delivery. Indian J. Pharm. Res. 4 (4): 80-84
- 137. Builders, P. F. **Adikwu, M. U.** Egieyeh, A. and Kunle, O. O. (2006). The swelling properties *Adonsonia digitata* mucilage: A super gel forming polymer. African Journal of Pharmaceutical Research and Development. 2: 88-93
- 138. Agboke, A. A. Edeh, O. G. and **Adikwu, M. U.** (2006). The study of interactions of silver concentrate and gentamycin against a clinical isolate of *Escherichia coli*. African Journal of Pharmaceutical Research and Development. 2: 94-96
- 139. **Adikwu, M. U.** (2006). Mucins and their potentials (editorial). Tropical Journal of Pharmaceutical Research, 5: 581-582
- 140. **Adikwu, M. U.** and Ndu, O. O. (2006). Gastroprotective properties of mucin and honey combinations. Journal of Pharmaceutical Research (India) 5: 84-86
- 141. **Adikwu. M. U.** and Ezeugwu, A. C. (2006). Comparative assay of diphenhydramine hydrochloride and its dosage form using colorimetry,

- UV-spectroscopy, potentiometric and aqueous acid-base titrations. Journal of Pharmaceutical Research (India) 5: 74-78.
- 142. **Adikwu, M. U.,** Agboke, A. A., Iroha, I. and Esiobu, I. (2006). In Vitro Evaluation of the Interactions between Chloramphenicol and Lamivudine against *Escherichia coli* and Nystatin and Lamivudine against *Candida albicans* Bio-Research 4(2): 85 8
- 143. Builders, P. F., **Adikwu, M. U**., Egieyeh, A. and Kunle, O. O. (2006). The swelling properties of *Adonsonia digitata* mucilage: a super gel-forming polymer. Afr. J. Pharm. Res. 2: 88-93
- 144. Agboke, A. A., Edeh, O. O. and **Adikwu, M. U.** (2006). The study of interactions of colloidal silver concentrate and gentamicin against clinical isolates of *Escherichia col*i. Afr. J. Pharm. Res. 2: 88-93
- 145. Esimone, C. O., Uzuegbu, D. B., Egbu, N. L., **Adikwu, M. U.,** Dibua, U. E. and Iroha, I. R. (2006). In vitro evaluation of the interactions between the chloroform extract of *Chromolena odorata* and lincomycin and itraconazole using the checker board method. J. Med. Pharm. Sc. 2: 69-73
- 146. Abonyi, D. O. **Adikwu, M. U.** Esimone, C. O. and Ibezim, E. C. (2009). Plants as sources of antiviral agents. Afr. J. Biotechnol. 8: 3989-3994.
- 146.EA Udokpoh, CC Muogbo, AA Agboke, I Iroha and **MU Adikwu** (2006), Preliminary investigation into the anti-microbial properties of methanolic and aqueous extracts of the leaves of *Euphorbia hirta* Linn. (Family: Euphorbiaceae) Bio-Research 4(1): 7-9
- 147. Esimone, C. O., Iroha, I. R., Okeh, C. O., Ude, I. G. and **Adikwu, M. U.** (2006). In vitro interaction of ampicillin with ciprofloxacin or spiramycin as determined by the decimal assay for additivity technique. Nigerian Journal of Health and Biomedical Sciences 5 (1):12-16
- 148.Esimone, C. O., Omobowajo, O. R., Amadi, C., **Adikwu, M. U**., Proksch, P. and Uberla, K. (2006). Antiviral potentials of two Nigerian spices: *Afromomum melegueta* (Roscoe) and *Piper guinense* (Schum and Thonn) Nig. J. Nat. Prod. Med. 10: 51-53

- 149. Ofokansi, K.C. and **Adikwu, M. U**. (2007). Preparation and Evaluation of Mucin-Gelatin Mucoadhesive Microspheres for Rectal Delivery of Ceftriaxone Sodium. Drug Development and Industrial Pharmacy, 33: 691–700.
- 150. **Adikwu M. U.** and B. U. Alozie (2007). Application of snail mucin dispersed in detarium gum gel in wound healing. Scientific Research and Essay 2 (5), 195-198
- 151. **Adikwu, M. U.** and Enebeke, T. C. (2007). Evaluation of snail mucin dispersed in brachystegia gum gel as a wound healing agent. Animal Research International **4: 685-589.**
- 152. **M. U. Adikwu** and Eraga S. O. (2007). Evaluation of the stability and rectal absorption of insulin-mucin complex. Research and Reviews in the Biosciences 1 (3): 1-8
- 153. **Adikwu, M. U.** and Nwamara C. J. (2007). Formulation of Mucuna Gum Gels Containing Porcine Mucin for Topical Application. Indian J. Pharm. Res **6(3)**: **173-175**.
- 154. **M. U. Adikwu**, C. C. Mbah and C. B. Ezenwanne (2006). Bioadhesive and release studies on riboflavin granulations prepared from cissus gum coprecipitated with gelatin. Journal of Raw Materials Research, 3 (2): 69-83
- 155. **M. U. Adikwu** and J. O. Onah (2007) Computational Studies for Evaluating the Mechanism of the Interaction of Chloranil with Ampicillin Using a Semi-Empirical Approach. Nigerian Journal of Pharmaceutical Sciences 6: 9-14.
- 156. Olowosulu, A. K., Akpa, P. A., Eze, U. V. And **Adikwu, M. U**. (2008). Spectrophotometric analysis of *Hibiscus sabdariffa* colourant at different pH values. Nig. J. Pharm. Sci. 7: 36-40
- 157. Builders P. F., Kunle, O. O. and **Adikwu, M. U**. (2008). Preparation and characterization of mucinated agarose: a mucin agarose physical crosslink. Int. J. Pharm. 356: 174-80.

- 158. Momoh, MA and **Adikwu M.U. (2007).** Evaluation of Oral Insulin Delivery using Bovine Mucin in non diabetic rats. Indian J. Pharm. Res. 6.
- 159. Attama, A. A. Mba, C. C. and **Adikwu, M. U.** (2007). Use of trona as a permeation enhancer for ointments prepared with beeswax extracted from native honeycombs. J. Pharm. Allied Sci. 4: 374-480
- 160. Esimone CO, Nworu CS, **Adikwu MU**, Odimegwu DC, Ezeugwu CO (2007). The effect of a new adaptogen, *Garcinia kola* seed, on the bioavailability of ofloxacin in humans, Scientific Research and Essays 2(10):482-285
- 161. Esimone CO, **Adikwu MU**, Nworu CS, Okoye FBC and Odimegwu D. C. (2007). Adaptogenic potentials of *Camellia sinensis* leaves, *Garcinia kola* and *Kola nitida* seeds. Sci. Res. Essays **2(7)**:232-237.
- 162. Omeje, E. O., Adikwu, M. U., Esimone, C.O., Obonga, W.O., Esimone, Okide, G. B. and Eberendu, O. C. (2007). Characterisation of polysaccharides from the fern *Platycerium bifurcatum* with expected biological activity. Journal of Phytomedicine and Therapeutics 12: 66-75
- 163. K.C. Ofokansi, P.A. Akpa and **Adikwu**, **M. U.** (2006). Preparation, Characterization and in vitro release properties of cefuroxime sodiumloaded microspheres based on gelatin and its admixtures with porcine mucin. Nigerian Journal of Pharmaceutical Research, 5, 1: 127-135.
- 164. Esimone CO, Nworu CS, **Adikwu M. U.,** Odimegwu DC, Ezeugwu CO (2007). The effect of a new adaptogen, *Garcinia kola* seed, on the bioavailability of ofloxacin in humans, Scientific Research and Essays 2(11): 482-485.
- 165. KC Ofokansi and Adikwu, M. U. (2007). Formulation and Evaluation of Microspheres Based on Gelatin-Mucin Admixtures for the Rectal Delivery of Cefuroxime Sodium. Tropical Journal of Pharmaceutical Research; 6 (4): 825832

- 166. Mshelbwala, K. Ojile, J. E., **Adikwu, M. U.** and Ameh, B.1(2007). Tableting properties of the aqueous leave extract of *Andrographis paniculata* Nig. J. Pharm. Sci., 6: 71 75
- Omeje, E. O., Amayo, L., Adikwu, M. U., Osadebe, P. O. and Ibezim, E.
  C. (2008). Platelet response to methanolic and aqueous extracts of *Euphorbia hirta*. Nig. J. Nat. Prods. Med. 11: 44-47.
- 168. Iroha, I. R., **Adikwu. M. U**., Amadi. E. S., Aibinu, I. and Esimone, C. O. (2008). Characterization of extended spectrum beta-lactamase producing *E. coli* from secondary and tertiary hospitals in Eastern Nigeria. Res. J. Microb. 3: 314-319.
- 169. Esimone, C. O., Kenneth C. Ofokansi, **Adikwu**, **M. U.,** Emmanuel C. Ibezim, Dominic O. Abonyi, Georgina N. Odaibo, David O. Olaleye. (2007). An *in vitro* evaluation of the antiviral activity of extracts from the lichen *Parmelia perlata* (L.) Ach. against three RNA viruses. J. Infect. Dis. Developing Countries, 1(3): 315-320.
- 170. Iroha, I. R., Amadi, S. E., **Adikwu, M. U.,** Esimone, C. O. (2008). Detection of plasmid borne extended Beta-lactamase enzymes in clinical isolates of *E. coli* from a community general hospital. Int. J. Mol. Med. Advan. Sci. 4: 4548
- 171. **Adikwu M. U.** (2008). Curriculum Development in Science, Technology and Mathematics (STM). Proceedings of the 49th Annual Conference of the Science Teachers Association of Nigeria (STAN) at the Bayelsa State College of Arts and Science, Yenagoa, Bayelsa, State, August 26-31, 2008. Pp. 3-11.
- 172. Momoh, M. A. and **Adikwu, M. U.** (2008). Evaluation of the effect of colloidal silver on the antibacterial activity of ethanolic extract of the lichen *Parmelia perlata*, Afr. J. of Pharm. Pharmacol., 2(6): 106-109
- 173. Philip F. Builders, Olobayo O. Kunle Larry C. Okpaku, Modupe I. Builders, Anthony A. Attama and **Michael U. Adikwu** (2008).

- Preparation and evaluation of mucinated sodium alginate microparticles for oral delivery of insulin. European Journal of Pharmaceutics and Biopharmaceutics, 70: 777-783
- 174. Momoh, M. A. and **Adikwu, M. U.** (2008). Determination of hydrophile-lipophile balance (HLB) of bovine mucin for possible emulsifying properties. Animal Research International 5(2): 840 842
- 175. **Adikwu, M. U**.and Okolie, C. O. (2009). The effect of snail mucin on the ulcer healing rate of clarithromycin. Indian J. Pharm. Res. 8: 6-8.
- 176. MA Momoh, **MU Adikwu**, SO Eraga (2008). The Effect of Cast Films of Bovine Mucin and Prosopis Gum Containing Cicatrin<sup>®</sup> Powder on Wound Healing. Dhaka University J. Pharma. Sci. 7 (1): 7-10
- 177. Momo, M. A., Ibezim, E. C., **Adikwu, M, U**. and Okechi, O. C. (2009). Isolation and characterization of thermostable enzyme-producing species of *Bacillus* species of pharmaceutical importance using animal dung. J. Pharm. Res., 2 (5): 808-810
- 178. Okore, V. C. and Adikwu, M. U. (2009). Application of polymers in the Pharmaceutical Sciences. In: Polymers and Polymer Applications; edited by, A. A. Attama, and C. O. Esimone, Jolyn Publishers, Nsukka pp. 49 63
- 179. **Adikwu, M. U**. (2009). Nigeria country report on post-basic education. Proceedings of the International Council of Associations for Science Education
  (Theme: Meeting Challenges to Sustainable Development in Africa). Jack Holbrook and Paul Eniayeju, editors; Abuja, May24-29, pp. 202-207
- 180. Iroha, I. R., **Adikwu, M. U**., Esimone, C. O., Aibinu, I. And Amadi, E. S. (2009). Extended spectrum β-lactamase (ESBL) in *E. coli* extracted from a tertiary hospital in Enugu State. Pak. J. Med. Sci., 25(2), 279-282
- 181. Ofokansi, K. C., Okorie, O. and **Adikwu, M U** (2009). Biodegradable microspheres based on gelatin-porcine mucin admixtures: in vitro and in vivo studies; Biol. Pharm. Bull. 32: 1754- 1759

- 182. Ngwu MI, **Adikwu M. U.,** Ibezim EC, Odimegwu DC, Ngwu GI and Esimone C. O. (2009). Susceptibility Pattern of a Clinical Isolate of *Staphylococcus aureus* to the Combined Activity of Herbal Preparation of *Azadirachta indica* and some Antibiotics. International Journal of Health Research 2(3): 279 286.
- 183. Eze, E. I., Ezugwu, C. N. and **Adikwu, M. U**. (2009). Sensitivity pattern of clinical isolates of *Candida albicans* from HIV/AIDS patients to combined *Physcia grisea* extract and tioconazole. Global Journal of Pure and Applied Science, 15: 301-304.
- 184. Builders, P. F. Chukwu, C., Obidike, I., Builders, M. I., Attama, A. A. and **Adikwu, M. U.** (2009). A novel xyloglucan gum from the seeds of *Afzelia africana* Sc. Pers.: Some functional and physicochemical properties. Int. J. Green Pharmacy, April-June 5: 112-118
- 185. Momoh MA, **Adikwu MU**, and Attama AA (2009). Evaluation of wound healing effect of gelatin and polyethylene glycol (PEG) containing Cicatrin<sup>®</sup> powder. **Arch. Pharm. Sci. Res.** 1(1) 54 57.
- 186. Ezeabasili SI, Ibezim EC, **Adikwu MU**, Attama AA and Ugoeze KC. (2009) Studies of some animal fats as lipid bases in the formulation of some medicated semi solid dosage forms I: physicochemical properties. Int. Conf. Polymer Dev. Applic., 1, 87-91.
- 187. Ezeabasili SI, Ibezim EC, **Adikwu MU**, Attama AA, Ugoeze KC (2009). Studies of some animal fats as lipid bases in the formulation of Some medicated semi solid dosage forms II: release of salicylic acid from ointments. Int. Conf. Polymer Dev. Applic, 1, 103-110
- 188. Ezeabasili SI, Ibezim EC, **Adikwu MU**, Attama AA and Ugoeze KC (2009). Studies of some animal fats as lipid bases in the formulation of some medicated semi solid dosage forms iii: rheological and stability studies of salicylic acid ointments. Int. Conf. Polymer Dev. Applic.,. 1, 119-125.
- 189. Ezeabasili SI, Ibezim EC, **Adikwu MU**, Attama AA and Ugoeze KC (2009). Studies of some animal fats as lipid bases in the formulation of

- some medicated semi solid dosage forms IV: release of hydrocortisone acetate from creams. Int. Conf. Polymer Dev. Applic. 1, 132-138.
- 190. Momoh, M. A., **Adikwu, M. U.**, Nwachi, U. E., Attama, A. A. and Gugu, T (2009). In vitro evaluation of bioadhesive and release properties of thiamine hydrochloride formulation from gelatine, gellan as their admixtures. BioResearch, 7: 461-464
- 191. Ezeabasili SI, Ibezim EC, **Adikwu MU**, Attama AA and Ugoeze KC (2009). Studies of some animal fats as lipid bases in the formulation of some medicated semi– solid dosage forms v: rheological and stability studies of hydrocortisone acetate creams. Int. Conf. Polymer Dev. Applic., 1: 151-159.
- 192. Nnamani PO, Ibezim EC, Attama AA, **Adikwu M. U**. (2010). Surface modified solid lipid microparticles based on homolipids and Softisan® 142: preliminary characterization. Asian Pacific Journal of Tropical Medicine 3: 1-5.
- 193. Momoh M. A., **Adikwu M. U.,** Ibezim C. E., Ofokansi K. C., Attama A. A. (2010). Thermal characterization of PEGylated-mucin. Asian Pacific Journal of Tropical. **Asian Pacific J. Trop. Med.** 3(6), 412-420.
- 194. Nnamani, P. O., **Adikwu, M. U.,** Attama, A. A. and Eze, O.C. (2010). Polyelectrolyte complexes of *Irvingia gabonensis* gum and gelatin: performance of suspended chalk particles. Journal of Pharmaceutical Research, 9: 117-121.
- 195. Nnamani, P. O., **Adikwu, M. U.,** Attama, A. A. And Ibezim, E. C. (2010). SRMS142 based solid lipid microparticles: application in oral delivery of glibenclamide to diabetic rats. European Journal of Pharmaceutics and Biopharmaceutics, 76(1):68-74.
- 196. M.A. Momoh, **M.U. Adikwu** and A.R. Oyi (2010). *Vernonia amygdalina* Extract and CD4+ Cell Counts: An Immune Study. Global Journal of Biotechnology & Biochemistry 5 (2): 92-96.

- 197. **Adikwu, M. U. (2010).** The Nigerian Education Roadmap and its ICT Content: The Role of STEP-B. Proceedings of the International Conference of Associations of Scientific Education (ICASE), Tartu, Estonia: pp. 14-15
- 198. **Adikwu, M. U.** and Obaje, A. (2010). Science and Technology Education Post-Basic (STEP-B): Key contributions to innovations in science and technology Education in Nigeria. Proceedings of the International Conference of Associations of Scientific Education (ICASE), Tartu, Estonia: pp. 15-18
- 199. Nnamani, P.O., Ibezim, E.C., Attama, A.A. and **Adikwu, M.U.** (2010). New approach to solid lipid microparticles using biocompatible homolipids templated heterolipid microcarriers for cimetidine delivery. Nig. J. Pharm. Res., 8(1): 19 35.
- 200. Nnamani, P.O., Attama, A.A., Ibezim, E.C., and **Adikwu, M.U.** (2010). Piroxicam-loaded PEGylated tallow fat-based solid lipid microparticles: characterization and in vivo evaluation. Nigerian J. Pharm. Res. 8(1): 92 111.
- 201. **Adikwu M. U.** (2011). Binding of *Staphylococcus aureus* onto bovine intestinal mucin. J. Pharm. Res. 10: 30-33.
- 202. **Adikwu M. U.,** Builders P. F., Ezenwa P. and Kunle O. O. (2011). Generation of mucinated cellulosic microfibers by mucin and microcrystalline cellulose hybridization; potentials for nanomedicine. J. Nanotech. Prog. Int. (JONPI) 4: 35 50
- 203. Momoh, M. A, **Adikwu, M. U,** Ibezim, E. C and Attama, A. A (2011). Effect of metformin and *Vernonia amygdalina* leaf extract loaded PEGylated- mucin formulation on haematological, kidney and liver indices of healthy and diabetic rats. J. Pharmacy Research, 4: 3455-3459.
- 204. Odimegwu DC, Ibezim DC, **Adikwu MU**, Boniface JAE, Ogbu HI and Esimone CO (2011). Bioassay-tracked temperature stress-induced chemical degradation of bioactive wound healing antibacterial extract of *Dissotis*

- theifolia stem dispersed in a pharmaceutical cream and ointment. International Journal of Applied Research in Natural Products 4 (1): 20-28.
- 205. **Adikwu, M. U.,** A. A. Attama, L. Adima and F. C. Okafor (2012). The effect of pyrodextrin source, pyrodextrin variation and storage temperature on the stability of paracetamol formulations: a statistical appraisal. J. Pharm. Res. J. Pharm. Res. 11 (1), 6-10
- 206. **Adikwu, M. U.,** Ibezim E C, Okafor J O, and Akpa PA (2012). Transdermal permeation of salicylic acid embedded in an array of formulations based on mucinated-honey across excised experimental rat skin. J. Pharm. Res. (India). 11: 29-32.
- 207. **Adikwu, M. U.** and Okafor J. O. (2012). Application of two animal products, mucin and honey, in wound healing. African Journal of Pharmaceutical Sciences and Pharmacy (USA) 3: 1-17.
- 208. Momoh, M. A, **Adikwu, M. U** and Ugwu, A. A, (2012). Insulin-Loaded Mucin-Eudragit Complexation: A Rectal Delivery Approach. Journal of Pharmacy Research 5(4),2052-2056
- 209. **Adikwu M U,** Okafor J O and Ibezim E C (2012). Evaluation of a mucin-honey formulation for healing in full thickness experimental wounds in rats. Journal of Pharmaceutical Research 11: 49-55.
- 210. **Adikwu, M. U.,** JO Okafor, EC Ibezim (2013). Application of Mucin and Honey Dispersed in Creams and their Wound Healing Properties. African Journal of Pharmaceutical Sciences and Pharmacy 4: 1-46
- 211. Esimone, C. O., Ihekwereme, C. P., Okoye, I. E. **Adikwu, M. U.** (2013). Urinary Elimination of Ofloxacin in Humans is reduced by Tea and *Kola nitida* Seed. African Journal of Pharmaceutical Sciences and Pharmacy 4: 70 82.
- 212. Ejikeugwu Chika, Ikegbunam Moses, Ugwu Chigozie1, Araka Olisa, Iroha Ifeanyichukwu, **Adikwu M. U.**, Esimone Charles. (2012). Evaluation of antibacterial activity of the leave extracts of *Buchholzia coriacea*. Asian Journal of Pharmaceutical and Biological Research 2: 204-208.

- Ejikeugwu P.C., Ugwu C.M., Araka C.O., Gugu T.H., Iroha I.R., Adikwu M.U., Esimone C.O. (2012). Imipenem and meropenem resistance amongst ESBL producing *Escherichia coli* and *Klebsiella pneumonia* clinical isolates. International Research Journal of Microbiology 3: 339-344.
- 214. Momoh, M. A., Kenechukwu, F. C., Mora, A. T., Adedokun, M. O., Odoh, C. E. and **Adikwu, M. U.** (2013). Preparation, characterization, in vitro and in vivo evaluation of PEGYlated-mucin matrix tablets containing aqueous leaf extract of Vernonia amygdalina. Journal of Pharmacy and Pharmacology, 7:2989-2997
- 215. Ejikeugwu Chika, Iroha Ifeanyichukwu, **Adikwu M. U.** and Esimone Charles (2013). Susceptibility and detection of extended spectrum blactamase enzymes from otitis media pathogens. American Journal of Infectious Diseases 9: 24-29.
- 216. N. T. Ujam, A. N. Oli, M. N. Ikegbunam, **M. U. Adikwu** and C. O. Esimone (2013). Antimicrobial Resistance Evaluation of Organisms Isolated from Liquid Herbal Products Manufactured and Marketed in South Eastern Nigeria. British Journ. Pharmaceut. Res. 3: 523-525.
- 217. Duru Carissa, Nwanegbo Edward, **Adikwu M. U.**, Ejikeugwu Chika and Esimone Charles (2013). Extended-Spectrum Beta-Lactamase-Producing *Escherichia coli* Strains of Poultry Origin in Owerri, Nigeria. World Journal of Medical Sciences 8 (4): 349-354.
- 218. Nnamani, O. P; Attama, A. A; C. Kenechukwu, F; Ibezim, E. C.; **Adikwu, M. U.** (2013). Pharmacodynamics of Piroxicam from Novel Solid Lipid Microparticles Formulated with Homolipids from Bos indicus. Current Drug Delivery, 10 (6): 645-655
- 219. Nwodo J. N., Ntie-Kang, F., Akachukwu I., Ngwa, V.F. Simoben, C.V. Sippl, **W., Adikwu, M. U.,** Mbaze, L. M. (2014). Molecular Modelling of Potential Anticancer Agents from African Medicinal Plants. J. Chem. Inf. Model., 54: 2433-2450

- 220. MA Momoh; MO Adedokun; **Adikwu M. U.** and CE Ibezim (2014) In vitro Evaluation of PEGylated-Mucin Matrix as Carrier for Oral Delivery of Metformin Hydrochloride, Tropical Journal of Pharmaceutical Research; 13 (7): 1039-1045
- 221. C. Mbah, P. Builders, I. Nzekwe, O. Kunle, **M. U. Adikwu,** A. Attama. Formulation and in vitro evaluation of pH-responsive ethosomes for vaginal delivery of metronidazole. J. DRUG DEL. SCI. TECH., 24 (6) 565-571: 2014
- 222. Emmanuel O. Olorunsola, Partap G. Bhatia, Babajide A. Tytler, **Michael U. Adikwu** (2014). Some chemical characteristics of novel hemi cellulosic Gums From seeds of *Afzelia africana* and *Prosopis africana*. West African Journal of Pharmacy; 25: 31-40
- 223. Eraga, S. O., Iwuagu, M. A., **Adikwu, M. U.** (2014). Evaluation of the suspending properties of the co-precipitate of *Irvingia gabonensis* gum and gelatin. Trop. J. Pharm. Res. 13: 843-848.
- 224. Emmanuel O. Olorunsola, Partap G. Bhatia, Babajide A. Tytler, **Adikwu, M. U.** (2014). Surface activity and hydrophile-lipophile balance of hydrophilic polymers from exudates of cashew and khaya plants. International Journal of Biological & Pharmaceutical Research; 5: 443-448
- 225. Chukwuemeka S. Nworu, Stella A. Ihim, Festus B. C. Okoye, Charles O. Esimone, **Adikwu**, **M. U.** and Peter A. Akah (2015). Immunomodulatory and immune-restorative activities of β-D-glucan-rich extract and polysaccharide fraction of mushroom, *Pleurotus tuber regium*. Pharmaceutical Biology, 53: 1555-1566
- 226. Norbert Nwankwo, N. I., **Adikwu, M. U.** and Okafor, I. (2015). HIV Tropism Prediction: Digital Signal Processing-Based Bioinformatics Approach is Non-Sequence Alignment Dependent. Computational Biology and Bioinformatics, 2015; 3(2): 21-30
- 227. Ngozi Justina Nwodo, Akachukwu Ibezim, Fidele Ntie-Kang, **Adikwu, M. U.** Chika John Mbah (2015). Combating Trypanosomiasis with Plants and Derived Products from Nigeria. Molecules 20: 7750-7771.

- 228. **Adikwu, M. U.** (2015). Drug, Food and Environmental Analysis in Rural Africa: The Need for More Action. Pharmaceutica Analytica Acta 6: 375-376
- 229. **Adikwu M. U.** (2015). Strengthening business in Nigeria through company registration: The Pharmacists Council of Nigeria Model. J. Soc. Sci. Res. 1: 20-24.
- 230. Uduma Eke Osonwa, **Adikwu, M. U,** Stanley Chijioke Eluu, Linda Onyeka Anagu, Charles Okechukwu Esimone (2015). Potentiation of Antimalarial Activity of Chloroquine by Chlorpheniramine in *Plasmodium berghei*-Infected Mice. African Journal of Pharmaceutical Research and Development, 7: 77-86
- 231. Ejikeugwu Chika, Esimone Charles, Iroha Ifeanyichukwu, Ugwu Chigozie, Ezeador Chika, Duru Carissa and **Adikwu M. U. (2016).**Phenotypic Detection of AmpC Beta Lactamase among Anal *Pseudomonas aeruginosa* Isolates in a Nigerian Abattoir. ARCHIVES OF CLINICAL MICROBIOLOGY: 7: 1-5
- 232. Orji JI, Akpa PA and **Adikwu MU (2015).** Physicochemical Properties of Co-Precipitate of Plantain Peel Cellulose and Gelatin. J Pharm Drug Deliv Res 4:4-7
- Osonwa, U. E., **Adikwu, M. U.,** Eluu, S. C., Anagu, L. O. and Esimone, C. O. (2015). Potentiation of antimalarial activity of chloroquine by chlorpheniramine in *Plasmodium berghei*-infected mice. Afr. J Pharm Res Dev; 7(2): 77-86.
- 234. Ihekwereme, C. P., Okoye, I. E., Esimone, C. O. and Adikwu, M. U. (2015). Concomitant use of tea (*Carmellia sinensis*) may inhibit the antimicrobial activity of ciprofloxacin in the treatment of urinary tract infections. Afr. J. Pharm. Res. Dev; 7: 137-141
- 235. Ejikeugwu, C., Duru, C., Iroha, I., Ugwu, M., Nwakaeze, E., Oguejiofor, B., Esimone, C., and **Adikwu M. U.** (2016). Phenotypic Screening of Clinical Isolates of *Escherichia coli, Klebsiella pneumoniae* and

- *Pseudomonas aeruginosa* for Metallo-Beta-Lactamase. Life Science Journal, 13: 77-82
- Ihekwereme CP, Nduka SO, Okoye IE, Esimone CO, **Adikwu MU** (2016) Pharmacokinetics and drug interactions of herbal medicines: the effect of *Garcinia kola* and *Carmellia sinensis* on norfloxacin use in the treatment of urinary tract infections Journal of Pharmaceutical and Allied Sciences. 13 (2): 2383 2391
- 236. Olorunsola, E. O., Tytler, A. B., Bhatia, P. G. and **Adikwu, M. U**. (2016). Thermochemical properties of hydrophilic polymers from cashew and khaya exudates and their use in drug delivery. Journal of Drug Delivery. Article ID 7496585, 7 pages http://dx.doi.org/10.1155/2016/7496585
- 237. Olorunsola, E. O., Tytler, A., Bhatia, P. G. and **Adikwu, M. U**. (2016). Compatibility studies of cashew and prosopis gums with some artemisinin derivatives. Nig. J. Pharm. 50: 35-53.
- 238. Ejikeugwu, C., Iroha, I., Ugwu, M., Oguejiofor, B., Eze, C. A., Araka, O., Orji, O., Esimone, C., and **Adikwu, M. U.** (2016). Phenotypic detection of AmpC enzymes and antimicrobial susceptibility of *Klebsiella* spp. isolated from abattoir. Int. J. Appl. Microbiol. Biotech. Res. 4: 117-121
- 239. Ibezim A, Mbah CJ, Ntie-Kang F, **Adikwu M. U.,** and Nwodo NJ (2016) Virtual screening of Trypanosoma Inhibitors from Nigeria. J Cheminform. 8 ((Suppl 1)):1–26
- 240. Anyebe, S.N., Allagh, T.S., Oyi, R.A., Ofokansi, K.C., **Adikwu, M. U.,** Olayemi, O.J. and Tytler, B.A. (2016). Evaluation of Eudragit<sup>RS</sup>100 and hydroxyl methylcellulose system in solid dispersion of piroxicam. Nig. J. Sci. Res. 15: 120-125
- Olorunsola, E.O, Bhatia, P.G, Tytler, B.A and **Adikwu, M.U** (2016). Hydration and swelling dynamics of some tropical hydrophilic polymers. Nig. J. Pharm. Sci. 15: 41-47

- 242. Uduma, E. O., Chidozie, S. O., Abali, S. O., Uwaezuoke, O. J.and **Adikwu, M. U. (2017).** Egg shell powder as a potential direct compression excipient in tablet formulation. West African Journal of Pharmacy 28: 107-118
- Olorunsola, E. O., Bhatia, P. G., Tytler, B. A., Adedokun, M. O. and **Adikwu, M. U.** (2017). Dissolution and permeation characteristics of artemether tablets formulated with two gums of different surface activity. Tropical Journal of Pharmaceutical Research; 16 (5): 981-988
- Olorunsola, E. O., Bhatia, P. G., Tytler, B. A., Adedokun, M. O. and **Adikwu, M. U.** (2017). Optimization of artesunate delivery by formulation in a delayed release propospis hemicellulose matrix. J. App. Pharm. Sci. 7: 142-146.
- 245. Ejikeugwu Chika, Esimone Charles, Iroha Ifeanyichukwu, Igwe David Okeh, Ugwu Malachy, Ezeador Chika, Duru Carissa and **Adikwu M. U.** (2017). Molecular Identification of MBL Genes blaIMP-1 and blaVIM-1 in *Escherichia coli* Strains Isolated from Abattoir by Multiplex PCR Technique. Res. J. Microbiol., 12: 266-273.
- 251. Ejikeugwu, C., Esimone, C. O. Iroha, I. And **Adikwu, M. U.** (2018). Detection of FOX-1-AmpC β-lactamase gene among *Klebsiella pneumoniae* isolated from abattoirs samples. Sudan Med. J., 54: 121-128.
- 252. Chika Ejikeugwu, Peter Eze, Ifeanyi Iroha, Charles Esimone. **Adikwu, M. U.** and Hirofumi Akari (2018). Understanding the facts and midning the gaps of HIV-1/HIV-2 Primate Research and Infectious Diseases Laboratories in Africa; International J. Infectious Diseases and AIDs 5: 1-14
- 253. Olorunsola, E. O., Tologbonse, A. A., Onwuka, N. A. **and Adikwu, M. U.** (2019). Enhanced oral delivery of artemether: An application of Prosochit<sup>®</sup>. J. Appl. Pharm. Sci. 9: 133-136,
- 254. Udem Ngozi Dorathy, Esimone Okechukwu Charles, **Adikwu M. U.** (2017). Effects of Capsules of *Vernonia amygdalina* Combined with Glibenclamide or Metformin on Blood Glucose Levels of Diabetic Rats. Int. J. Pharm. Sci. Rev. Res., 44: 9-14

- 255. Chika Ejikeugwua, Morteza Sakib, Emmanuel Nwakaezea, Peter Ezed, Orinya Chinedua, Duru Carissae, Chijioke Edeha, Charles Esimone, Ifeanyichukwu Irohaa, **Adikwu M. U.** (2019). Characterization of metallo-βlactamases-encoding genes blaIMP-1 and blaVIM-1 amongst *Klebsiella pneumoniae* from abattoir samples of Ebonyi State, Southeastern Nigeria. Gene Reports, 16: 1-5
- Nwankwo, N., Okafor, I., **Adiwu, M. U.,** Ibezim, E., and Azoji, M. (2019). Computerized robotics and informatics-based dispensation: the pharmacist's gains. West African Journal of Pharmacy. 30: 13-17
- 257. Chika Ejikeugwu, Shaimaa O. Hassan, Nonye Treasure Ujam, Chijioke Edeha, Reham M. Al-Mosawi, Miaad K. Alkhudhairy, Morteza Saki, Chika Ezeador, Peter Eze, Malachy Ugwu, Carrisa Duru, Onyinyechi Udu-Ibiama, Ifeanyichukwu Irohaa and **Adikwu, M. U.** (2020). Occurrence of FOX AmpC gene among *Pseudomonas aeruginosa* isolates in abattoir samples from southeastern Nigeria; Reviews in Medical Microbiology 31: 99-103
- Norbert Nwankwo, Ngozika Njoku, Ignatius Okafor, **Adikwu, M. U.** Emmanuel Ibezim, Nnenna Ibezim, and Mathew Azoji (2020). Revalidating Therapeutic Relevance of Monoclonal Antibody Therapies using Computerized and Digital Signal Processing-based Bioinformatics Approach. J Bioinf Com Sys Bio 2: 111-115.
- 259. **Adikwu M. U.** (2019). Medicinal and Pharmaceutical Applications of Mucin and its Derivatives. Modern Approaches Drug De. 2: 1-2
- 260. Mba, C. C., Ofoefule, S. I., Attama, A. A. Builders, F., **Adikwu, M. U.** (2021). Nanovesicle formulation enhances anti-inflammatory and safe use of piroxicam. Pharmaceutical Nanotechnology 9: 177-190.
- Saki, M., Ejikeugwu, C., Nworie, O., Al-Dahmoshi, H. O. M., Al-Khafaji, N. S. K., Chika Ezeador, C., Nwakaeze, E., Eze, P., Oni, E., Obi, C., Iroha, I., Esimone, C., and **Adikwu, M. U.** (2021). Metallo-β-lactamase and AmpC genes in *Escherichia coli, Klebsiella pneumoniae*, and

- *Pseudomonas aeruginosa* isolates from abattoir and poultry origin in Nigeria, BMC Microb. 21: 124-132.
- 262. Nnamani, P. O., Ibezim, E. C. **Adikwu, M. U.** and Attama, A. A. (2021). Sustained-Release Glibenclamide-Loaded Solid Lipid Microparticles from Micellar Solutions of Homolipids. Journal of Pharmaceutical Innovation, 16:1-11
- Ibezim, A. Onuku, R. S., Ibezim, A., Ntie-Kang, F., Nwodo, J. N. and **Adikwu, M. U.** (2021). Structure-based virtual screening and molecular dynamics simulation studies to discover new SARS-CoV-2 main protease inhibitors. Scientific African 14:1-9
- Ngozi Dorathy Udem, N, D., **Adikwu, M. U.,** Ikegbunam, M. N. and Udem, S. C. (2021). Formulation and evaluation of capsules and suppositories containing *Gongrenema latifolium*. Nigerian Journal of Pharmacy. 55: 35-42
- Onochie-Igbinedion, I. T. O., Ikegbunam, M. N., Ekpunobi, N. F., Ibeagha I., Chukwuma, O. G., **Adikwu M. U.**, Esimone, C. O. (2022). The Prevalence of Dengue Virus and Malaria Co-Infection among HIV-Infected Patients within South Eastern Nigeria. Advances in Infectious Diseases, 12: 106-117.
- 266. Petra Nnamani, Nnadi Ogechukwu, Amelia Odo, Victoria Abimibola, Agatha Ugwu, Emmanuel Ibezim, John-Dike Ogbonna, Ebere Ajogu, Simon Onoja, , **Adikwu, M. U.**, Claus-Michael Lehr, Anthony Attama (2022). Gentamicin nanogel films based on Carrageenan-*Prosopis africana* for improved wound healing. Precision Nanomedicine 5: 879-896
- 267. Ejikeugwu, C., Obum-Nnadi, C., Onuh, E., Adonu, C., Ujam, N., Iroha, C., Nwakaeze, E., Edeh, C., Udu-Ibiam, O., Afiukwa, N., Ugwu, M., Iroha, I. and **Adikwu, M. U.** (2022). Livestock and poultry milieux as non-hospital sources of AmpC and extended spectrum beta-lactamase producers in Southeast Nigeria. Int. J. Pharm., & Phytopharmacol. Res. 12 (5): 1-7
- 268. Emmanuel Olorunsola, E., Ekpeowo, S. U., Momoh, M. A. and **Adikwu, M. U.** (2023). Polysorbate 80 Modulated Nanocrystallization for Enhancement of Griseofulvin Solubility. German Journal of Pharmaceuticals and Biomaterials" (GJPB) (Accepted).

## d). Conferences attended

- 1. **Adikwu, M U.** and Buratai, M. (1988). The biopharmaceutics and pharmacokinetics of solid and liquid dosage forms as basis for dosage form selection in hospital pharmacy practice. Presented at the Conference of Nigerian Association of Hospital Pharmacists, Ilorin, Nigeria; April 27.
- 2. Okide, G B. and **Adikwu, M U.** (1993). Kinetics study of the degradation of arachis oil. Paper presented at the Forum for Free Radicals Research, Nsukka, Nigeria, March 27.
- 3. **Adikwu, M U.,** Udeala, O K. and Ohiri, F C. (1994). Release and permeation properties of jellies formulated from mucuna gum. Presented at the 2<sup>nd</sup> National Symposium of Pharmaceutical Technology, Ibadan, Nigeria, June 6-10.
- 4. **Adikwu, M U.** Udeala, O K. and Ohiri, F C. (1994). Sustained release tablet formulation of theophylline with prosopis gum. Presented at the 2<sup>nd</sup> National Symposium on Pharmaceutical Technology, Ibadan, Nigeria, June 6-10.
- 5. **Adikwu, M U**. (1994). Emulsifying properties of Gelrite stabilised with sodium sesquicarbonate (trona). Presented at the 2<sup>nd</sup> National Symposium on Pharmaceutical Technology, Ibadan, Nigeria, June 6-10.
- 6. **Adikwu, M U.** and Ibezim, E C. (1995). Electrically controlled drug delivery systems. Presented at National Conference on Medical Physics and Technology, Nsukka, Nigeria, July 12.
- 7. **Adikwu, M U.** Adekoya, A A. and Ibezim, E C. (1995). Application of the polymerised latex of *Landolphia dulcis* in sustained release aminophylline microcapsules. Presented at the Annual Conference of the Chemical Society of Nigeria, Enugu, July 27.
- 8. **Adikwu, M U.** (1995). Foetal haemoglobin in sickle cell disease: its significance and ways of increasing it. Presented at the Nsukka Research Team on Sickle Cell Anaemia, Nsukka, Nigeria, August 15.
- 9. **Adikwu, M U**. (1995). Modification of the physicochemical properties of two organic gums with magnesium aluminium silicate. Presented at the

- Symposium on Chemistry and Biotechnology for National Development. Sheda Science and Technology Centre, Abuja, Nigeria, August 18.
- 10. **Adikwu, M U.** and Okide G B. (1996). The role of the academic pharmacist in oral rehydration therapy (ORT). Presented at the Annual Meeting of The West African Pharmaceutical Federation, Banjul, The Gambia, March 20.
- 11. **Adikwu, M U**. (1996). Bioactive properties of some tropical polysaccharides. Paper presented at a Seminar Organised by National Institute for Pharmaceutical Research and Development, Idu, Abuja, Nigeria, May 14.
- Adikwu, M U., Okoli, N D. and Ofokansi, K C. (1997). Studies on bioadhesive granules formulated with prosopis and mucuna gums for intestinal drug delivery.
   Presented at the International Workshop on Biotechnology, Umudike, Nigeria, August 10-15.
- 13. **Adikwu, M U.,** Uzoho, C A. and Okide, G B. (1997). Formulation of a thermostable agar using exopolysaccharide from *Pseudomonas elodea*. Presented at the International Workshop on Biotechnology, Umudike, Nigeria, August 10<sup>th</sup>-15.

14. **Adikwu, M U**. and Attama, A A. (1998). Bioadhesive properties of tacca starch/SCMC and tacca starch/Carbopol hydrogels containing hydrochlorothiazide. Presented at the 11<sup>th</sup> Scientific Congress of the West African Pharmaceutical Federation, Lagos, Nigeria, February 22-26.

- 15. **Adikwu, M U.** (1998). Education in rural setting: problems and prospects. Paper presented at the School Day of Government College, Utonkon, Nigeria, June 5.
- 16. **Adikwu, M U.** (1998). The pharmacist and the new information era. Presented at the Annual Conference of the Pharmaceutical Society of Nigeria, Anambra State Branch, Awka, Nigeria, October 9-10.
- 17. Esimone, C O. and **Adikwu, M U.** (1998). Preliminary investigation of the antimicrobial properties of extracts of fructicose lichen *Ramalina farinacea*. Presented at the Annual Regional Conference of West African Society of Pharmacology, Zaria, Nigeria, October 22-24.

- 18. Esimone, C O., Attama, A A. and **Adikwu, M U.** (1998). A study of the in vitro interaction of Paluther with various tetracycline congeners. Presented at the Conference of Academic Pharmacists, Kano, Nigeria, November 1-3.
- 19. **Adikwu, M U.,** Olowosulu, A K., Ojile, J E., Onunkwo, G C. and Egeonu, C H. (1999). Some physical properties of tableted seed of *Garcinia kola*. Presented at the Continuing Education in Pharmacy and Scientific Workshop, Ahmadu Bello University, Zaria, Nigeria, March 29-April 1.
- 20. Mshelbwala, K., Ojile, J E. and **Adikwu, M U**. (1999). Tableting properties of the aqueous leaf extract of *Andrographis paniculata*. Presented at the Continuing Education in Pharmacy and Scientific Workshop, Ahmadu Bello University, Zaria, Nigeria, March 29-April 1.
- 21. Olowosulu, A. K., Bangudu, A B. and **Adikwu, M U**. (1999). Tableting properties of Nigerian *Acacia senegal* gum. Presented at the Continuing Education in Pharmacy and Scientific Workshop, Ahmadu Bello University, Zaria, March 29<sup>th</sup>-April 1<sup>st</sup>.
- 22. **Adikwu, M U.,** Esimone, C O. and Nwodo, M N. (1999). Antimicrobial properties of leaf extracts of some indigenous plants. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23th.
- 23. Ezeabasili, C. O., Esimone, C O., **Adikwu, M U**., Attama, A A. and Okide, G B. (1999). Preliminary antimicrobial screening of extracts of Olax viridis. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23<sup>rd</sup>.
- 24. **M. U. Adikwu,** Esimone, C. O. and Attama, A.A. (1999). Assessing the impact of "comparative advantage reversal" by multinational companies on the pharmaceutical industries in Nigeria. A paper presented at the 6<sup>th</sup> Annual Workshop of the African Technology Policy Studies (ATPS) Network, Banjul, The Gambia, November 3-6.
- 25. Esimone, C O., Okolo, C O., Ezugwu, C O, **Adikwu, M U.,** Okeke, M I. and Uzuegbu, D B. (1999). Comparative evaluation of the antimicrobial properties of tea extracts. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20-23-

- 26. Okide, G B., **Adikwu, M U.,** Esimone, C O. and Awemu, G A (1999). Haematological effects of the methanolic extracts of azardrichta leaves in rats. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23<sup>rd</sup>.
- 27. Okide, G B., **Adikwu, M U**., Esimone, C O and Awemu, G A (1999). Effects of crude neem alcoholic extract on the blood chemistry of rats. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23<sup>rd</sup>.
- 28. **Adikwu, M U** and Akpa, P A (1999). Evaluation of the physicochemical properties of tronated microcrystalline cellulose from saw dust. Presented at the Annual Regional Conference of the west African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23<sup>rd</sup>.
- 29. Mshelbwala, K., Anaba, A., Attama, A A and **Adikwu, M U**. (1999). Preliminary properties of tablets prepared by wet granulation of the leaves of Andrographis paniculata. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23<sup>rd</sup>.
- 30. **Adikwu, M U** and Akpa, P A (1999). Studies on melt-extrusion matrix drug delivery systems containing cellulose produced using trona as an artificial chaperone. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria, October 20<sup>th</sup>-23<sup>rd</sup>.
- 31. Esimone, C O., **Adikwu, M U** and Ndu, O O (1999). In vitro potentiation of fluoroquinolone activity by arthemether. Presented at the Annual Regional Conference of the West African Society of Pharmacology, Nsukka, Nigeria 20<sup>th</sup>23<sup>rd</sup>.
- 32. **Adikwu, M U** (2001). Processes of drug disposition. Lecture presented at the Update Lecture Series of the West African Postgraduate College of Pharmacists, Enugu, Nigeria, 3<sup>rd</sup> April.
- 33. **Adikwu, M U** (2001). Formulation and administration of veterinary drugs including therapy of common animal diseases. Presented at the Mandatory Continuing Education for Pharmacists, Aba, Nigeria, 27<sup>th</sup> April.

- 34. **Adikwu, M U.,** Ofokansi, K C and Esimone C O (2001). In vitro/in vivo bioavailability studies on some fixed ratio sulphadoxine-pyrimethamine combinations marketed in Nigeria. Presented at the Fourth National Workshop on Better Quality Assurance in the 3<sup>rd</sup> Millenium, Ibadan, 20<sup>th</sup>-24<sup>th</sup>.
- 35. Ofokansi, K C., **Adkwu, M U** and Esimone, C O (2001). Detection of diethylcarbamazine citrate, moclobemide and promethazine hydrochloride on thin layer plates using chloranilic acid as the locating reagent in no-aqueous media. Presented at the Fourth National Workshop on Towards Better Quality Assurance in the Third Millennium, Ibadan, Nigeria, 20<sup>th</sup>-24<sup>th</sup>.
- 36. **Adikwu, M U** and Hoeltje, H.-D. (2001). Theoretical aspects of the analysis of ampicillin by charge-transfer complexation. Presented at the Fourth National Workshop on Towards Better Quality Assurance in the Third Millennium, Ibadan, Nigeria, 20<sup>th</sup>-24<sup>th</sup>.
- 37. Attama A. A., Onugwu L. E. and **Adikwu M. U**. (2002) Stability of drugs in palm kernel oil-goat fat suppository base admixtures. Paper presented at the XXIX<sup>th</sup> Annual Regional Conference of the West African Society for Pharmacology (WASP), Abuja, Nigeria, October 21-23.
- 38. Attama A. A., Onugu O. C. and **Adikwu, M. U**. (2002). The use of solid selfemulsifying systems in the delivery of diclofenac sodium. Paper presented at the XXIX<sup>th</sup> Annual Regional Conference of the West African Society for Pharmacology (WASP), Abuja, Nigeria, October 21-23.
- 39. Attama A. A., Nnamani P. O and **Adikwu M. U.** (2002). In vivo bioavailability of metronidazole from in situ gelling mucoadhesive suppositories formulated with theobroma oil and Carbopol ETD-2020. Paper presented at the XXIX<sup>th</sup> Annual Regional Conference of the West African Society for Pharmacology (WASP), Abuja, Nigeria, October 21-23.
- 40. **Adikwu, M. U.** (2003). Sociology of health and disease. Lecture delivered at the Update Lectures of the West African Postgraduate College of Pharmacists, Enugu, Nigeria 25<sup>th</sup> July.
- 41. **Adikwu, M. U.,** Agboke, A. and Mbadugha, M. C. (2005). An evaluation of the *in vitro* antimicrobial interaction between *Euphorbia hirta* methanol leaf extract with erythromycin and nystatin by the checkerboard method.

- Presented at the Workshop of the Nigerian Society for Pharmacognosy, Ahmadu Bello University, Zaria, Nigeria May 24-28.
- 42. **Adikwu, M. U.,** Mbonu, I. C. and Akpa, P. A. (2005). Prediction of gastrointestinal permeation of drugs through neural network analysis based on five molecular descriptors, Presented at the Annual Conference of the National Association of Academic Pharmacists, Abuja, 27-29, 2005
- 43. **Adikwu, M. U.**, Aneke, K. O. and Builders, P. F. (2005). Biophysical properties of mucin and its use as a drug delivery: current developments and future concepts. Presented at the Annual Conference of the National Association of Academic Pharmacists, Abuja, 27-29, 2005
- 44. **M. U. Adikwu** and C. O. Okolie and A. A. Agboke (2005) The effect of snail mucin on the ulcer healing rate of clarithomycin. In the Book of Abstract of the First Annual Conference of Science and Technology Forum. November 16-17, 2005, Community Centre, University of Uyo, Nigeria.
- 45. **M. U. Adikwu** and Mbonu, I. C. (2006). Prediction of drug absorption using molecular properties: the role of charge transfer. Presented at the Conference on Drug Development for the Third World, 5- 9 June, Trieste, Italy.
- 46. Nnamani, P. O., Nwamara, C. J. and **Adikwu, M. U.** (2006). Formulation of Mucuna Gum Gels Containing Porcine Mucin for Topical Application, Presented at the Annual Regional Conference of the West African Society for Pharmacology, 13-16 November, Enugu, Nigeria
- 47. Nnamani, P. O., Ezekwe, I. B. and **Adikwu, M. U.** (2006). The effect of gelatin polyethylene glycol 1000 film containing Cicatrin powder on wound healing. Presented t the Annual Regional Conference of the West African Society for Pharmacology, 13-16 November, Enugu, Nigeria.
- 48. **Adikwu, M. U.** and Audu-Peter, J. D. (2006). Binding of Staphylococcus aureus onto bovine intestinal mucin. Paper presented at the 7<sup>th</sup> Annual Conference of Nigerian Association of Pharmacisists in Academics (NAPA), July 19-22, 2006, Ahmadu Bello University Zaria, Nigeria.
- 49. Olowosulu, A. K, Okoro, C. L. and **Adikwu, M. U.,** (2006). Effect of Storage Practices on Iodine Content of Iodised Salt. Paper presented at the 7<sup>th</sup>

- Conference of Nigerian Association of Pharmacisists in Academics (NAPA), July 19-22, 2006, Ahmadu Bello University Zaria, Nigeria.
- 50. **Adikwu, M. U.,** Osadebe, P. O., Omeje, E. O. and Amayo, L. A. (2006). Platelet response to methanolic and aqueous extracts of *Euphorbia hirta* (Linn, Euphorbiaceae): a putative terpenoid activity. Paper presented at the 7<sup>th</sup> Conference of Nigerian Association of Pharmacists in Academics (NAPA), July 1922, 2006, Ahmadu Bello University Zaria, Nigeria.
- 51. Ofokansi, K. C., Akpa, P. A. and **Adikwu, M. U.** (2006). Preparation, characterisation and in vitro release properties of cefuroxime sodium-loaded microspheres based on gelatin and its admixtures with porcine mucin. Paper presented at the 7<sup>th</sup> Conference of Nigerian Association of Pharmacists in Academics (NAPA), July 19-22, 2006, Ahmadu Bello University Zaria, Nigeria.
- 52. Olowosulu, A. K., Akpa, P. A. and Eze, U. V. and **Adikwu, M. U.** (2006). Spectrophotometric analysis of Hibiscus sabdariffa colourant at different pH values. Paper presented at the 7<sup>th</sup> Conference of Nigerian Association of Pharmacists in Academics (NAPA), July 19-22, 2006, Ahmadu Bello University Zaria, Nigeria.
- 53. Esimone CO, Nworu CS, **Adikwu MU** and Akah PA (2007). Rational Vaccine Design: The Challenges of Adenoviral Vectors. A paper presented at the international conference on the Bioinformatics of African Pathogens and Disease Vectors, May 28June 2, 2007, International Center of Insect Physiology and Ecology (ICIPE), Nairobi, Kenya.
- 54. **Adikwu, M. U.** (2007). Wound healing devices (formulations) containing snail mucin. Public lecture delivered in respect of the Award-Winning Research of the Nigerian Liquefied Natural Gas Limited/Nigerian Academy of Science, February 16, 2007, MUSON Centre, Lagos, Nigeria
- 55. **Adikwu**, **M. U.** (2007). Highlights on Science and Technology Education Post-Basic (STEP-B). Presented at the Digital Bridge Institute at a Conference organised by the Nigerian ICT Forum, Abuja, July 24.
- 56. **Adikwu, M. U.** (2007). The Science and Technology Education Post-Basic (STEP-B) Project. Presented at a Meeting with the Independent Evaluation Group, STEP-B Office, Abuja, July 25

- 57. **Adikwu, M. U**. (2007). Science and Technology Education Post-Basic (STEP-B). The steps so far and the way forward. Delivered at the Workshop for Stakeholders, Valencia Hotel, Abuja, July 10.
- 58. **Adikwu, M**. U. (2007). Review of Science and Technology Education Post-Basic (STEP-B). Presented at the Workshop on Review of World Bank, African Development Bank, International Fund for Agricultural Development and Islamic Bank Assisted Projects in Nigeria, Le Meridien Hotel, Abuja, September 24-26
- 59. **Adikwu, M. U.** (2007). Highlights on Science and Technology Education Post Basic (step-b) Project IDA Cr. No 4303 UNI (\$180m) Presented During South-West Zonal Sensitization Workshop at Federal College of Education (Tech.) Akoka-Yaba, Lagos; September 20-22.
- 60. **Adikwu, M. U.** (2007). Options for Financing the Change-Management System. Presented at the Stakeholders Conference on Engineering and Technology Academic Programmes. Transcorp Hilton, Abuja, November 10.
- 61. **Adikwu, M. U.** (2007). Issues on the Science and Technology Education Post-Basic (STEP-B). Presented at a Conference Organised by the University of Jos on STEP-B. University of Jos, Auditorium, Jos, Nigeria; November 23.
- 62. **Adikwu, M.** U. (2008). Understanding STEP-B. Presented at a Seminar Organised by the University of Agriculture, Makurdi on STEP-B. April 3, 2008. University of Agriculture, Makurdi, Nigeria.
- 63. Uva. I. I., **Adikwu, M. U.,** Bello, M., Ukpong, E., Mohammed, J., Adekola, O. A. and Abdullahi, B. (2008). Improving TVET in Nigeria. A Country Project Report presented in a World Bank Training Programme at the World Bank Institute, Washington, DC, April 14-25.
- 64. **Adikwu, M. U.** Accessing Funds under STEP-B. (2008). Presented at a Workshop Organised by the University of Calabar on STEP-B. July 1, 2008. University of Calabar, Calabar, Nigeria.
- 65. **Adikwu, M. U**. (2008). Biochemistry and the Millennium Development Goals: Matching Curriculum with Current Realities. A keynote Address Presented to

- the Conference of Heads of Biochemistry Departments and Units in Nigerian Tertiary Institutions at the Main Auditorium of National Universities Commission, Abuja, July 10, 2008.
- 66. **Adikwu, M. U.** (2008). Facts about STEP-B. Presented at a Workshop Organised by the University of Uyo on STEP-B. October 12, 2008. University of Uyo, Uyo, Nigeria.
- 67. **Adikwu M. U**. (2008). Curriculum Development in Science, Technology and Mathematics (STM) Education A keynote Address Presented at 49th Annual Conference of the Science Teachers Association of Nigeria (STAN) at the Bayelsa State College of Arts and Science, Yenagoa, Bayelsa, State, August 26-31, 2008.
- 68. **Adikwu M. U.** (2008). The rubrics of STEP-B. Presented at a Workshop Organised by Abubakar Tafawa Balewa University, Bauchi, Bauchi State, for the Administrative and Academic Staff on STEP-B. October 31, 2008.
- 69. **M. U. Adikwu** (2008). The Role of Collaborations and Partnerships in Human Capital Development; Presented at the Open-Day of the University of Jos-Carnegie Research Collaboration, Jos, Nigeria, November 19, 2008.
- 70. Abdullahi, B. and **Adikwu, M. U.** (2008). Country report on education in Nigeria. Training at the World Bank Institute on Education for Development and Competitiveness: Challenges and Opportunities for Post-Basic Education, April 14-25, 2008, Washington, DC, USA.
- 71. **Adikwu, M. U.** (2008). How Professional Bodies can Access Funds under STEP-B. Presented to the Information Technology Association of Nigeria (ITAN), Kano, Nigeria, November 27, 2008
- 72. Ngwu, M. I., **Adikwu, M. U.,** Ibezim, E. C., Esimone, C. O. and Odimegwu, O. C. (2009). A preliminary assessment of the in vitro interaction between crude water extract of *Azardrichta indica* and the antibiotics penicillin G., Ampicillin and Cefuroxime using *Staphylococcus aureus* as test organism. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.

- 73. Okafor, J. O., **Adikwu, M, U.,** Ibezim, E. C. and Attama, A. A. (2009).

  Some physico-chemical properties of mucinated honey for topical drug delivery. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 74. Okafor, J. O., **Adikwu, M, U.,** Ibezim, E. C. and Attama, A. A. (2009). Effect of mucinated honey on healing in full thickness wound experimental wound in rats. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 75. Nnamani, P. O., **Adikwu, M. U.** and Eze, O. C. (2009). Evaluation of the suspension properties of the co-precipitate of *Irvingia gabonensis* gum and gelatin. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 76. Ezeabasili, S. I., Ibezim, E.C., **Adikwu, M. U**., Attama, A. A. and Ugoeze, K. C. (2009). The application of some animal fats as lipid bases in the formulation of medicated creams. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 77. Ezeabasili, S. I., Ibezim, E.C., **Adikwu, M. U**., Attama, A. A. and Ugoeze, K. C. (2009). The application of some animal fats as lipid bases in the formulation of salicylic acid ointment. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 78. Odimegwu, O. C., Ibezim, E. C., Esimone, C. O. and **Adikwu, M. U.,** (2009). Evaluation of the dose-activity relationship of crude methanol extract of *Dissotis theifolia* contained in two selected topical preparations. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 79. Ngwu, M. I., **Adikwu, M. U.,** Ibezim, E. C., Esimone, C. O. and Odimegwu, O. C. (2009). An evaluation of the in vitro interaction between crude water extract of *Azardrichta indica* and some antibiotics against *Staphylococcus aureus*. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.

- 80. Builders, P. F., Okpako, L. C., Attama, A. A., Kunle, O. O. and **Adikwu, M. U.** (2009). Preparation and characterisation of mucinated cellulose for therapeutic and drug delivery purposes. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 81. Omeje, E. O., Adikwu, M. U., Esimone, C. O., Agbo, I. U., and Osadebe, P. O. (2009). Polysaccharides from the fern, *Platycerum bifurcatum*, as putative pharmaceutical excipient and biologically active agent. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 82. Nnamani, P. O., **Adikwu, M. U.** and Okafor, G. U. (2009). Evaluation of the suspension properties of the co-precipitate of *Cissus populnea* gum and bovine mucin. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 83. Momoh, M. A., Ofokansi, K. C., Attama, A. A., Ibezim, E. C. and Adikwu, M, U. (2009). Evaluation of the effect of PEGylated-mucin and its combination with Vernonia amygdalina extract on haematological and liver indices: A toxicological study. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 84. Momoh, M. A., Ofokansi, K. C., Attama, A. A., Ibezim, E. C. and **Adikwu, M. U.** (2009). The in vitro analysis of PEGylated-mucin: A drug delivery approach. 1<sup>st</sup> International Conference on Polymer Development and Applications, Nsukka, March 18-21<sup>st</sup>.
- 85. **Adikwu, M. U**. (2009). Nigeria country report on post-basic education. Proceedings of the International Council of Associations for Science Education (Theme: Meeting Challenges to Sustainable Development in Africa). Jack Holbrook and Paul Eniayeju, editors; Abuja, May 24-29, pp. 202-207
- 86. **Adikwu, M. U.** (2009). Recent Policies in Science and Technology Education in Nigeria: The Case of STEP-B. Paper presented at a Conference on: Understanding the Policy Making Process: Working with the Media and NGOs on Policy Engagement; Organised by African Population and Health Research Centre, Kenya. Abuja, August 18.

- 87. **Adikwu, M. U.** (2009). Standardization in Nigeria's Education Sector. Paper presented at a Retreat of the Nigerian Academy of Science, held in Abidjan, Ivory Coast, August 18-21.
- 88. Damian C. Odimegwu, Emmanuel C. Ibezim, Charles O. Esimone, **Adikwu M. U.** (2009) Bio-monitoring of the chemical degradation of two topical herbal preparations: a means of early prediction of possible toxic metabolites formation. A conference paper presented at the 7th Congress of Toxicology in Developing Countries held, 2009, Sun City, South Africa; September 6-10.
- 89. **Adikwu, M. U.** (2009). Novel Delivery Techniques in Pharmacy. Presented at a Conference of Nigerian Association of Pharmacists in Academics, Nsukka, Nigeria. November, 25-28
- 90. **Adikwu, M. U.** (2009). Africa's response to global challenges in science technology and innovation: the case of STEP-B in Nigeria. Presented at a conference organised by African Technology Policy Studies, Abuja, Nigeria; December 24-28
- 91. Momoh, M.A., **Adikwu, M.U.**, Ibezim, E.C., Attama, AA, (2009). Evaluation of PEGylated mucin matrices: A bioadhesive study. Presented at a Conference of Nigerian Association of Pharmacists in Academics, Nsukka, Nigeria. November, 25-28
- 92. **Adikwu, M.U.**, Uzor, P.F., (2009). Molecular weight determination of some polysaccharides by dilute solution viscometry. Presented at a Conference of Nigerian Association of Pharmacists in Academics, Nsukka, Nigeria. November, 25-28
- 93. Mbah, C.C., Attama, A.A., **Adikwu, M.U.**, Use of trona as a permeation enhancer for ointments prepared with beeswax extracted from native honey combs. Presented at a Conference of Nigerian Association of Pharmacists in Academics, Nsukka, Nigeria. November, 25-28
- 94. Agboke, A. A., **Adikwu, M.U.**, Momoh, M.A., Attama, A.A, Esimone, C.O., (2009). Studies of the interaction between extracts of the lichen, *Ramalina farinacea* and erythromycin against clinical isolates of Staphylococcus aureus. Presented at a Conference of Nigerian Association of Pharmacists in Academics, Nsukka, Nigeria. November, 25-28

- 95. **Adikwu, M. U.** (2010). Challenges of scientific research in Nigeria. Presented at a Conference of Nigerian Association of Pharmacists in Academics, Zaria, Nigeria. June, 1-4
- 96. **Adikwu, M. U. (2010).** The Nigerian Education Roadmap and its ICT Content: The Role of STEP-B. Presented at the International Conference of Associations of Scientific Education (ICASE): Tartu, Estonia, June 28-July 2.
- 97. Adikwu, M. U. and Obaje, A. (2010). Science and Technology Education Post-Basic (STEP-B): Key contributions to innovations in science and technology Education in Nigeria. Presented at the International Conference of Associations of Scientific Education (ICASE): Tartu, Estonia, 28 June July 2, 2010.
- 98. **Adikwu, M. U. (2010).** Training Science Teachers and Students for Effectiveness. Paper presented at a Workshop organised by the STEP-B Subproject of the National Research Institute for Chemical Technology (NARICT), Zaria, August 2.
- 99. Nnamani, P. O., Attama, A. A., Ibezim, E. C. and **Adikwu, M. U.** (2010). SLMs as microcarrier for intestinal delivery of BCS classes II and III drugs based on solidified reverse micellar solutions. Paper presented at the TWOWS Fourth General Assembly and International Conference: Women Scientists in a Changing World, Beijing, China, 27 30 June, 2010
- 100. **Adikwu, M. U.** (2010). Country Report on Science and Technology Education in Nigeria presented to the Korean Institute for Vocational Education and Training (KRIVET), Seoul, August 27, 2010.
- 101. **Adikwu, M. U.** (2011). Grant seeking and proposal writing. Papers presented at a Conference of Nigeria Association of Pharmacists in Academia, Zaria, October 24-28.
- 102. **Adikwu,** M. U. (2012). Snail Production for Sustainable Development and Good Health. Keynote address presented at the First International Conference on Giant African Land Snails (GALS), Abeokuta, Nigeria, February 13.
- 103. **Adikwu, M. U.** (2013). Science and Technology Development initiatives in Nigeria: The Case of STEP-B. Presented at the International Conference of

- Associations of Scientific Education (ICASE): Kuching, Malaysia; September 29 October.
- 104. **Adikwu M. U.** (2013). Water Supply and Sanitation. Presented at the Mandatory Continuing Professional Development for Pharmacists, Enugu, Sepetmber 18.
- 105. **M. U. Adikwu** and K. C. Ofokansi (2014). Code of Ethics in Pharmacy Practice. Presented at the Mandatory Continuing Professional Development, Enuqu, May 7-9.
- 106. **Adikwu, M. U. (2014).** An Overview of Flooding and Climate Change. Paper presented at the National Conference of Society for Environmental Health and Ethics; Federal Polytechnic, Ida, November, 10-12.
- 107. **Adikwu, M. U.** (2014). Unity, A Social Vaccine to Sustainable Peace and National Security. Presented at the Conference organised by Federal Government College, Jos, Old Students Association, Port Harcourt, November, 13-15.
- 108. **Adikwu, M. U.** (2015). Achieving Excellence in Pharmaceutical Education and Research. Paper Presented at the Conference of Nigerian Association of Pharmacists in Academic, Ibadan, 11-14 August.
- 109. **Adikwu, M. U.** (2015). Paper Presented at the Conference of Science Teachers' Association of Nigeria (STAN), Awka, 18-24.
- 110. **Adikwu, M. U.** (2016). Professor Udeala: Pharmacist per Excellence. Lecture delivered at the retirement summit on Professor Oleka Kelechi Udeala, University of Port Harcourt, Port Harcourt, March 15
- 111. **Adikwu, M. U.** (2016). Enhancing higher education for career success. Presented at the Anvil Education Summit, Wuye, Abuja, May 7.
- 112. **Adikwu, M. U.** (2016). Emerging issues on science and technology towards sustainable development. International Conference on Sustainable Development, International Conference Centre, Abuja, August 22-26, 2016

- 113. **Adikwu, M. U.** (2016). The strategies of writing award winning research proposals. Presented at a National Christian Teachers' Summit, Bethany Resort, Gboko, August 25-28.
- 114. **Adikwu, M. U.** and Adikwu, V. O. (2016). Human dimensions of ecological crisis. Presented at the Conference of the Jubilee to Celebrate Knowledge and Mercy, Rome, Italy, September 6-11.
- 115. **Adikwu, M. U.** (2016). Positioning Curriculum Development and Strategic Planning Towards Quality Academic Management in Nigerian Universities. Presented at the Conference of Directors of Academic Planning in Nigerian Universities, Abuja, October 18-21.
- 116. **Adikwu, M. U.** (2016). Research, Education and Mentoring of Pharmacists for Expanding Roles in Public Health. Paper Presented at the Conference of Pharmaceutical Society of Nigeria, 7<sup>th</sup> -12 November, 2016, Minna, Nigeria.
- 117. Udem, N. D., Esimone, C. O., **Adikwu, M. U.** (2017). Formulation and evaluation of metformin or glibenclamide troches for diabetes mellitus. Presented at the 6<sup>th</sup> FIP Pharmaceutical Sciences World Congress; Stockholm, Sweden, May 21-25.
- 118. **Adikwu M. U.** (2017). Redefining the Education Ecosystem in the Face of the Fourth Industrial Revolution-To Be or Not to Be? Paper Presented at the 5th Edition of the Digital Africa Conference and Exhibition, Abuja, 6th -8th June.
- 119. **Adikwu, M. U.** (2017). The Role of a Christian Teacher and School Administration in Resisting Examination Malpractice. Presented at a Christian Teachers' Summit, Peace House, Abuja, June 10.
- **Adikwu, M. U.** (2017). World Class Reformers. Presented at the Deeper Life High School, Abuja, July 15.
- 120. **Adikwu, M. U.** (2017). World Class Reformers. Presented at the Deeper Life High School, Enugu, July 20.

- 121. **Adikwu, M. U.** (2018). Building an Educationally Strong Nation. Presented at the Annual Lecture of the Victory Land Group of Institutions, March 1.
- 122. **Adikwu, M. U.** (2018). Preserving the Legacies of Our Heroes. Paper presented at the 2018 Annual Eni Njoku Lecture at the University of Nigeria, Nsukka 4<sup>th</sup> June.
- 123. **Adikwu, M. U.** (2018). Paper presented at the FCT Science and Technology, EXPO (FASTECH), March 13, 2018.
- 124. Adikwu **M. U.** and I C Mbonu (2018). Predicting intestinal permeation of drugs through neural network analysis based on some molecular descriptors. Annual Congress on Medicinal Chemistry, Pharmacology and Toxicology July 30 31, Amsterdam, Netherlands.
- 125. **Adikwu, M. U.** (2018). Mathematics and the Nigerian Economy beyond Oil. Presented at the Annual Conference of the Mathematical Association of Nigeria, Kwali, Abuja, August 26-30.
- 126. **Adikwu M. U. (2018).** Health, Environmental and Economic Impacts of Manmade and Naturally Released Toxicants. Presented at the Conference of Nigerian Society of Toxicology, Abuja; September 25-27.
- 127. **Adikwu, M. U. (2018).** Promoting ethics in higher education: the challenges and opportunities in Nigerian universities. Presented at the International Conference on Ethics; Abuja, October 18.
- 128. **Adikwu, M. U.** (2019). Repositioning the Nigerian Educational System for National Consciousness, Unity and Economic Development Presented as the Convocation Lecture, Madonna University, Elele, Nigeria, August 9.
- 129. **Adkwu, M. U.** (2019). Repositioning research and education in the Nigerian Education System. Presented at Bingham University, Karu, September, 24.
- 130. **Adikwu, M. U.** (2019). Applications of nanomedicine in translational research. Presented at a Conference Sponsored by Alexander von Humboldt

- Foundation, Germany, at Nigerian Institute for Medical Research, Lagos, October 17<sup>th</sup> -18<sup>th</sup>.
- 131. **Adikwu, M. U.** Atah, J. and Maikudi, S. (2019). The Nigerian Research and Education Network (NgREN): A Case of a National Solution to Internet Connectivity. Presented at eLearning Conference, Abidjan, Ivory Coast, October 23-25.
- 132. **Adikwu, M.** U. (2019). Building digital Nigeria: Enhancing capacity through libraries. Keynote address presented to Librarians Registration Council of Nigeria during its 6<sup>th</sup> Conference and Induction Ceremony, Abuja, 26 November.
- 133. **Adikwu, M.** U. (2020). Secondary Data Collection Methods and Analysis in Research. Presented to the Executive Intelligence Management Course 13 (EIMC13) at the National Institute for Security Studies, Bwari, Abuja; March, 18.
- 134. **Adikwu, M.** U. (2020). Use of Technology in Maritime Security. Presented at the National Institute for Security Studies to Executive Intelligence Management Course 13 (EIMC), Bwari, Abuja; May, 15.
- 135. **Adikwu, M. U.** (2020). Mastering leadership. Presented to members of the Chartered Institute of Leadership and Governance (USA), August 4.
- 136. **Adikwu, M. U.** (2021). Global Security Challenges and Responses in a Dynamic Environment. Presented to the Executive Intelligence Management Course (EIMC13) at the National Institute for Security Studies, Bwari, Abuja, January 28.
- 137. **Adikwu, M. U.** (2021). Literature review in research. Presented at the Forum on Research Methodology for Staff and Postgraduate Students, Veritas University, Abuja, February 23.
- 138. **Adikwu, M. U.** (2021). Research Methods and Data Analysis Including Citations and References. Presented at the Forum on Research Methodology for Staff and Students, Veritas University, Abuja, April 27.

- 139. **Adikwu, M. U. (2021).** Hybrid governance system, security and sustainable development in Nigeria: The role of traditional institutions. Presented to the Executive Intelligence Management Course 14 (EIMC14). National Institute for Security Studies, Bwari, Abuja, May 5.
- 140. **Adikwu, M. U.** (2021). Global Security Challenges and Responses in a Dynamic Environment. Presented to the Participants of Advance Security Management II at the National Institute for Security Studies, Bwari, Abuja, July 8.
- 141. **Adikwu, M. U. (2021).** Dynamics of leadership. Paper presented at the Annual Democratic Event (Paddle 2021) of the Polling Unit Ambassadors of Nigeria (PUAN), November 1-2.
- 142. **Adikwu, M. U. (2021).** Methodology: Data Analysis and Documentation Presented at the Workshop on Research Methodology for Staff and Students, Veritas University, Abuja, December 27.
- 143. **Adikwu, M. U. (2021).** Opinion. Why has it been relatively easy to create a vaccine against COVID-19 compared to HIV or cancer? Experts' Opinions. DevelopmentAid, September 20.
- Adikwu, M. U. (2022). The Strategic Role of Agriculture in Pharmaceutical Production. Paper presented at the Convocation of Peace House Agricultural Training Institute (PHATI), Isarun, Ondo State, January 27.
- 145. **Adikwu, M.** U. (2022). Disruptive Technology in Pharmacy Education and Practice. Presented at eLearning Africa Conference held in Kigali, Rwanda, May 11-13.
- 146. **Adikwu, M. U.** (2022). Opinion. Is monkeypox the next big pandemic? Experts' Opinions. DevelopmentAid, July 5.
  - 147. **Adikwu, M. U.** (2023). Life-threatening infections on the rise: causes, consequences and solutions | Experts' Opinions. What are the main causes and consequences of the rise in life-threatening infections? DevelopmentAid, March 27.

- 148. **Adikwu, M. U.** (2023). Disruptive Technology in STEM Education: Application in Pharmaceutical Education and Practice, Presented at the ICASE Conference, Dubai, United Arab Emirate, March 27 -30.
- **149. Adikwu, M. U.** (2023). Corporate Governance in Nigerian Universities: Challenges and Solutions: Presented at the University of Nigeria Alumni Convention, June 15-18